

SAILPLANE AND GLIDING

October-November 1984

£1.20





Take a good look: printed on high quality art paper, the 1985 calendar of soaring flight from the Mauritius Verlag of Wiesbaden has the full range of what it takes to make *you* stop and look, from veteran aircraft to modern prototype. Nine top photographers have delivered the thirteen subjects which reveal the beauty of our sport from launch to landing. You experience gliding in Germany, Austria, Switzerland, the Netherlands coast, near the Spanish Costa Brava, the USA and Africa. Make sure that your eyes follow our horizons through 1985.

The 16th edition will have a print run of 21,000 and will be produced in the usual 48x29 cm format. The rear pages of each month provide a lively commentary in German, English and French. Price £ 7.75 including postage plus 15% VAT.



**AEROSPACE
INFORMATION
CENTRE**

26 Church Street
Stapleford, Cambridgeshire CB2 5DS
Telephone Cambridge 0223-843400

SAILPLANE & GLIDING

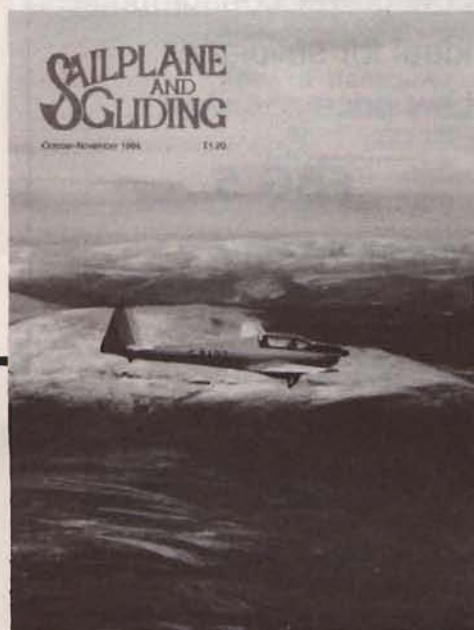
Magazine of the **BRITISH GLIDING ASSOCIATION**



CONTENTS

- Editor:**
Gillian Bryce-Smith, 281 Queen Edith's Way,
Cambridge, CB1 4NH. Tel. Cambridge 247725.
- Consultant Editors:**
Alan E. Slater
Rika Harwood, 66 Maisemore Gardens,
Emsworth, Hants. Tel. 024-34 4580.
- Subscriptions:**
Jenny Rolfe. Tel. Market Harborough 67084.
- Committee:**
A. W. F. Edwards (Chairman), R. Q. Barrett,
M. Bird, F. G. Irving, B. Rolfe.
- Advertisement Managers:**
Chelron Press Ltd.,
7 Amersham Hill, High Wycombe, Bucks.
HP13 6Q. Tel. 0494-442423.
Office hours: 9am-3pm
- Publisher:**
British Gliding Association, (Barry Rolfe, BGA
Administrator).
- 204 Back to Basics Part 1** A. D. Piggott
- 205 Southdown GC Celebrate First Soaring Flight** P. Wildbur
- 206 Booker's Gliding Granny** Mary Meagher
- 208 Wave Cross-country Flying from Aboyne** K. A. Harrison
- 210 Soaring and Stress** V. Brian
- 211 "Flying" Cable Parachutes** W. G. Scull
- 212 En Route Mid-Air Collisions**
- 214 Gliding — a Marketing Approach** J. Alway
- 216 Competition Enterprise** I. D. King
- 218 Platypus at the 15 Metre Class Nationals**
- 222 Final Results**
- 223 Island Retrieve** M. B. Jefferyes
- 224 BGA and General News**
- 225 BGA Accident Summary** A. K. Mitchell
- 227 Gliding Certificates**
- Book Reviews** A. D. Piggott, Rika Harwood, D. B. James
- 229 The State of the Clubs** W. G. Scull
- A Traveller's Tale** S. Cassidy
- 230 Your Letters** D. B. James, A. J. Davis, J. Armstrong, C. J. Chapman,
A. E. Gee, R. Parsons, R. K. Page, C. Banks
- 231 50 Years Ago** A. E. Slater
- 232 Club News**
- 239 Service News**
- 241 Overseas News** Nikki Campbell

Cover: Dickie Feakes in a Mini Nimbus photographed
Harry Orme and Al Fox in a Tandem Falke over Mor-
ven near Aboyne.



OCTOBER-NOVEMBER 1984

VOLUME XXXV No. 5

British Gliding Association
Kimberley House, Vaughan Way, Leicester, LE1 4SG. Telephone Leicester 0533-531051

Printed in England by Blackfriars Press Ltd., Smith Dorrien Road, Leicester

WESTLEY AIRCRAFT

PERSONAL, QUICK, HIGH QUALITY
REPAIRS, MAJOR OR MINOR TO
GLASS AND CARBON FIBRE,
STEEL TUBE, WOOD, METAL,
C.A.A., ARGON ARC WELDING,
INSTRUMENTATION, RE-SPRAY,
RE-FABRIC. SUPPLY OF REPAIR
MATERIALS AND GLIDER SPARES.

C of A's to all types.

SIMON WESTLEY

65 Brooklands Drive, Leighton Buzzard
Beds. LU7 8PE

Tel. 0525-379567

ANYTIME INCLUDING EVENINGS AND WEEKENDS

CAMBRIDGE AUDIO DIRECTORS MK II

Superseded Model — Limited Stock
£99.00 + £2.00 P&P + £15.15 VAT
New with full guarantee

All current Cambridge instruments
usually in stock

ALL INSURANCE REPAIRS UNDERTAKEN

Wood, Metal, or GRP

Book NOW for your Autumn C of A
renewal

SOUTHDOWN AERO SERVICES LTD.

LASHAM AIRFIELD
ALTON, HANTS

Telephone Herriard (025 683) 359

FROM ROLLADEN SCHNEIDER GmbH

THE **LS-6**

- ★ New generation 15m Class racer
 - ★ Performance — to follow the LS-4 precedent
- OR

THE **LS-4**

- ★ The outstanding Standard Class sailplane
- ★ Winner 1983 World Competition

FROM WALTER DITTEL GmbH

FSG50G

- ★ 5w — 720 CH
- ★ Low power consumption
- ★ Ideal for sailplanes
- ★ Low price

FSG 5

- ★ Handheld 720 CH
- ★ 8-12hr operation

For information on Rolladen-Schneider Sailplanes
and Dittel radios, contact the **Sole UK Agents** —

SPEEDSOARING

6 LASHLAKE RD, THAME, OXON

084421 4132 or 08692 42691
24 HOUR ANSWERING SERVICE

Panel space is priceless— we help you save some

Becker Ar 3201, no VHF transceiver offers you more for so little!

- The VHF transceiver Becker Ar 3201 combines small size with high performance.
- Small instrument size (2¼").
- 5-7 Watts output power.
- Reduced power consumption, approx. 70 mA.
- Automatic battery voltage monitoring.
- Automatic self-test.
- Four programmable channels, non volatile memory.



VHF distress frequency 121.5 MHz permanently stored.

Prepared for frequency range extension to 137 MHz.

Included: Intercom, panel lighting.

Options:

Display of outside air temperature, display of battery voltage.

For further information contact Mike Dawson 01-897 6446



**Fieldtech
Heathrow**

Fieldtech Heathrow Limited
Huntavia House 420 Bath Road
Longford Middlesex UB7 0LL England
Telex: 23734 FLDTEC G

Make Insurance problems just plane sailing . . .

CONSULT THE AVIATION INSURANCE SPECIALISTS

FOR AN IMMEDIATE QUOTATION CONTACT: JOHN O'SULLIVAN

GLIDERS, SAILPLANES,
MICROLITES, BALLOONS
AND POWERED AIRCRAFT
FACILITIES AT LLOYD'S



**LOWNDES LAMBERT
AVIATION LIMITED**

Lowndes Lambert House, 53 Eastcheap
London, EC3P 3HL
Tel (01) 283-2000 Telex 8814631



A word of encouragement to all our competitors...



At Chiltern, we're always thinking about you. As more and more aviators bring their aircraft to us for parts, service or accessories we often reflect that flying people are nice people to know – and we wonder what we can do to help expand the sport and help you.

It isn't easy. We've set up a system of quality at a reasonable price in everything we do – and our symbol has come to be a real asset when owners

come to sell. Aircraft looked after by us invariably have a pedigree that's hard to beat.

So how does all this help you build a better mousetrap? Not much. You'll need to match our service and our expertise. But keep on trying. Competition keeps us both on our toes.



Chiltern.

The best. And it shows.

GROB

Manufacturers appointed sole U.K.
and Eire repair support organisation
for all GROB-WERKE products.
Demonstration and sales Tel 0491-37184

Booker Airfield, Nr. Marlow, Bucks. SL7 3DR. 0494 445854 (works)
or 0865 890517 (outside office hours). Access & Barclaycard accepted with pleasure.

CENTRAIR PEGASUS 101

THE WORLD'S FAVOURITE SAILPLANE

CHOOSE EITHER STANDARD OR CLUB CLASS VERSIONS

SUPERB HANDLING

COMPETITIVELY PRICED

DEMONSTRATIONS BY ARRANGEMENT

AVAILABLE NOW

Also ASW 20F's available
and The Marianne,
the new training and
high performance 2-seater

"New" Schofield Aviation trailers. Craftsman-built and fully fitted

VALENTIN TAIFUN 17E

Two-seater motor glider. Power "on" or "off" this machine out-performs the others
FULLY CERTIFICATED IN THE UK
DEMONSTRATIONS BY ARRANGEMENT

Special
Features:

Flapped Wing Section
Retractable u/c
Folding Wings by 1 person
Feathering Prop.
30:1 Glide
110 Kts Cruise
675 nm range

Ring Steve White on

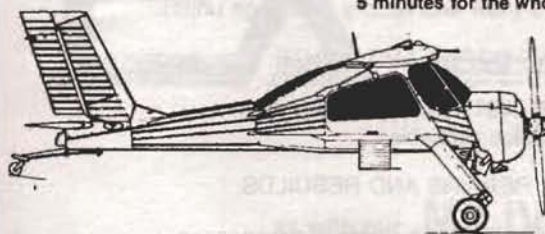
0494 36888 or Alister Kay on 02406 2491, or write to:

NINE FOUR AVIATION LTD

2 Hazlewood Cottage, Horns Lane, Booker, Marlow, Bucks. SL7 3DU

PZL-WILGA

4 minutes to tow a glider to 1000m
1 minute to descend from 1000m
5 minutes for the whole towing operation



MAY BE BOUGHT,
HIRED OR LEASED

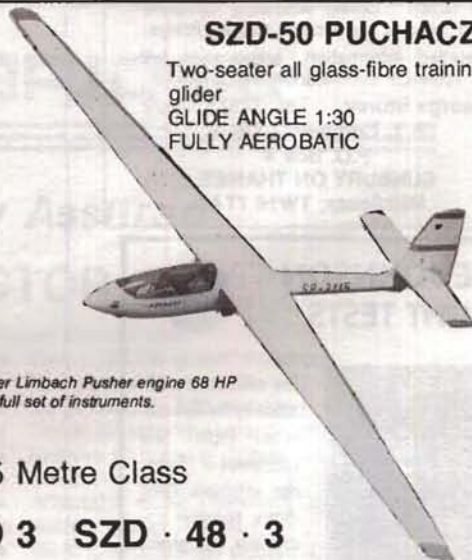
OGAR



Two-seater Training Motor Glider Limbach Pusher engine 68 HP
Glide angle 1:30 supplied with full set of instruments.

SZD-50 PUCHACZ

Two-seater all glass-fibre training
glider
GLIDE ANGLE 1:30
FULLY AEROBATIC



GLIDERS

MOTOR GLIDERS

LIGHT AIRCRAFT

AGRICULTURAL A/C

HELICOPTERS

ENGINES

INSTRUMENTS

SPARE PARTS

NEW — 15 Metre Class

JANTAR STD 3 SZD · 48 · 3

GLIDE ANGLE 1:40

COME AND FLY OUR
DEMONSTRATORS

ANGLO-POLISH SAILPLANES LTD

Wycombe Air Park · Booker · Marlow · Bucks

(0494) 40911

(0628) 39690

Telex: 848341 CHACOM G



OXYGEN EQUIPMENT

The Air Apparatus & Valve A.I.R. 24 series oxygen equipment for gliders, comprising a control head and 680-litre oxygen cylinder, is now available for self installation. With all the in-flight oxygen controls situated in the one position, this control head has been developed from the Company's highly successful Domiciliary oxygen unit to Drug Tariff Specification 01B.

The 680-litre cylinder is of British manufacture in aluminium to H.O.A.L. 4 specification and is supplied valved and charged to 2000 p.s.i.

The company also supplies portable oxygen equipment based on 230- and 680-litre cylinders, and face masks complete with valves and economiser bags.

In the unlikely event of servicing being required, the company operates a 24-hour turn-'round postal system.

NOW AVAILABLE — SLIMLINE 630 CYLINDERS

AIR APPARATUS & VALVE LTD

Oakfield Works, Branksome Hill Road, College Town,
Camberley, Surrey Tel: Camberley 0276-35885



STORCOMM

TWO-WAY RADIO

TR7603 Air Set TR7804 Vehicle Set

Each set fitted with all four gliding channels 130.4, 130.125, 130.1 and 129.9.

'Volmet' 128.6 optional on channel 4.

- ★ Full power transmitter with excellent speech quality.
- ★ Highly sensitive and selective receiver works both distant and close range.
- ★ Extremely rugged and reliable.
- ★ Full back-up service and spares available.
- ★ CAA and NATS approved.

All radios supplied absolutely complete with easy fit connectors and all fittings. Detailed information, prices and full Technical Specifications FREE from

George Storey Tel. 09327 84422
H.T. Communications
P.O. Box 4
SUNBURY ON THAMES
Middlesex, TW16 7TA

THE JOHNSON FLIGHT TESTS



This soft-bound publication by the SSA contains flight test evaluations of 18 popular sailplanes. Polar charts, narrative descriptions and photographs round out the testing of the PIK-20B,

604, LS-3, Std. Cirrus, AS-W 20 and Janars. Tests conducted by the Dallas Gliding Association and Richard H. Johnson.

Only \$5.00 U.S. Add \$2.50 for airmail.

Soaring Society of America
Box 66071—B
Los Angeles, CA 90066 USA

London Sailplanes Ltd

*Major repair
specialists in glass & carbon
fibre reinforced plastics, steel tube
& wood.*

- ★ A. SCHLEICHER GLIDERS AND SPARES: SOLE U.K. Agents
- ★ TOST WHEELS, TYRES (inc. 400 x 4), WEAK LINKS, RELEASE HOOKS (new and factory exchange units)
- ★ PRINTA NEOGENE DOPES AND PAINTS: Main stockists
- ★ Agent for WINTER INSTRUMENTS: Most other instruments and radios available
- ★ MATERIALS FOR REPAIRS AND REBUILDS
- ★ GLI FINNISH BIRCH PLY in a range of thicknesses from 0.8 to 6.0mm
- ★ GERMAN STEEL TUBE for GLIDERS: Complete range
- ★ INSTRUMENT CALIBRATION AND REPAIRS

And hundreds of other items available from stock
All at competitive prices

*'phone us -
or call at:*

LONDON SAILPLANES LIMITED

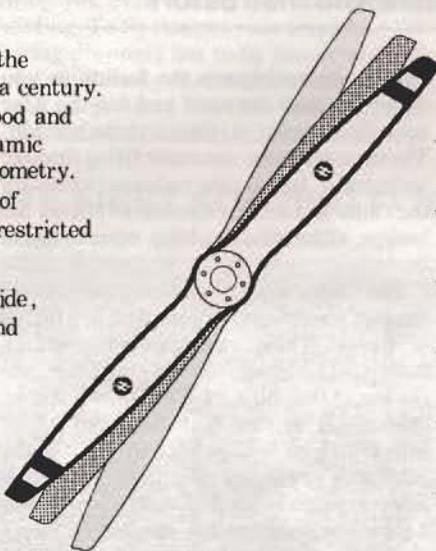
Tring Road, Dunstable, Beds. LU6 2JP
Telephone: Dunstable (0582) 62068

Open Monday to Saturday: 9.00 - 1.00 and 2.00 - 5.00

A quiet revolution

Hoffmann have been manufacturing the finest propellers for over a quarter of a century. Composite construction, using hardwood and synthetic fibres, allows free aerodynamic design giving more efficient blade geometry. The natural damping characteristics of the blade reduce vibration and avoid restricted rpm ranges.

Today Hoffmann's business is worldwide, manufacturing and servicing fixed and variable pitch propellers for General Aviation. Hoffmann propellers for aircraft such as Tiger Moth, Pitts Special, Schiebel Falke, Piper Cub and Chipmunk are unsurpassed in performance and economy.



- ☆ CAA approved
- ☆ low moment of inertia
- ☆ minimum blade vibration
- ☆ integral metal leading edge
- ☆ superior torsional stiffness
- ☆ coloured or natural finish

SKYCRAFT SERVICES

HOFFMANN 

Ross Skingley and Michael Barnett 6 French's Rd Cambridge CB4 3LA tel: (0223) 315273.



CAMBRIDGE

FOR

Quality Assured

as with our **Mk IV NAV DIRECTOR**

Digital Final Glide Computer with

- "During Glide" update capability
- Wind computation capability
- Distance-to-go Readout
- Altitude required Readout
- Thermalling during final glide capability

Plus: NEW! — 4K Memory (giving access to future significant software developments)
— Bugs/Rain in flight polar adjustment
— Power consumption only 100 mA



Speed Director with

- Own LCD "bar-graph" Read-out
- No effect on Variometer
- No CRUISE/CLIMB switching
- Digital 20 second Averager with own Readout
- Relative Variometer Option (with Mk 4 vario only)
- 4-Function Audio
- Adjustable Audio Threshold Option
- Altitude Compensation
- Micro-Computer and Custom LCD Technology

AND — It will work with **ANY CAMBRIDGE** Vario, regardless of vintage.

YES — You could give your glider a new capability and give yourself more flying fun with a Mk IV NAV DIRECTOR.

ADD — one now — and — REMEMBER **CA** for **QA**.

Manufactured by:

CAMBRIDGE AERO INSTRUMENTS

6A Dunham Road, Billerica, MA 01821, USA

Tel: 0101-(617) 275-0889

BACK TO BASICS — Part 1

*The first in a series of articles by DEREK PIGGOTT
intended principally for beginners and instructors.*

One of the biggest difficulties in learning to glide is convincing yourself that you are, in fact, making satisfactory progress. To do this you must understand a little about the process of learning and this is not often explained by the instructor. It is an unfortunate fact that many quite important aspects of glider training do not always get covered by every instructor. Misunderstandings which arise create problems for everyone and I am hoping that this series of articles on learning to glide will be of help to both students and instructors.

Few pilots or instructors spare enough time to explain about the sensations a beginner usually experiences on the first few flights. At this stage it is quite normal to have worrying if not rather frightening feelings and many would-be pilots dislike them so much that they give up after one or two flights. A few words of comfort and explanation would be invaluable to most people having their first glider ride.

There are several reasons for these sensations. Our sense of balance is normally directly related to gravity and is not familiar with movements and accelerations in all three dimensions. Once in the air, therefore, we begin to experience worrying sensations, but are unable to relate them to the movements of the aircraft. Such sensations would normally be suppressed by our brain when our eyesight recognised exactly what was happening. But this takes the experience of a number of flights.

Also at this stage it is quite normal and only natural to be rather nervous about handling the controls and this uncertainty adds to our worries. Flying on a turbulent day and particularly when there is no clear horizon makes these sensations far worse. There is no way of telling when the bumps will occur and it is more difficult to recognise what is happening to the aircraft as it is tipped or bumped about. When handling the controls in these conditions every bump gives the impression that the aircraft is about to fall out of the sky and only the constant reassurance by the instructor will help a nervous person to enjoy the flight.

We are particularly sensitive at first to the feeling of "lightness" which occurs as we lower the nose of the glider. This low *g* or reduced *g* sensation is similar to the feeling of falling we experience in a nightmare, so we tend to associate it with falling. On an early flight the feeling is alarming because the possibility of falling out of the glider seems very real. After a few more flights

your brain anticipates the feeling as you move the stick forward and see the nose actually dropping in relation to the horizon. The same sensation can occur flying through turbulence. In this case we learn to identify the cause and after a number of flights the bumps, although disturbing, cease to alarm us.

The importance of selecting reasonably smooth conditions for your first few flights is obvious. These sensations may continue to be worrying until you have confidence in the use of the controls. Until then it will be frightening to find that the glider is not responding or is momentarily tipping the other way as a bump tips it. On a very hazy day it is much more difficult to see what is happening, making the sensations worse and reducing your confidence in what you are doing.

"... turbulence and poor visibility are bound to have a big influence..."

In practice, the weather is never perfect, but it is helpful to realise that turbulence and poor visibility are bound to have a big influence on your flying ability and confidence in the early stages. These are very significant problems if you are a beginner, and pilots and instructors concerned with early training flights should, therefore, explain them and avoid prolonged circling, stalling or any abrupt manoeuvres.

The first real lesson in flying is to find out the effects of the controls. But whereas the stick movements are logical and soon become almost instinctive and automatic, no one finds the rudder movements easy or natural. Those rudder movements certainly are the devil to get right! Not only is it a matter of getting the correct direction and amount of movement, but they have got to become almost totally automatic. This is further complicated by the variations in the rudder forces which can occur when your co-ordination is poor. On many types of training gliders, particularly the K-7, K-13 and Bocian, the rudder tends to "overbalance" whenever the turns are inaccurate.

Imagine yourself as a beginner trying to learn to turn. Unwittingly you fail to apply quite enough left rudder going into a turn to the left. Something odd seems to happen and you get a vivid feeling as though the glider is rolling right over and you are going to fall out. Then you feel the instructor pushing on the rudder pedals. "Damn it" you think. "Why can't he leave me alone."

It all becomes even more confusing when you realise that he is pushing on the right rudder pedal yet is telling you to apply more left rudder.

This is very confusing until sometime later you realise that most of the time your instructor was not even touching the pedals and that it wasn't him but the airflow that was moving the rudder and accentuating your original small error. The reason for this problem is that the rudder on most gliders does not centralise itself. Every time the aircraft is banked into or out of a turn without the correct amount of rudder, it flies slightly sideways for a few seconds. As this happens the airflow pushes sideways on the rudder surface moving it further across the wrong way. If you feel the rudder moving or trying to move against your feet it may not be the instructor riding the controls at all. Imagine, if you like, that you have a lunatic sitting in the back cockpit. Every time you get the rudder movement wrong, he insists on making your error worse by kicking on even more of the wrong rudder. For example, if you apply too much rudder or keep it on during the turn instead of reducing it to just a small amount, the aircraft will skid badly and the rudder will overbalance and lock on requiring a force to reduce the deflection or to re-centralise it.

If you experiment and apply full rudder slowly you will notice how to begin with it takes more and more force to apply the rudder. Then, quite suddenly the force required drops or even reverses so that the full rudder will stay on by itself. A further confusion often arises. At the same time as the rudder overbalances the needle of the airspeed indicator swings back through the zero to give an entirely false reading. If you happen to be glancing at it at that moment you may well be deluded into thinking that you are about to stall. Quite a small amount of slip or skid will cause the ASI to under read.

If you do feel this movement of the rudder pedals as though your instructor is riding the controls ask him. He should be able to tell when the rudder overbalances by watching your turns and ideally he should tell you that his feet are off the pedals and that the movement is the air moving the rudder and not him. Incidentally this characteristic is unacceptable in a normal powered aircraft. It is really caused by a lack of directional stability, i.e. the fin is too small. It causes endless confusion to beginners but is scarcely ever noticed by the experienced glider pilot. As a result the effect is often

forgotten by instructors or at least not demonstrated in a convincing manner. Get your instructor to show you or try it for yourself.

Make no mistake, this co-ordination of the stick and rudder is the real difficulty in learning to fly gliders. The trouble is that it has to be a habit and almost totally automatic. This takes practice. Turns, turns, and more turns. Notice also that you will not be

able to fly straight until these movements are correct. For example, if a wing drops, the glider will start to turn immediately. If you bring the wings level with the stick alone forgetting the rudder, the adverse yaw will swing you even further off your original heading. To fly straight your correction for a wing dropping has to be immediate and correctly done by co-ordinating the stick and rudder together. Every time that you make

a sideways movement on the stick and forget the rudder, the glider will start to swing from side to side.

So don't despair if you cannot do it after a few lessons. Flying straight will probably be one of the last things to achieve before going solo. You will not be alone in finding this apparently simple exercise difficult and in the next issue I will be explaining more about turns and how to get them right. ✕

SOUTHDOWN GC CELEBRATE FIRST SOARING FLIGHT

PETER WILDBUR

Wednesday, June 27: A vintage glider parked on the edge of the Downs, a light wind blowing onto the hill, well established cumulus clouds and a stream of people converging towards the launching area. It was a scene which could have taken place at any hill site during the last 50 years but we were celebrating a gliding event which took place exactly 75 years ago from the top of Amberley Mount in West Sussex, close to the present site of the Southdown Gliding Club.

It was in 1909 that José Weiss produced a full size, man-carrying glider based on principles of stability that he had established over a number of years with model aircraft. This aircraft was first tested with ballast only (as seen in the photograph) and then on June 27, 1909 was flown by the 16 year-old Gordon England (S&G, June 1959, p168). It was launched into hill lift and achieved a gain of height above the launch of some 40ft, the first recorded gain of height by a glider until the Wright Brothers resumed their gliding trials at Kittyhawk.

Our celebrations opened with lunch at the club for the attending VIPs which included Mrs Josée Moseley Williams, an active 78 year-old flying member of our club, and daughter of José Weiss and 91 year-old Mrs Doris Gordon England, the



Mrs Josée Moseley-Williams (left) and Mrs Doris Gordon England unveiling the plaque on Amberley Mount.

pilot's widow. Tom Zealley, BGA chairman, introduced the proceedings and commented on Gordon England's courage and confidence in flying the machine at a time when there was no precedent for successful gliding in this country and when little was known about effective methods of controlling an aircraft in flight.

Chris Wills brought his beautifully restored Rhönbuzzard along to Parham

and Peter Bourne his Scud 2, both of which later soared in the good thermal conditions. Also on display was a foot launched, rigid wing L6FS designed by John Lee, the sixth in a line of developing designs. This and the Scud were perhaps the nearest in conception to the Weiss glider both in their design and incredibly small size by present day standards.

During the afternoon visitors and members climbed the Downs to Amberley Mount where a temporary plaque had been set up by John Land, the technical director of the Amberley Chalk Pits Museum. John has made a special study of Weiss and his aircraft designs and is preparing a permanent exhibit in the Museum on early aviation history in Sussex. We understand that the Parham Estate (the Club's landlord) is to set up a permanent inscribed plaque to commemorate the event.

A lesser known piece of gliding history is that José Weiss formed what must have been the earliest gliding club in the world. It was called the Amberley Soaring Club and its members had all been involved with his early attempts at gliding flight and included Frederick Handley-Page. But for the start of the war five years later in 1914, soaring might well have flourished in this country at a much earlier date. ✕

The 1909 Weiss glider, which achieved the gain of height, being launched from Amberley Mount with ballast only. José Weiss is on the right of the group. No photograph is known to exist of Eric Gordon piloting the aircraft.



BOOKER'S GLIDING GRANNY



MARY MEAGHER, a mother of four with two foster children, two grandchildren and a husband who prefers running, had her first air experience flight with Bernie Fitchett last August and "recognised at once what I had been missing all my life." She joined immediately, went home and "was sick as a dog. Was it the gliding? Was I too old for such adventure? Perhaps at 50 one is a bit round the bend..." Mary overcame an airsickness problem, went solo in November and sells ice skating rinks to "fund the habit". This, and future articles about her progress, is a spin-off from letters she writes to her 84 year-old father in the USA who only retired from tennis a year ago.

As soon as he saw me walk in the office the CFI said "Whatever you're asking the answer is NO!"

Sometimes I know just how John McEnroe feels! It doesn't do much good to argue with Brian Spreckley either. "But Brian!" I pleaded "It's going to be a good day — please may I have the K-8 to go cross-country?" Brian and Bernie Fitchett looked at each other — Bernie raised an eyebrow and shrugged. "You can go put your name on the list and help them get out the gliders, and we'll see how the day develops." I was off like a shot.

Ready for it now... to slip the surly bonds of Booker and float downwind to try for Silver distance. Depending on the wind direction, I could try for Enstone or Swindon. Or Lasham.

Being a middle-aged chicken-hearted female glider pilot, I did not want to get lost. I had been to Enstone and made a dozen circuits with Gordon Camp in the Grob motor glider. I went to Swindon and had a jolly good look at the neighbourhood. Then the day before I went to Lasham, where gentle Derek Piggott took me up in the Falke for an exercise in map reading to Reading and back.

"I don't recommend," said Derek, "making a first cross-country attempt this time of year. So many fields are in crop and it's difficult to find a safe landing place." He cut the engine and I wrestled with the controls in a wobbly circle. "Try to keep away from the sink, and watch your speed. That's it, gentle turns." Amazing. I never thought a Falke could soar, but it can. We floated down over Basingstoke; Derek pointed out the AA building and the road to Lasham. I felt pretty confident I wouldn't get lost. Derek wrote in my logbook "Map reading, Lasham, Aldermaston, Reading and back. Went well."

He never expected I would show up

the very next day! But I did. It took some doing.

I beetled on down to the hangar where the eager beginners on a course were sorting out the K-13s, and wrote a note and left it on the seat of the orange K-8 named Josee. I found a brand new parachute and put that in the glider. I took a barograph apart and Bernie showed me how to smoke it with a bit of old tape. Dave Richardson signed and sealed it and I strapped it in the back. Two kind visitors walked Josee down the field to the point of launching for the day. Doug Edwards said he would come and get me if I landed out. Everything was set and ready. But what would Brian say?

"... delightfully precise spot landing just between two gliders..."

Brian said "You'll have to wait and see. It's not good enough yet." What he really meant was that I wasn't good enough yet. Last week I got all ready and he wouldn't let me go. I made a delightfully precise spot landing just between two gliders, which Brian happened to see, and I caught a rocket for not playing safe and landing down the field. "Last year," said Brian, "a K-8 was broken just that way. You could have been caught by a crosswind gust and damaged the glider." He's right of course. Always is.

But now the day was warming up. The pundits began to queue for take-off. The big blue hole over Booker began to fill with bits of fluff. I began to get really nervous. No doubt about it, this was going to be a super soaring day, a classic. Now or never! Where was Brian? Brian was strapped into the Libelle way up the field, already attached to the tug. I pelted over to him to the indignation of

the chap on the wingtip "Can't you see we are ready to launch!" he yelled angrily. Brian popped open the canopy with a weary look. He looked at me, he looked at the sky. And he spoke thus: "You can go, if and only if cloudbase is 3600ft and the visibility is good at Goring." Yahoo! At last!

"You better take some water with you," advised Doug Edwards. But I had nothing to carry it in, so didn't — mistake number one. The brand new parachute wasn't as comfortable as I had hoped — mistake number two. I didn't think to put a cushion in the back — mistake number three. There were other mistakes but I found out about them later. And the logkeeper got very grumpy when I wasn't quite ready and had to be pulled away from the queue. "If you didn't talk so much. Mary, you'd be ready on time." Boy, that really got me upset. I was upset enough already, I'd made about six trips to the hedge and that's not easy for a female to manage with any delicacy.

My state of nerves was demonstrated to the onlookers by a very shaky take-off. For a terrible moment as I swerved from side to side I thought I should have to abort; with no cushion at my back it was a job to keep the stick fully forward but I hung in there and sorted it out. We bounded up over the trees, up over the M40, upwind toward the Stokenchurch Tower. I released at 2000ft, tried to get comfortable and began to turn in what turned out to be sink. This wouldn't do. Over the village of Lane End you're pretty sure to find a thermal, and sure enough three gliders were circling there. I joined them and climbed up to 3600 below cloudbase. Brian's conditions had been met. You could see all the way to Didcot.

I headed west toward a likely looking cloud, upwind of Booker. It didn't work.

I tried another. That one didn't work either. Four out of 13 times in the K-8 I had stayed up over an hour, and could have stayed up all day. But this day nothing worked. It flew like a brick. Back to the Lane End thermal, marked by half a dozen experts, I waffled around for more than an hour before things began to get a little better and I could find lift all by myself with nobody showing me where. All this time in gliding range of Booker. I could hear the barograph ticking at my back.

I began to creep toward the ridge. The wind, more west than north, resisted penetration. Over the ridge I was down to 1600ft and now too far from Booker to go back, without ever having made a firm decision to press on. "Oh God," I quaked in my seat, and tried to decide on a suitable field where they were cutting the hay, and only then found 2 up and managed to centre. I didn't want to leave it even though it wasn't very strong, so I worked it and worked it and worked it, and had a very good look at Henley-on-Thames. Never cross the Thames at Henley or you may find yourself in a territorial dispute with a 747 on its way into Heathrow. And we know nobody's looking out the window in a 747, much less the pilot on approach.

I struggled up to 2500ft over Henley and then flew from cloud to cloud just north of Reading. A super day! Any moron could stay up on a pocket handkerchief. All I had to do was go west of Reading and east of Basingstoke and follow the road to Lasham.

Easier said than done. I didn't dare fly across Reading, it is a vast sprawling city with a brewery and a gasometer, and a lot of streets and houses and no place to land in the middle. I went round the west end but it was a mighty struggle. The K-8 will float but it won't go upriver. Every time I got down below 1800ft my glasses got all steamed up and I couldn't see. At last I turned the corner and fled down to Basingstoke. Hurrah! From here it will be a piece of cake. After all, Lasham is in gliding distance

from Basingstoke. Just don't make a mistake and land at Odiham, that would be short of Silver distance.

I decided to make one last ascent to be sure of an easy glide to Lasham. By now I had been flying for more than 3½hrs on a very warm day and I was getting tired. In fact I was getting sick and tired. In fact I began to feel pretty bad, dizzy and nauseated. "I'm nearly there and I'm falling apart!" I realised. Instead of going up I was going down.

"I said out loud 'I am going to land, dammit'"

And near Lasham, Derek said the day before, there was nowhere safe to land. I had to come down. No choice. Couldn't make it. There, down there, a ploughed field, big enough and into wind. I said out loud "I am going to land, dammit," and I put my hand on the airbrake, and anyway there's nobody in the circuit to worry about, and that ploughed field is no good because its bloody down hill! but just beyond it there's a pasture, I can see the thistles sticking up, and the animals are in another field, I can see the electric fence, and the pasture is uphill into wind and not too steep and I turned onto base and 55kts, watched the speed, and turned into wind and came down over the hedge and made a perfect landing. "I did it, I did it! I landed in a field!" Tremendous elation Tremendous relief.

I opened the canopy, rejoicing. Clambered out, took off the wretched chute and put it on the wing. Warm silence, bird song. I wondered what do I do next? And then over the hill three men appeared. I hoped for a kind reception. It was rather disconcerting to realise they were toting shotguns. But the natives were friendly; just rabbit-hunting, not glider-hunting. "Sorry to drop in like this," I greeted them, "but your field came just in time!"

"You're lucky, lady," said the farmer.


"we just moved, the longhorn bull out of here this morning!"

A glass of water in the farmer's kitchen did the world of good. Lasham was only four miles down the road; I phoned them up and they agreed to send a tug and if the field was not too steep they would tow me back to Lasham. The whole family came out to see the fun. I never thought the tug would land, the field was uphill into wind and not very big. Brian Spreckley always says "When in doubt chicken out," and that's a good motto in my opinion. But it would be a long way home by road.

At last we saw the little yellow Piper Cub towing a glider to a likely cloud nearby. Set free, it came down and looked us over. And then incredibly, it dropped the cable. "He's going to land!" I shouted. And realising that I would have to fly again that day my knees turned to jelly.

The tug turned and landed neatly up the slope. The pilot, Graham Rodger, said we'd have to move the glider to the bottom of the field and take off downwind, the slope was much too steep to take off into wind uphill. Sure enough the field had a longer bit down at the bottom that I hadn't noticed, so the farmer and his family helped push the glider down to the very last corner and I asked them all to turn their backs for a moment, which they all did most politely, while I crouched behind the glider. "You'll have to keep the wings level on the downwind take-off, and if it looks like we won't make it, release the cable," said Graham Rodger. The farmer looked impressed with the solemnity of the occasion. I felt pretty solemn as well. "Don't get high," reminded Graham, and climbed into the tug. We rattled over the flinty field for a long long time but Graham flew with supreme confidence and I didn't do too badly — we got away downwind with no trouble.

I made a lousy circuit at Lasham. Came in way too high, like a 1000ft instead of 300, and made an S turn abruptly on the final approach, which is **Never Never Done**, and they came and told me so and I submitted meekly to reproof and said I would never sin again and humbly apologised and went in the bar and had a large gin and tonic.

Doug Edwards and Bernie Fitchett came down with the tug from Booker to fetch me home: Doug flew in the glider and I rode in the tug with Bernie and we flew over my little pasture and I pointed it out to Bernie, feeling quite proud of myself. Of course it was four miles short of Silver distance. Never mind. Anyway, the barograph was upside down. Tick tick tick but it didn't make a trace. Close but no cigar. 

AMF ENTERPRISES

Without doubt the most established and experienced glider trailer manufacturers in the UK

Most clubs buy AMF

Over 90 built to date

Talk to any AMF trailer owner before you order

The best value for money

'YOU'VE GOT TO HAVE STYLE'



YOU KNOW WHAT YOU'RE GETTING WITH AN AMF TRAILER

Call in, ring or write for details

**MEMBURY AIRFIELD, LAMBOURN, BERKS
0488 72224**

Wave cross-country flying from Aboyne

JACK HARRISON on home territory

Aboyne is justifiably known as the place for easy Diamond heights. But many local pilots and not a few of the regular visitors see little value in height for height's sake and are now opting more and more for cross-country flying. With altitudes of 20 000ft plus this sounds all too simple. In practice, it is a rather different story, as the two typical cross-country flights I made recently will show.

North West Wave

The forecast gave showers in the west and north of Scotland, dying out in the west later; mainly dry and sunny in the south and east. The forecast was to prove accurate. Laurie Beer (visiting from Booker) and I agreed that the NW wave, with the characteristic Aboyne L-shaped cloud, looked promising. The L-shaped cloud can occur with NW wave. It runs north to south in the lee of Morven, turning almost 90° at the river Dee to run east to west up the valley to Braemar. We decided on a 320km triangle to the SW end of Loch Tay, then NE to Aberchirder, just south of Banff on the Moray coast.

LB launched first at 1015hrs and was soon reporting an easy climb over the river Dee. I took off 15 minutes later, but found the wave disappointing, giving only 1½ to 2kt to 8000ft. LB by this time was working slowly SW of Ballater to the reliable "hot spot" of Loch Muick. I followed. LB decided to go back to the airfield for a formal startline; I saw him for the first time as he passed some 2000ft above in the opposite direction. At Loch Muick I crept up to 9000ft; meanwhile LB was reporting that he was having trouble regaining operating height over the airfield. The wave pattern was typically confused, although a more definite wave bar had formed over Glenshee. But more ominously, cu-nims were already brewing over the Cairngorms.

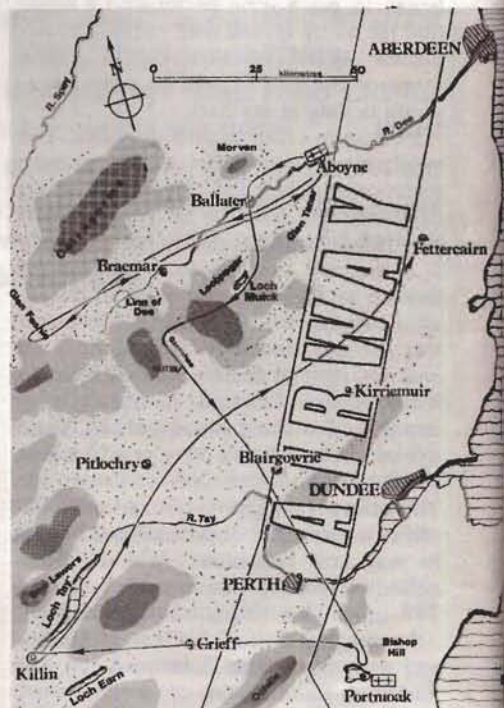
Storms often stay over the highest ground, with the primary down of the wave killing them dead as they drift off the mountains. But on our intended track, and around Aboyne itself, the ground is over 3000ft in places, so I was not entirely happy about the future. Nevertheless, I did not abandon the task and crossed upwind to Glenshee, arriv-

ing at some 7000ft. I worked slowly south over the ski and hang glider site at Cairnwell, finally reaching 9000ft over the Spital of Glenshee Hotel. Although the storms were apparently no worse, the wave along track looked more confusing than ever. To the south, thermal conditions looked superb. LB meanwhile was struggling at around 8000ft at Loch Muick. I made a decision. Portmoak, here we come.

From 9000ft I was able easily to cross a patch of dead air under cirrus overcast, descending to cloudbase 5000ft just north of the airway near Blairgowrie. Two rapid climbs to cloudbase, and a fast glide onto the west face of Bishop hill at Portmoak was easy, arriving at about 2000ft. I had heard reports of useful wave there but was not prepared for what lay in store. Anyway, a turn over the SGU clubhouse seemed an appropriate place to drop waterballast (or whatever) and I was working back along the Bishop. It seemed so easy now to get into the wave from the NW corner of the hill, a far cry from my first fumbling efforts nearly twenty years earlier. The advice then was "get as high as you can on the hill, press forward into wind and hope to contact wave".

"It was like Piccadilly Circus up there..."

I realised now that the orientation of the wave was not the same as that of the slopes of the Bishop, the wave running roughly NE to SW (parallel to the Ochills upwind), the Bishop being N to S. The technique seemed obvious now. Get as high as possible on the hill at the nearest point to the wave, and then track at right angles to the wave. That would normally mean track NW from the NW corner of the hill unless, of course the wavelength is such that the lift conveniently intercepts the face of the Bishop at some point. These are the classically easy days. This day was not quite as simple, but nonetheless, I was soon passing cloudbase at a steady 9kt. This was magic. It was like Piccadilly Circus up there, and I took great pleasure in overtaking some of the local traffic on the way up. As the lift dropped to 3kt at 16 500ft, I left for a fast VMC crossing of the airway.



Loch Tay now seemed possible again. LB was stuck at Pitlochry after a tedious climb to around 12 000ft, and about to give up and go home. I simply had to make Loch Tay now. I could not allow a Booker pilot to upstage a local. It was feeble lift near Crieff, equally feeble by Loch Earn. Loch Tay itself is usually reliable in a north-westerly, so with escape routes planned to suitable landing areas, I dived into the TP by the village of Killin with 6000ft asl on the altimeter. It was entertaining at this height, especially as the lift was pathetic. But I managed to hold height as I crept north-eastwards to the Loch Tay "hot spot" in the lee of Ben Lawers. This was indeed better. I found that the best climb was achieved by drifting back with wave induced cumulus. I kept going forwards to stay in the lift — the usual practice in these conditions — but even though new, scrubby cumulus was forming below, there was no lift. Back to the big cloud, which was still giving 1-2kt. Forward again, with the same negative result. But strangely, the third attempt worked, and still over the same spot, the same scrubby clouds — 5kt! Wave is indeed fickle.

LB was by now almost back at Aboyne and reporting weak, useless wave. I

managed to get to Pitlochry, still at 8000ft. But a wave return to Aboyne was hopeless with massive cu-nims over most of the high ground to the N. My only chance was to thermal over the low ground to the SE of the mountains and hope somehow to be able to cross back into the Dee valley. The thermals were truly superb with one climb of 10kt for three minutes to cloudbase of 5500ft. This really was too good to be true, with by now very unstable air. Over the mountains low scud cloud had formed in association with the cu-nims. LB confirmed impossible conditions as he descended into Aboyne covered in ice from what was to be the last usable cloud.

"... as close as I was likely to get to Aboyne."

All that was left was to find a suitable place to land. With adequate height, I could meet all the requirements. A pub, a village, a main road. And of course, good fields. Fettercain met all the requirements, and was as close as I was likely to get to Aboyne. I landed by the distillery. The three quarter mile walk into the village centre was no fun in regulation wave-soaring moonboots. Although the pub would not be open yet (1600hrs), I could at least buy a pie and can of drink from the local shop. Now many of you will know that for some reason (even they cannot explain why) the Scots do not have their public holidays on the same day as the rest of us. Yes, you have guessed. Fettercain was having its Bank Holiday one week early!

Southerly Wave

Two weeks later it was a very different flight. A light SE surface wind, and the possibility of weak south wave. But nobody really believed it was worth launching until CFI, Dave White, came down from a two-seater trip reporting that he had left 8kt at 5000ft. The Cirrus came out of its box, and just under an hour later tug pilot, Joanna Murray, was taking me to the exact spot over Glen Tanar I had asked for. Bravely I pulled off at 2000ft (normally it is worthwhile taking higher). There was lift of sorts, but it was very poor. Iain Donnelly meanwhile was "fiddling about" just downwind of me at 3500ft. I went under him and found a weak thermal at 1700ft. I took this until it died, then back into wind again and picked up the next. This was typical of wave thermals and gradually I was able to work up to the top of the pronounced haze layer at around 3500ft. As expected, the lift steadied at 1kt and I was into the wave proper. Iain

was with me as we worked westwards up to 5500ft, but it was very poor.

A sortie downwind to the N side of the Dee valley and a good line of cloud brought nothing. But the wind was light so I lost little getting back to the river at Cambus O'May, four miles W of the airfield. This spot was reliable, so I dared to venture further away. "The lee of Lochnagar ought to be," I thought. I reached there at 4000ft, still above the haze only to be surprised by a remarkable rotor effect. The lift was too broken to work properly, although it was certainly 4-5kt in brief bursts. So back to Aboyne. By now a medium level true lenticular had formed just to the S of the airfield. This was much better and at a steady 5kt I passed the front of this cloud at around 9000ft. (These smooth lenticulars are often not as high as they appear. The smoothness is deceptive). At 10 000ft I set off W again, albeit at little more than 50-55kt, and was able almost to maintain height. The odd patch of 1kt enabled me to make an extended glide.

I was soon passing Braemar and on to the Linn of Dee, still with a workable looking line of clouds ahead. Forty-five minutes after leaving Aboyne I reached the end of these clouds as I crossed over the watershed into Glen Feshie. I was some 60km from base at 7000ft. This was certainly lower than I would have liked, but not uncomfortable. There are good fields at Braemar and Ballater so there would be no problems if I could avoid bad sink. But even if I did, a turn downwind should soon get me out of it. In fact, the return to Aboyne was uneventful. There was reduced sink most of the way, rotor again in the lee of Lochnagar and a sudden loss of 800ft as I failed to interpret the confused cloudscape. But I was soon back to the by-now spectacular lenticular just S of the airfield. From 6000ft it was a rapid 7kt past cloudbase, still at precisely the same height. The lift gradually died, but with the cross-country complete I relaxed as it took me to 12 500ft. I called it a day, and within 15 minutes was in the bar.

Aboyne might indeed be the place for easy Diamonds. Portmoak might indeed be the place for cross-countries in NW wave. We are only just beginning to tap the potential Scotland has to offer. I like to believe that pilots of the 2080s will look back with amusement at our feeble efforts of the 1980s.

We would be grateful if all contributions to S&G are sent to the editorial office, 281 Queen Edith's Way, Cambridge CB1 4NH and not to the BGA office. Valuable time is wasted each issue with material ending up in the wrong place.

Aero Marketing
ASSOCIATES LTD

**WHEN ONLY
THE BEST**

WILL DO

PESCHGES —



**THE BEST
ELECTRICAL
VARIOMETER
AND
NAV COMPUTER
SYSTEMS**

The most advanced technology offers YOU

- Unsurpassable accuracy
- Unequalled T.E. compensation
- Extremely fast, but smooth indication
- All weather reliability, world-wide
- Maximum durability
- Easy installation, only pitot and static needed — no flasks or tubes

SAGE —



**THE BEST
MECHANICAL
VARIOMETER**

We have just been appointed agents for these superlative hand-made variometers.

FLETTNER —



**THE BEST
ROTARY
VENTILATOR**

Prevent dampness, humidity, and heat build-up in your trailer.

LESSONAL —

**THE BEST
FIBREGLASS
POLISH FOR
GLIDERS**

LESSONAL —

**THE BEST
GLIDER SEALING
TAPE**

Now in summer and winter versions

Also — THE BEST

High quality silicon tubing
Locking ties for silicon tubing
Electric and pneumatic switches

Contact:

TED LYS

54 TOR BRYAN
INGATESTONE
ESSEX CM4 9HN

Tel: (027735) 2418

BOB SZULC

110 KENDAL DRIVE
SLOUGH
BERKS SL2 5JA

Tel: (0753) 31796

SOARING & STRESS

A look by VAL BRIAN at the tensions of the sport, what they can do and how to cope

(Reprinted by kind permission from Soaring)

Stress is a normal part of life. It is normal to feel stress in certain situations, when we are faced with uncertainty, challenged or threatened. In a state of primitive nature, a threatening situation leads to fight or flight — the adrenalin flows, the muscles tense and the body makes preparations for emergency action.

In a state of civilization, many of our challenges offer us little or no opportunity to release our physical tensions; consequently, they can accumulate and result in a variety of physical and mental disorders; headaches, asthma, indigestion, ulcers, sleeplessness, hypertension, forgetfulness, muscular cramps — the list is almost endless. Little is known about how anxiety is transferred to an ailing part of the body, but the fact is well known that these transfers do occur and that it does little good to merely treat symptoms; the stress-related disorder pops up somewhere else. What is important is to relieve the causes of stress, by finding ways both physical and mental to avoid the accumulation of tensions until they finally break out in uncomfortable and even in debilitating ways.

A sailplane is a perfect stress machine. Its pilot is shut up in a confined space, made too hot or cold and, when faced with the challenge of competition, concerned to avoid other gliders and otherwise keyed-up. Added to these irritants often are the need to traverse hostile terrain and the possibility of landing in a strange field. The pilot has to monitor half a dozen instruments while at the same time keeping a good lookout, hurtling around in a narrow thermal or final-gliding over trees that extend to the horizon's edge.

It is no wonder that many of us feel our mouths dry, our palms sweating, our breathing constricted and our limbs cramped. It is no wonder that pilots get lost, forget to lower their gear, or stall and spin on approach. For the competition pilot, white knuckles are an occupational hazard.

After landing, have you ever wondered how you could have made such a dumb error — mistaken a landmark or failed to reason out your position? The fact is that a pilot under stress is less intelligent, less rational than the same pilot on the ground, and this is the best reason I can find for the superiority of

some pilots — they retain their ability to think smart under pressure. The rest of us, steaming in the competition pressure cooker, are thinking at lower efficiency, we make more mistakes, and after a few hours of high concentration our technique drops off. A few pilots, at the other end of the scale from the experts, are so debilitated by stress that they are constantly at risk, and sooner or later they may have an accident.

"We tend to think of a flight as One Big Problem, when in fact it consists of a series of problems that can be anticipated and dealt with in a systematic way."

How can we cope with soaring stress — at the lower end, avoiding passing out, making those decisions that the inquiry will label "Pilot Error" and at the high end, performing at the top of our form rather than being degraded by tension?

First, let us look at how stresses accumulate. For everyone there are stresses deriving from our work, our families, ourselves. Investigators have come up with a matrix of "stress indicators" which include changes we have to adapt to, marital problems, loss of job, illness, and so forth. To this background of stresses we add the wear and tear of competing — towing a trailer hundreds of miles, adjusting to life in a tent or a noisy motel, suffering sunburn and heat exhaustion.

It certainly helps if we can reduce these stresses by careful planning. Having a good crew and an experienced crew chief can unload the pilot of many of his concerns about equipment and leave him free to study each task and concentrate on what the pilot alone can do. But beyond planning and preparation, there will always be the irreducible tension that goes with competition. One pilot I know always throws up before a competition flight. He's fine afterwards, but there may be better ways of handling the stress.

Systematic stress relief can take a variety of forms, ranging from daily exercises year-round to last minute distressers before each flight and in-flight tension relievers. One form of daily stress relief is to lie down and systematically

tense and release every muscle from the toes to the top of the scalp. At the same time, you practice deep yogic breathing to purge air from the lungs. Other techniques have been specially developed with stage performers in mind — dancers, musicians, actors, and so on. These involve exercises to extend the muscles and manipulate the bones of the skeleton so as to increase mobility. Many people find that such physical recrea-

tions as running and tennis are beneficial in relieving stress.

The sensation of tension can also be relieved by taking drugs and alcohol, but this symptomatic relief often leaves us worse able to cope with the environment that gives rise to stress.

Wringing out the physical tensions in our bodies with daily exercises and pre-and in-flight stress relief techniques can be helpful to those afflicted by stress, but much of the anxiety experienced by soaring pilots derives from their lack of a methodical plan for dealing with decisions and crises in the air. We tend to think of a flight as One Big Problem, when in fact it consists of a series of problems that can be anticipated and dealt with in a systematic way. Breaking down a flight into its components — the start, the first climb, navigation to the turnpoint, taking the photo, etc. — can all be practised and reviewed, leaving us free to concentrate on real emergencies and problems to be solved.

For example, an aeronautical chart is a nightmare to fold and unfold in the cockpit. Why not tape it so that it shows only the territory you will be concerned with, and mark north with a big arrow? Courses should be marked with big numbers, and if you have to identify TPs, the photos can be taped to the back. I now have to wear glasses for reading, yet I despise bifocals. As a result, I am continually having to find reading glasses and dark glasses in the cockpit, which complicates the finding and reading of charts. When I've solved this problem, I'll let you know!

Val Brain is an SSA Instructor with the Mid-Atlantic Soaring Association at Fairfield, Pennsylvania. He also serves as co-ordinator of Performance Stress Workshops at which methods of stress relief are taught.

Since I am not a good navigator, I find it necessary to navigate myself around a task course before take-off, noting the landmarks on the chart ahead of time. There is never a good time to study a chart in the air, and being lost is usually a matter of failing to recognise significant landmarks. Worry about other gliders while flying in gaggles can be alleviated by mounting a small convex mirror on the instrument panel to cover the area above and to the rear, where the risk of collision is greatest. This avoids a lot of head-twitching to cover the blind spot behind the pilot's head.

It goes without saying that we should not fly when ill or otherwise distressed, and that we should prepare ourselves for hot and cold conditions and take precautions against sun and wind. Some gliders are not adequately ventilated, which adds substantially to their pilots' stress. On the other hand, a ventilation system that directs a blast of cold air on one part of the body can cause aches and pains. Some systems do a poor job of de-misting or de-icing the entire canopy, especially places that can't be reached in

flight. Flying half blind is not conducive to reducing the pilot's stress.

If one feels oneself tensing up while flying, one can perform a routine to help relax. I sometimes become aware that I am holding my breath during a crucial climb, and must consciously control my breathing. After my first long flight back in the fifties, I got out of the glider and collapsed. My legs just would not carry me. I had been supporting my outstretched legs from the hips, rather than allowing them to rest on the rudder pedals, with the result that my leg muscles became exhausted and they were stiff for weeks.

Many *ab-initios* hold on tight to a part of the cockpit or lock onto the release knob or stick. Their muscles fight each other and eventually become exhausted. Consciously relaxing muscles during a glide between thermals can prevent tension building up. Fear of unfamiliar manoeuvres, like stalls, spins and steep turns, can be overcome by practising them. Some pilots are made uncomfortable in haze when a clear horizon is not visible. Flying hands-off for a few seconds under such conditions can help reassure the pilot that the glider is not going to suddenly flip. If, through negligence, you allow yourself to be sucked into the bottom of a cloud, you may be tempted to drop the nose and dive out as fast as possible, but this is hazardous to you and any others in the vicinity.

Instead, flying out calmly on a compass course at normal speed makes more sense and keeps the urge to panic under control.

Panic is, basically, the breakdown of all reasoning under the effects of stress. Panic is never beneficial, since even poor judgment is better than none. I have known pilots so distressed at getting lost that they have just fluttered down and landed in a field below them when they could easily have stayed up and possibly found themselves. Tense pilots forget their good sense and are easily confused. Faced with a difficult field landing, a pilot may mistake the gear lever for the airbrake lever, or pull on the release rather than the spoiler knob. As a result, a tense controllable situation becomes a tense uncontrollable situation, and a bad outcome is assured. When we need calm, rational thinking the most, it is likely to be least available to us.

To sum up, then: what I am suggesting is that we try to control stress and always function at our best by preparing for the stress of soaring in two ways. The first is rational: planning ahead, using checklists, thinking about emergencies before they occur. The second is physical and psychological: practise ways of relaxing on the ground and in the air, so we do not become victims of our own tensions. We may not raise ourselves to the level of top competition pilots, but at least we can avoid the epitaph "Pilot Error." ❏

"FLYING" CABLE PARACHUTES

BILL SCULL, BGA director of operations, calls attention to a launching danger which has claimed one life this season and caused serious injury to another pilot.

Another serious accident involving a cable and parachute across the glider's wing (see also p224) gives considerable cause for concern. Although both the accidents were on reverse-pulley launches it appears that the risk is there in any type of launch — winch, straight autotow or reverse pulley.

The problem occurs where the angle of the cable to the ground is a shallow (acute) one; cable length to some extent determines the height up to which the critical circumstances can arise. If the launch is abandoned and the car or winch driver is slow to react then, with power still applied, the cable parachute will literally fly — the principle of the ascending parachute; to what extent it may climb is determined by the cable weight and parachute size.

Given a flying parachute and a descending glider it is not difficult to envisage the glider catching up with the parachute and cable. Once the cable is over the wing the pilot's reaction is critical. If he turns the chances are that the cable will eventually

snag on the wing, probably at the inboard end of the aileron. This is almost bound to happen if the glider is turned to get the cable off the wing; the aileron is deflected upwards and so stops the cable sliding off.

Avoiding such accidents first of all requires a more general awareness of this particular risk. The aspects of ground operation which must be emphasised are:

- Winch/car drivers to stop immediately (or as soon as possible if a launch is abandoned. Without the driving force the parachute cannot fly.)
- Releasing the cable at the car or cutting it at the winch probably gives the glider pilot a slightly better chance if the cable "hangs up".
- Use the smallest cable parachute you can to further minimise the risk. This is also relevant in a low-level launch failure when the parachute may envelope the nose and cockpit of the glider.

Pilots should be aware that:

- The risks are probably greatest in a launch which is too slow — given the requirement on releasing to lower the nose immediately and gain speed.
- Above all, if the foul up happens, then your best chance of survival is to go straight ahead. If the cable snags on the glider's structure and on the ground then there is no chance of getting round the turn.

Instructors must emphasise the nature of the risk by:

- Getting students to work out for themselves (rather than just telling them) how to avoid and how to deal with this particular situation.

Finally, if these accidents represent the tip of the iceberg then the need for incident reporting should be obvious to everyone. How often does one hear accounts of this sort of thing happening? Often enough to suggest that we must have reports of all incidents to get a true picture. ❏

En route mid-air collisions: how to avoid them

Further copy on this subject reflects the continuing concern with collision risk. Since the two fatal accidents reported in the last issue there have been two more mid-air collisions, fortunately without loss of life. The following article serves to reinforce the problems of looking out and, more importantly, seeing. Only if you understand the problems can you hope to overcome the eyes' limitations.

— Bill Scull, BGA director of operations

(Reproduced with acknowledgements to the Australian Aviation Safety Digest published by the Bureau of Air Safety Investigation).

This article addresses the issue of detecting other aircraft during an *en route* cruise by examining some of the physical, physiological and psychological problems of lookout or visual search.

Relative motion

If two aircraft are on a collision course and are flying on constant headings at constant horizontal and vertical speeds, then each aircraft has a constant relative bearing to the other right up until the moment of impact. Fig 1 makes this clear. Even though

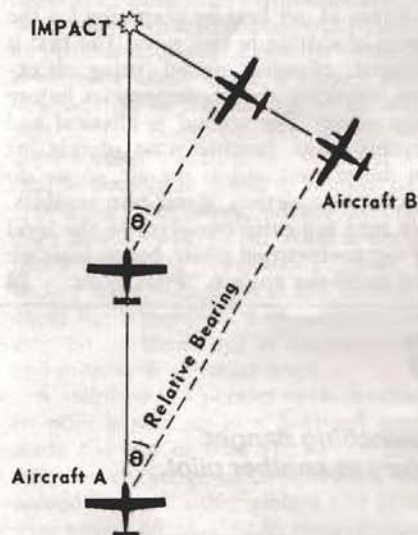


Fig 1. Constant relative bearing equals collision risk. aircraft A is going twice as fast as aircraft B, their relative bearings are constant. The effect of this, of course, is that if you are going to collide with another aircraft, then that aircraft has no apparent motion with respect to you and will stay at exactly the same point on your windscreen until you hit it; in other words, it will in many respects behave in the same way as a fly squashed on the outside of the windscreen.

This absence of any relative motion is important from the point of view of detecting the other aircraft because most of the retina (the sensitive layers of cells at the back of the eye which turn light into nerve impulses to the brain) is wired up to be especially sensitive to the detection of small movements. It is not hard to imagine why this has evolved to be so. If you and your fellow cavemen were sitting around the campfire munching your mammoth steak you would not need to have your attention drawn to the woods

while they were still, but even a small movement could have signalled danger. Apart from this physiological reason for moving targets being easier to detect than stationary ones there is probably a psychological reason as well, and this is that the experienced pilot will have learned to use movement as a cue to detection for the simple reason that all the aircraft he has ever seen will have had some relative movement with respect to him — unless he is one of those pilots who has had to take real evasive action to avoid a collision.

So, the relative motion problem is a very real one and can be summarised by saying that motion is a good cue to detection, pilots probably learn to use it, and all aircraft possess some relative motion except for the odd ones that you are likely to bump into (which is a bit of a shame really — much better if it were the other way round).

Time, distance and size

Some pilots may wish to argue that while the information on relative motion may be true it does not really explain how mid-air collisions occur: if you are going to hit another aircraft it must look as big as a barn door before you collide with it; whether it appears to be moving or not is, to put it mildly, of academic interest only.

To answer this point, look at Fig 2 to see just how an oncoming aircraft appears to get larger as it gets closer. It is roughly true to

say that the apparent size of an oncoming aircraft (ie the angle which it subtends at your eye) doubled with each halving of that aircraft's range. Imagine the case in which a GA aircraft and a military jet are approaching each other head-on at speeds of 150kt and 450kt respectively — a closing speed of 600kt. At about twenty seconds before impact the two aircraft might be about 6000m apart and each will present a target to the other of only around a sixteenth of a degree. Ten seconds from impact the distance will have halved and the target size will have increased to all of an eighth of a degree; at five seconds the size will have again doubled but is still only about a quarter of a degree.

In other words, the oncoming aircraft remains extremely small until very, very late, and then it suddenly expands into something that fills the windscreen. These abstract calculations match up with the accounts of many pilots who have had mid-air or near misses: they often describe themselves as having maintained a good lookout, then diverted their attention inside the cockpit for two or three seconds to complete some checks, only to look up and be horrified to find that the way ahead was full of aeroplane. As reaction time is usually two seconds or more this amounts to a situation pregnant with danger.

Some readers may still not be convinced that there is any perceptual problem in seeing other aircraft and might argue — with some justification — that although, for example, a quarter of a degree may sound small, it is actually a reasonably large target (it equates roughly to the size of a 2p coin viewed at a distance of about six metres) to miss completely, and that anyone keeping a good lookout should not really miss it. There is an element of truth in such an analysis, but it really hinges on what is meant by a good lookout, and this again bears some psychophysiological comment.

Visual acuity

The first point to be made is that the retina is not equally sensitive over all its surface. Fig 3 shows that it is only in a small, central area of retina (the fovea) that visual acuity is good. Even at very small angular departures from this central area acuity drops off alarmingly to a small fraction of the central acuity. This does not cause any problems in everyday life because we can always use the

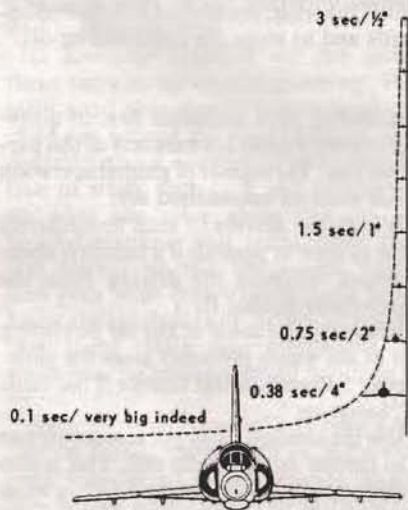


Fig 2. Time to impact and angular size of oncoming aircraft.

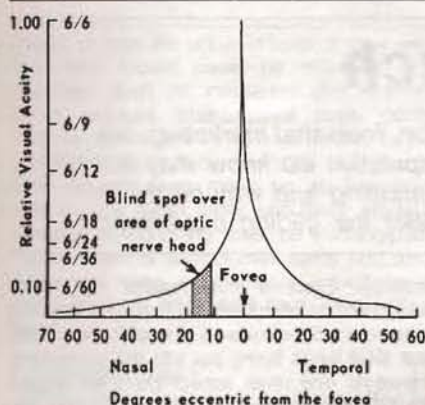


Fig 3. The variation of visual acuity at retinal sites eccentric to the fovea. The acuity at 5° to the fovea is only one-quarter that at the fovea.

central part of the retina to investigate anything that we are interested in and use the rest of the retina to "fill in" the rest of the world (and attract our attention to anything interesting out there), but it does mean that if we are conducting a visual search for a small target, and the object of our search does not happen ever to fall on the foveal area, then we are extremely unlikely to see it. It is clear that the subjects' chances of spotting the aircraft dramatically mirror the sensitivity of the retina.

Many pilots will have experienced similar effects; it is a common experience to spot another aircraft, look away for a few moments, and then look back to the area of sky where it was but be unable to see it again because this time the aircraft's image just does not happen to land on the right bit of the retina. Sometimes, though, the aircraft will appear to pop up from nowhere as it is acquired in the right place.

Lookout and scanning

Accepting the comments presented thus far, the question now arises of how best to move the eye over the external world in order to maximise the chances of detecting aircraft out there.

Some pilots believe that the best way of searching is to move the eyes in a smooth, continuous way over the area of interest. Unfortunately, it is impossible to move the

eye in such a smooth, continuous movement unless there is something out in the world also moving smoothly which the eye can track. In the absence of such a moving stimulus, the eye can be moved only in fast jerks (called saccades) with interposed rests. What is more, it is only during the rests that it is possible to see anything. You can easily demonstrate the saccades to yourself by trying to move your eye smoothly around your room: pay careful attention to what you are doing and it will become apparent that actually you are moving your eye in jerks. However, if you hold up your finger in front of your face and move it about, you can track it smoothly and easily. Alternatively, watch someone else's eyes whilst he does it.

Those making slow methodical searches were losing out.

So, when searching an empty sky the eye does not move smoothly but jerks about. There is some good evidence to suggest that if you are conducting a search it does no good to prolong the rests: that is, if you are going to see something in one of the rests, you will see it straight away and it does no good to leave your eye hanging around in the same place — it just wastes time. Thus, in experimental situations, the people with the best detection scores were those with the highest frequency of eye movements. Those people who thought perhaps that they were making slow methodical searches were in fact losing out.

The last point to make about visual searches is that of where to look. It is possible that you could collide with an aircraft that was descending (in which case you should have seen it silhouetted against the sky) or climbing (in which case it should have been seen against the ground). In the first case it probably does not matter much what colour the aircraft is painted, but in the latter case it matters a lot. Civil aircraft generally show up fairly well against the countryside, although this does of course vary with the aircraft paint scheme and the

terrain. The effectiveness of military camouflage on low-flying aircraft, on the other hand, has to be not seen to be believed. However, it is most likely that you will bump into another aircraft that is level with you, for in this case the other aircraft will (at low to moderate altitudes) be between you and the horizon and will present to you its least conspicuous aspect, *ie* you will probably be viewing it from the front or side and the wings will effectively have disappeared. So, again it looks as though all the factors conspire to make the most threatening possibility the least easy to detect.

Conclusion

The final, crucial question is whether all this actually results in any useful advice. The first important point is that pilots should understand what they are actually doing when they search the sky — and if you have read this article up to here you should now be in that happy situation. There are a few more concrete tips that may be worth remembering. They will not guarantee that you will not have a mid-air, but if you follow them your chances of picking up that potential collision risk will be considerably enhanced.

- Remember that the aircraft you are going to collide with is the one that appears to be stuck in the same place on the windscreen — if it moves, you will miss it (but take positive avoidance action just in case).
- Remember that you are looking for a small target that gets rapidly bigger only when it is too late to be avoided. It can easily take two seconds or more to appreciate the situation, make a response and get your aircraft to change course, so minimise the time spent with your head in the cockpit.
- Concentrate your search in the area of most likely conflict, which, in many situations, will mean along the horizon, looking for those aircraft at the same level as you.
- Do not imagine that you can make a smooth, continuous search. Keep your eyes scanning the world in quick movements. ☒

THE REPAIR SPECIALISTS



NOW IN OUR 24th YEAR

WE REPAIR: GLASS — STEEL — ALLOY — WOOD

LLOYD'S
APPROVED

TUG AIRCRAFT REPAIRS AND RE-COVERS

RAPID
SERVICE

VINTAGE AIRCRAFT REBUILDS

FULLY QUALIFIED STAFF

SHEPLEY LANE, HAWK GREEN, MARPLE, CHESHIRE Tel. 061-427 2488

GLIDING – a Marketing Approach

JOHN ALWAY, a marketing manager with experience of sports promotion, feels that marketing, like gliding, is greatly misunderstood and the little the majority of the population do know may not enhance the image of either. He gives a brief explanation of basic marketing and why he thinks gliding is in need of help, before discussing what marketing can offer the gliding movement.

An accepted definition of marketing is "the identification, anticipation and satisfaction of consumer needs at a profit." This is normally applied to consumer and industrial goods or services but is being increasingly applied to non-commercial organisations such as charities, churches or political parties, and the "at a profit" statement can become "not at a loss" in these cases.

Marketing men play with four basic variables in their attempts to provide customers with what they want.

P — Product, the goods or service itself.

P — Price, the price of the product.

P — Promotion, the advertising and publicity of the product.

P — Place, the distribution or availability of the product.

Marketing is about optimising the combination of the four Ps which are never static and many products and companies have failed because they did not adjust to a changing environment.

Why does gliding need marketing?

Gliding takes people's time and money and therefore could be described as a product or service. With fewer people coming into the gliding movement, clubs have less revenue and the movement itself could become stagnant to the detriment of all in it at present, further inhibiting potential glider pilots.

Marketing certainly won't cure any of gliding's problems but it may help to isolate them and hence make ideas which are already in people's minds be more easily applied.

P — PRODUCT

What is the gliding product? This is not easy to answer as many people are involved for differing reasons. Some glide as it is simply a means of getting into the air, others because they like being involved with making or mending mechanical objects, some enjoy the challenge of cross-country soaring, some want to take part in and do well in competition, helping others learn something can also be a reason, as can being involved simply because one's husband or wife is addicted. These and many others are all part of what makes up gliding.

However, what often happens is that because people running clubs or the gliding movement have their own reasons for gliding, it is easy for them to assume that the vast majority of others are involved or would want to be involved for the same reasons. Marketing myopia sets in and the product becomes further removed from what is actually wanted.

To sort out what kind of product they wish to provide, the BGA and individual clubs should be asking questions such as:

- Are we a training organisation? If so, what are we training people for?
- Is the training adequate?

- Is the training too long?
- Should we be providing more or less air experience flying?
- Are our holiday courses sufficient?
- Do we have a bad weather programme?
- Are our launching facilities right for our members?
- Can we launch people quickly enough?
- Is private ownership hindering training?
- Do we cater for the needs of pilots after they have gone through basic training?
- Do we give pupils an appreciation or access to knowledge about other aspects of gliding?
- What are the requirements for club gliders?
- What are we offering private owners?
- What facilities are we offering to the "fettlers"?
- What family attractions have we?
- What club atmosphere do we provide?

I am sure these questions and many others have already been asked but what happens all too often is that the answers are given by the existing organisers, not by the up and coming members, or by the people who have given up gliding or those who would like to take it up.

Before we can provide a product we must know what consumers and potential consumers want. It may be that the existing product, which does after all cover a wide spectrum from soaring centres to training courses, from high performance glass-fibre to vintage gliders, from aerotows to bungee, from thermal to ridge and wave sites, from fancy clubhouses to tin shacks, from professional instructors to passenger carriers etc, etc, already can provide for most people. If this is the case, could it be that other elements in the marketing mix are wrong?

P — PRICE

In today's economic climate price is becoming increasingly important and many companies are having to reassess pricing policy in the light of competition. Price wars, special offers and discounts are all commonplace and there is no reason why gliding is exempt from economic pressures.

With three million unemployed, many more on short time working and real disposable income beginning to fall, people are thinking twice about buying ordinary household goods let alone spending on something which may not be considered essential.

The price of gliding is made up of many elements, club membership, club joining fee, launch fees, glider hiring charges, glider purchase, insurance, repairs, competitions, courses etc. Virtually all of the costs associated with gliding have risen tremendously over the last decade and this naturally puts pressure on those who are already within the movement and causes them to cut down their

activity. Even if this means not taking launches on marginal days or only entering one competition instead of two, it does affect the total funds being put into the movement. However one must accept there will always be a level of complaints about prices and the problem is to establish whether this is normal or whether it is having an adverse influence.

Gliding as a leisure activity is not in a vacuum but is competing for people's time and money with all other leisure activities, but more specifically with other related sports or hobbies. Included in these would be hang gliding, windsurfing, sailing, power flying, microlight flying, etc. Ten years ago gliding may have been considered a cheap alternative to flying, but it is possible that hang gliding is now considered the cheap alternative to gliding and microlights the cheap alternative to flying.

If the gliding movement is to flourish it must constantly attract new, and that primarily means younger, people. If the "joining" costs to become a glider pilot are excessive then the younger people with limited resources will find alternatives.

Reduced launch fees

Some elements of the costs of gliding are outside the direct control of clubs or the BGA, but others can be controlled and used to try and stimulate either greater use by existing members or attract new members. Examples of this could be reduced launch fees for early morning or evening launches, cheaper joining fees and membership for under 21s, reduced soaring charges for badge flights in club gliders etc.

Financial inducements could be made to potential new members such as a rebate on launch fee on completion of first solo. Existing members must also be convinced they are getting value for money, both from the launching facilities available, whether winch, auto or aerotow, and from their other fixed costs such as membership.

The whole area of club and private finance is very complex but without a thorough review it is likely that with rising prices and increasing competition, gliding will find itself with fewer active members to cover greater overheads. The recent plummet in secondhand prices of gliders is a reflection not only of the favourable exchange rate for new gliders, but also of the old-fashioned economic theory of supply and demand. Basically there are more gliders around than people are prepared to buy and hence price drops.

Most commercial companies have had to have a very careful look at their finances to try and ride out the recession and this has meant reductions in overheads and running costs. In gliding club terms this could mean looking at the size of the fleet to see if any

gliders or tugs are under-utilised. If they are, then both capital could be released and expenses such as insurance and maintenance reduced. Maintenance costs could also be minimised by C's of A etc being undertaken by suitably qualified club members. Launch costs make up an important cost for new glider pilots and more efficient methods of launching must be investigated. Tighter financial control over costs and also debts can make a significant impact on a club's finances and could help keep prices down.

P — PROMOTION

This is the variable most easily identified as being the province of the marketing man and hopefully this can be used to stimulate consumers, both present and future, to partake in the pastime which all the advertising superlatives can't do justice. Advertising can cost a great deal of money for rewards which may not be directly measurable. One of the oldest advertising quotes is "I know that half my advertising is wasted but I don't know which half".

Excluding adverts in S&G, our own fairly introspective magazine, very little advertising is seen either for the gliding movement as a whole or individual clubs. Most club advertising of their facilities or courses is in S&G where presumably it reaches the converted and hardly anybody else. Some clubs do advertise in aviation press such as *Pilot* where they will reach a broader audience. If individual clubs can't afford advertising in the more expensive, bigger circulation magazine, then should not the BGA try to attract people by taking larger, better designed adverts on behalf of the clubs?

A measurable form of advertising is direct response advertising where the reader can fill in a coupon to either buy a product, say the latest S&G, or be sent information, say about holiday courses run by various clubs. This could be tried at fairly low cost to see what response was generated. If the BGA do not have funds available then clubs who wish their details to be forwarded to respondents could make a contribution.

Budding club talent

The creative content of any advertising is very important and the use of a professional adviser at least could engender enthusiasm in readers. I am sure most clubs have some budding advertising talent waiting to be unleashed and access to somebody in the advertising world.

Most clubs run open days and local advertising in press or posters in local shops can help to boost attendances which can then be converted to members. However advertising does cost money and if funds are limited, other promotional activities must take place.

Direct involvement from all members of gliding clubs in recruiting new glider pilots would certainly help. It should be relatively easy for most people to put a notice up at work inviting fellow employees to an air experience evening or day. If this sort of activity is organised, then people can get involved in gliding who would not, of their own volition, venture on to a strange airfield with these strange gliding types. Some com-

panies even have sports and social clubs which may be prepared to subsidise employees' gliding and this would help keep costs down.

Public relations, PR, can be a major help if used properly. Recently there have been some good examples of gliding getting coverage by the media. On TV there was the film about a 500km attempt, this must have introduced a lot of people to an element of gliding that they did not even know existed. On Radio One, a top DJ was given a flight by a club and recorded this for playing on his Sunday programme. This could lead to younger people being interested in gliding.

This sort of activity does not happen by accident, somebody has to organise it either on a local club basis or via the BGA. How many clubs take PR seriously and see it as a positive aid to attracting new members rather than reply to complaints about aircraft noise?

Human interest

An enthusiastic PR person or team in a club could build good relationships with local press, local radio or TV stations and obtain coverage, especially for newsworthy events, ie open days or Regionals. Of course stories with human interest always make good reading, listening or watching — examples of this would be first solos for 16 year-olds, or over 60s. Also in this category would be news of gliding helping less fortunate members of society, such as happened with NationGlide in 1981. On most good weekends a large number of visitors can be found outside most gliding sites. These visitors have an obvious interest in gliding and a few suitable notices could probably entice some of them onto the field and into a glider. Again this would rely on the visitor receiving a proper welcome and the operation being organised enough to cater for this type of air experience flight without the visitor having to wait around for hours on end to get a flight.

The whole area of looking after visitors, whether this is at weekends or during competitions, is one which has probably been ignored by the vast majority of clubs. We may not be a spectator sport in the traditional sense but with better viewing facilities and communications this could be improved. This could certainly be organised for competitions with details of tasks, times, leading pilots and progress, anticipated finishing times, etc being provided. This might even attract media coverage. Naturally, if there are spectators these could provide a source of revenue from ice creams, drinks, etc.

Each club I am sure is capable of generating ideas and publicity appropriate to its own needs, but it does require organisation and the same applies to the BGA as a whole. One area where extra promotion could lead to more long-term glider pilots is to ensure that new solo pilots do not drift away having achieved what they may have seen as their goal. The BGA has the ideal mailing list for a follow up leaflet giving details of clubs and how to follow on from the solo course. There are a number of young pilots trained by the ATC who have never been on to a civilian gliding club and who do not progress further with the ATC after soloing. A training scheme aimed at these would not deprive the ATC and could bring new blood into clubs.

P — PLACE

Certainly this is the most difficult variable to influence and is a subject dear to the hearts of many clubs fighting to hold onto airfields. I don't intend to get involved in all the attendant problems associated with finding and developing sites where people want to fly. However, it is obvious in a changing world there will be a need to find new sites and it is encouraging to see a few enthusiastic people starting new clubs, sometimes out of bare fields. If these clubs are in the right place, either in terms of the flying available or in terms of the number of people in their catchment area, they should be actively encouraged by the BGA.

Airspace restrictions are increasing and not likely to ease and this may force some clubs to reconsider their sites and look for alternatives. This should be done in a positive manner rather than in a begrudging way because we resent the faceless bureaucrats impinging on our freedom.

One of the major complaints about gliding in the UK is the weather and while there is nothing we can do about that as regards our gliding sites, there are alternatives. There are occasional articles in S&G about flying in the Alps or Spain where the sun always shines and 10 000ft cloudbases are the norm. A limited number of UK pilots do undertake the long trek to the sun on their own or in small groups, but there are still a very large number who have not had their appetite for gliding further whetted by the experience.

Clubs who migrate

If one visits places like Gap-Tallard there are large contingents of pilots from northern France or German clubs who migrate in club form with gliders and tugs for a fixed period of time. This amortizes costs and enables club pilots to fly in different and excellent soaring conditions.

Many UK clubs organise trips to Aboyne or Portmoak which are roughly the same driving distance from southern England as many gliding sites in the south of France area. Could not a few clubs get together and test whether there is enough demand from members to have a summer base camp in conditions which are more than likely better than the UK?

Being even more adventurous, could UK clubs form links with clubs in the USA and organise reciprocal visits for task weeks or competitions? Air fares are still cheaper in real terms than they used to be and the USA has many attractions from the glider pilot's viewpoint. Of course it might be harder to sell American pilots on the idea but if our conditions are good enough to breed a triple World Champion maybe they'll want to learn how to do it!

Well that has briefly covered the four main market variables. Most of marketing is applied common sense and there is nothing revolutionary about trying to ensure a healthy gliding movement. On the whole I would say that the gliding movement has moved forward with the times and catered for the demands of glider pilots, but some serious thinking and then action is needed to prevent it stagnating in today's, and probably tomorrow's, economic climate.

COMPETITION ENTERPRISE — June 30-July 8, North Hill

IAN KING takes a director's eye view

Day 1 — Saturday, June 30

Driving to North Hill for my week's stint as competition director, I watched the sky for clues as to how the day might develop. Early morning cumulus began to puff over Dartmoor between 7 and 7.15am, and the general feel of the day was good. I even ventured a guess at a 300km task. Would them that know feel the same; prophet John Fielden as task-setter and Mike "the Met" Garrod?

Apprehensively — (I've never done anything like this before!) — I was greeted by an ever-increasing number of friends and acquaintances while going about the official opening preparations. A warm welcome to friends, old and new, all imbued with the desire to partake of the special, indeed unique, elixir of Enterprise; to share "Philip's Dream".

Sir Peter Emery, MP for Honiton and a vice-president of the Club, opened the Competition, accompanied by Lady Emery and our Club and competition representatives, including Tom Zealley who briefly put on his BGA hat, went around a large number of the gliders being fettled for the tasks of the Day — which the prophet John had declared: pilot's choice of 300km O/R: 1. Camborne School of Mines; 2. Shobdon; 3. Broadway Tower; 4. Lasham. The scoring accounted for the likely degree of difficulty for each task. I say little about this as I was too busy working out other things to begin to understand the scoring.

The day brewed well, the field being launched in just over the hour after midday. Out of 34 (including three *hors concours*), 14 glass and three wood finished. Justin Willis (*hc*) visiting both Camborne (well almost) and Lasham, 622km at 91km/h. Norman Parry (LS-4) won the day, Ron Davidson (SB-5B) was top wood, completing his first 300km in wood and the day's meritorious performance was Trevor Hills (K-13), with his lady P2, managing 249km. Tony Maitland flew in for the weekend from Shobdon, turning Fordingbridge to make the return.

Day 2 — Sunday, July 1

Felt like yesterday, but brewed later and bluer. The sea breeze came through about 1230hrs, with half the field still to launch. At briefing, Norman Parry told us how he had visited Shobdon, taking the scenic route over the Severn Bridge and up the Wye Valley. Justin described his dilemma, approaching Camborne: the inversion was gradually lowering the further west he went and appeared to meet the ground at the TP, so he photographed it 10km out and turned for home via Lasham. Ron Davidson filled us in with the origins of his SB-5B. (We gave it an arbitrary K-6E handicap.) John Fielden then shot a line — to Bacton, Norfolk and nominated TPs along it: Pilot choice O/R 1. Keevil 190km; 2. South Marston 270km; 3. Oxford Cowley Works 345km; 4. Ely Cathedral 596km.

How bold were the optimists? John Bally (ASW-20L) declared Tempsford — on the line and

finished — 510km; Tony Moulang declared Ely and got back to Marlborough for 464km with a long wait for his retrieve. Also over 460km were Mark Darby (Cirrus) and Norman Parry. Charles Owles (Dart 17) at 286km was top wood, overtaking much glass in the process. Justin flew home via Bacton (well almost — like yesterday) and Tony Maitland returned to Shobdon via Cardington.



Ian King, competition director, photographed by Tony Smallwood.

Day 3 — Monday, July 2

Mindful of their previous exertions, John declared a rest day — well, a restful day with a jolly task: a 75km triangle, Clatworthy reservoir, Taunton racecourse with a height gain over 4000ft thrown in for good measure. *Perpetuum mobile* — as many times as you like, the fastest time to count and go round in the order specified! This was going to test our rudimentary start/finish line arrangements, thought I!

This became a needle day; resting pilots, my foot! At least, I think we kept track of their starts, restarts and various finishes. In the midst of the pelter, was heard "Turned racecourse". Suspicious director, thinking he recognised pilot, initiated inquiry "Have you turned Clatworthy?" — "Negative" — "You were briefed Clatworthy first" — "Oh." — Was he just enterprising, I asked myself, or...?

Twenty-six of 33 finished at speeds from 26km/h to 95km/h. Fastest was John Bally with 47min, but with 50min and handicap Norman Parry won the day. Maurice Clarke (K-6CR) was top wood in 89min. (When the points were worked out that day Derek Staff (Oly 2B) appeared with 90pts and "DNF". However he did fly, locally, and made a height gain to score. Our valiant scorer/task-setter sorted out absconding schoolboy Douglas King and BBC Micro and left them to play the week away developing a sophisticated scoring programme.

With so much rivalry for the fastest circuit, we had several low fast finishes — an uncommon sight at North Hill — to enliven the proceedings.

Day 4 — Tuesday, July 3

At briefing, Dave Reilly (Libelle) imparted some local knowledge — too late for yesterday — telling

of house thermals at each end of the Wellington Monument Ridge that took him to each TP and revived him on his retreat, to keep him up with the top three for the day. Then came the Day Puzzle — Taskoglyphics, with related distances. Coloured signs teased the brain, proving to be: 1. Halfpenny Green O/R 400km; 2. Long Marston O/R 356km; 3. Lasham O/R 322km; 4. M4 junction 13 O/R 304km; 5. $\Delta 1 + 3 = 531$ km.

Was the Day big enough? Chris Simpson (ASW-20L) thought so, completing Task 5 at 68km/h. Dave Reilly wasn't certain as he turned Halfpenny Green just behind schedule for the Big One, so he returned direct at 61km/h. In wood, Bill Murray (SHK) aimed high but was beaten by the sea air at 487km, enough though to win the day. Wood performed well: Ron Davidson, Maurice Clarke and Bill Longstaff (Dart 17R) all completed Task 3; Eric Shore (Dart 15) completed Task 4; Tony Smallwood wafted an amazing 254km in the Gull and Charles Owles 450km. There was a good spread of glass from Sherborne to Merryfield all just missing the sea breeze convergence so highly spoken of by the prophet John, if you can find it. Out of 34 flying today, 30 exceeded 248km, including both K-13 entries. Total distance flown was 10 660km.

Day 5 — Wednesday, July 4

Day medals were presented at briefing to Chris Simpson, and to the furthest and fastest wood: Bill Murray and Bill Longstaff. Then the task — another pictogram, discerned as a giant with Meldon Quarry as the third point of the triangle — 220km, intended to beat the sea breeze by turning Cerne Giant first, but warning of the sea air incursion up the Exe Valley later in the day.

Launching into the blue, most beat the sea air to Cerne and went on to sample the Meldon house thermal alluringly described at briefing. Of 33 starters, 22 finished, led by John Cadman (Mosquito) at 82km/h. Norman Parry, Chris Simpson and John Bally clocked in at 75, 74 and 74km/h respectively, with Geoff Dixon (Libelle) and Tony Moulang each at 71km/h. The Gull landed at 195km, with the SHK some 15km behind. Four pilots returned direct from the Giant, John Dabill (Libelle) giving a demonstration of a very finely judged final glide, straight in from miles out. John Willie must have been very busy calculating that one.

Day 6 — Thursday, July 5

John Cadman won the Day medal, with Geoff Dixon being awarded one for consistency, and Trevor Hills again, for his success, a 220km with the same young lady P2.

With the weather becoming hotter and increasingly stable, what rabbits would John pull out of his hat today? A mixed bag was the answer: 1. a 148km triangle, Glastonbury, Henstridge; 2. a 146km triangle Weston Zoyland, South Molton; 3. a 135km triangle, South Molton, Meldon Quarry; 4. a 134km triangle, Meldon Quarry, Dartmeet. Task 4 was prefaced with the comment

that in normal years Dartmoor is a large sponge to be avoided. However, this year it is extremely dry and the substantial cumulus development early in the day suggested reasonable conditions for the bold. No one tried!

A day for upsets! Twenty-three of 33 starters completed their tasks to find that Tony Smallwood won the day with the Gull on Task 1. Great jubilation on the field when the Gull was seen on circuit. As notable, was the eventual return of K-6CR EBQ from its second circuit of Task 2. Maurice Clarke had already taken a flight to put him into 2nd place and then his crew, Rob Harding, took a little light aerial entertainment by doing the same task in exactly the same time.

Day 7 — Friday, July 6

What pleasure to be able to present Day medals to Tony Smallwood and Rob Harding. Also a medal went to that K-13 again, but this time to the



John Fielden, task-setter, was pressganged into flying his task on a blue, difficult day in Tony Smallwood's Gull 1. Tony took the photograph.

other pilot, John Stone, who had completed task 1 and was 7th for the day.

Today the tasks were horses and water: 1. a 90km O/R Sutton Bingham reservoir; 2. a 180km O/R Westbury White Horse; 3. a 230km O/R Milk Hill White Horse.

Tony Smallwood gave up his Gull today, insisting that our task-setter take himself off on a magical mystery tour on one of his own tasks. John needed no second bidding, but did need a relight and disappeared into the haze to float to earth just short of TP1. Of the others, there were few returns: On Task 3, Dave Reilly waved handicap at Messrs Bally and Simpson to win the day. That K-13 finished again — Task 1. For many others it was the great Somerset Levels struggle, followed scratch by scratch over the radio. Slowly ever closer they struggled. From Taunton Deane Services (M5) the police phoned to tell us of a persistent pilot who had been overhead for some 10min; Ron Davidson and Charles Owles landed there shortly afterwards.

Day 8 — Saturday, July 7

Day 7 medals were presented to Dave Reilly and Tim Gardner (DG-100) for regularly providing their crew with a distant retrieve. Then, how to finish



Charles Owles flying his Dart 17. Photographed by Ian King.

an all flying week? Where would we be welcome? Weston-super-Mare was the choice by us, but would they accept. Eventually we made contact. They would, so John set three options: 1. *Direttissima* 60km; 2. *Via* Stourhead Lakes 124km; 3. *Via* Old Sarum 193km.

Twelve went direct, two via Stourhead and nine via Old Sarum. Three landed out, one flew home and two stayed local. Rumour has it that there was a most impressive display of gliderwork at Weston later in the afternoon, and I hope that the opportunity for ATC Cadets to inspect the goodies compensated in some measure for the disturbance of an afternoon's flying. Again, Tony Smallwood demonstrated that age is no handicap, with the allocated handicap of a Gull. The hot glass crowded in below the Gull, with the occasional interspersed of wood — Charles Owles was 7th on Task 3 and Derek Staff 15th at 33km/h direct.

Most derigged and left their trailers at Weston to be collected the following day. Did anyone forget?

Then they all returned hotfoot to North Hill for the prizegiving and party. Inge Cadman was prevailed upon to present the prizes and Day medals to: Day prizes: Ken Moorhouse (fastest Mini-Nimbus to Weston); Derek Staff (fastest Oly 2B to Weston); Chris Dobbs (fastest to Weston

direct) — Overall prizes to: 1 John Bally 4816pts, 2173km flown, 29hrs 39min competition time recorded; 2 Chris Simpson, 4589pts, 2058km, 32hrs 15min and 3 Norman Parry, 4571pts, 2110km, 33hrs 20min.

The prize for all supporting role in wood — for determination Julie Williams and Adrian Wild (Pirat) for bringing up the rear.

Overall impressions

If this is Enterprise, and this is what Philip Wills believed in, then I am converted. No more directing for me, even if They asked me again (unlikely). Fantastic week, with amazing achievements in conditions that very often would have club members flying extended circuits in sea air, where an aerotow to 3000ft would provide the bridge to the nearest thermal.

So, a Thermal Symphony, with Sea Breeze interludes, the performers completing a total of 43 153km (26 950 miles) — Enterprise girdles the earth. A brief thank you to all who put so much hard work to making Enterprise 84 an enormous success, both the organisers at North Hill, and the competitors, past and present by whose endeavours and successes Enterprise exists. On that, and the future emulation of such endeavour, Enterprise must go from strength to strength.

Regular Enterprise faces. From l to r, John Cadman, Bill Longstaff and John Bally, the overall winner and collector of the Enterprise trophy. Photo: Tony Smallwood.



Dunstable - July 14-22



CONTESTS AREN'T WON BY WINNING

Bernie, Johnny, Chris, Bernie, Andy, Andy, Andy: on that basis, Andy should have won, with Bernie second. But contests are not won by winning, they're won by not losing. Bernie, in particular, had two dud days. It's "high risk" flying. John Cardiff was very, very consistent.



Day 1, Sunday, July 15

Task: 254.3km Δ, Andover, Devizes

A fairly brisk, unstable NNW flow covered eastern England. Showers occurred in the Dunstable area, but further west the instability was more limited and showers did not develop.

It was a good day if you knew how to hill soar. Bernie Fitchie spent less time hill soaring than most!

Leading pos	Km/h	Pts
1. Fitchett	70.46	633
2. Davis	58.67	588
3. May	57.47	584
4. Cardiff	55.70	577
5. Smith	55.46	576

Day 2, Monday, July 16

Task: 210km Δ, Northleach, Blakehill Farm.

The air was still somewhat moist and unstable, but good rates of climb were achieved in the sunnier areas.

Turning point photo disasters for nearly a third of pilots, in spite of being given detail TP maps. New road-works misled them. But the penalties mercifully did not affect the final results of the Championship.

Leading pos	Km/h	Pts	Ov'll pts	Ov'll pos
1. Cardiff	83.36	952	1529	1
2. Garton	81.97	931	1097	15
3. Cunningham	80.14	904	904	25
4. Wells	79.36	892	992	20
5. Lysakowski	78.31	877	906	24

Day 3, Tuesday, July 17

Task: 186km dog leg O/R Goring, Lasham, Goring.

The wind had backed to NW by morning, heralding the approach of a weak warm front over

western Wales. This failed to encroach on the task route and subsequently dissipated. Strong thermals developed as convective cloud amounts decreased after an initial spreadout period.

Chris Garton said "It was really a 100km/h day but after the first leg of solid streeting, the good thermals weren't where the clouds looked good. I got cautious, stayed high and perhaps by default that was the policy that worked".

Leading pos	Km/h	Pts	Ov'll pts	Ov'll pos
1. Garton	96.03	776	1873	7
2. Wells	95.86	774	1766	11
3. Elliott	91.56	725	1080	35
4. Cardiff	88.83	695	2224	1
5. Murdoch	88.54	691	1699	15

Day 4, Wednesday, July 18

Task: 190.7km Δ, Northleach, Banbury.

The day began cloudy with some light drizzle as an occlusion moved south. At first sight the day looked like a "write-off", but a clearer spot appeared which enabled a task to be set to the west of Dunstable.

Bernie Fitchett "was surprised a task had been set at all, and so I was first through the line. Conditions improved enough for me to regret the early start but this little trough was moving across the last leg; through rain and murk I finally ground to a halt near Wing."

Leading pos	Km	Pts	Ov'll pts	Ov'll pos
1. Fitchett	175.95	702	2640	2
2. King	171.20	681	2450	5
=3. Whitehead	170.45	677	2380	9
=3. Cooper	170.45	677	1685	32
5. May	170.20	676	2320	10

Day 5, Thursday, July 19

Task: 190.7km Δ, Banbury, Northleach.

Stratus cloud from the North Sea was expected to clear by late morning, but in the event the clearance was slower.

All Andy Davis could say this day was that he had been lucky whereas formerly he had been unlucky. The modesty of these people is maddening.

Leading pos	Km/h	Pts	Ov'll pts	Ov'll pos
1. Davis	76.44	998	3430	3
2. Wells	76.12	993	3270	6
3. Cardiff	75.46	985	3711	1
4. Murdoch	74.93	978	3179	9
5. Woodford	74.07	966	2743	20

Friday, July 20

Thermal activity was very weak beneath an ever lower inversion and no task was possible.

A scrub: 41 pilots were relieved not to have to



Bernie Fitchett who won two days.

hang around at 1700ft waiting for the start. Two pilots were still raring to go. No prizes for guessing which ones — Bernie and Andy.

Day 6, Saturday, July 21

Task: 266.3km Δ, Dowdeswell Reservoir, Pewsey.

An even lower inversion was evident overnight, but this allowed daytime heating to destroy it and convection reach a higher level than the previous day. Dry thermals were forecast to go to 4500ft, but in the event it was somewhat better as the result of temperatures in the eighties. Small cumulus formed over the route and allowed some fast times.



Tom Zealley, BGA chairman, came second on Day 7.

WHAT MAKES FOR A GOOD COMP?

	DAY	SPEED STATISTICS							Averages
		1	2	3	4	5	6	7	
Fastest	(km/h)	71	83	96	n/a	76	93	82	84km/h
Median	(km/h)	52	72	80	n/a	65	86	70	71km/h
Slowest	(km/h)	45	50	62	n/a	51	75	54	56km/h
Distance	(km)	254	210	186	191	191	266	261	223km
% finished		28	86	91	0	67	58	58	55%
Median time	(hrs)	4.88	2.92	2.33	n/a	2.94	3.09	3.73	3.32hrs

These little tables are quite useful to keep over the years, especially for the task-setter in Standard and 15 Metre contests. It is better than working from polar curves and thermal-strength forecasts, about which the less said the better. Broadly you should expect pundits to do better than 80km/h, average pilots to do 70km/h and the also-rans (might as well alienate everybody) to stagger around, if at all, at 60km/h or less. The task should be set at what the median pilot, not the slowest, can do in about four hours. So the ideal task for the 15 Metre class in our weather should be about 280km.

In practice none of the tasks achieved at this 1984 contest were as big as that. Strangely, however, no one seemed to mind the relative shortness of the races. If people didn't get back the task was too long for them anyway, while the adrenalin of a racing final glide and the relief at not having to retrieve seems to compensate the finishers for the theoretical loss of maybe an extra hours' flying. All the same, I miss the big, big tasks, where, if smiled upon by the Gods, you groped your way home from the Celtic Fringe around lighting-up time. (And if not smiled upon, you groped your way back by road around breakfast-time.)

All Andrew Davis would say was that he had been even luckier.

Leading pos	Km/h	Pts	Ov'll pts	Ov'll pos
1. Davis	92.69	1000	4430	3
2. Fitchett	92.62	999	4563	2
3. Spreckley	92.16	995	3601	18
4. Cardiff	90.27	977	4688	1
5. Lysakowski	89.71	971	3527	19

Day 7, Sunday, July 22

Task: 260.8km Δ, Chipping Norton, Markfield.

Once again a hot day was expected, with cumulus forming after midday. The upper air ascent for Crawley suggested the chance of thunder late in the day, but this threat did not materialise until later afternoon.

Dashing back to Dunstable, Andy came back to poor weather and took 1½ hours to get back up to start height. This delay was lucky (that word again) because he then flew in conditions that he would otherwise not have encountered. The same sort of "luck" pushed other late starters into torrential rain and washed them onto the deck.

Leading pos	Km/h	Pts	Ov'll pts	Ov'll pos
1. Davis	81.61	1000	5430	2
2. Zealley	79.54	977	3161	38
3. May	79.20	974	5019	5
4. Cardiff	76.94	950	5638	1
5. Cunningham	76.24	942	4714	8



Pam Hawkins competing in her first Nationals.

TINSFOS Rules OK?

Ted Lysakowski started a debate during one of the quieter periods, on the subject of abolishing the 15 Metre Class. Pilots filled in questionnaires (the results still being studied) asking their views of the possible creation of a new 17 or 18 Metre Class. The chief reason being the astonishing performance of Standard Class gliders like LS-4s and DG-300s, which makes the benefit of flappery without extra span rather marginal.

Head in a bucket

01-246-8099 is a number I regularly ring to get weather forecasts for Hertfordshire, Bedfordshire and Inland Essex. Lord knows why I bother. I've

just called at 7.25am and get a forecast issued at midnight — nearly a third of a day stale. For this particular area the hapless reader of stale forecasts is made, for some reason, to deliver the message with his head in a bucket.

On a bad day (not a bad weather day, just a bad transmission day for the Weatherline Service) the bucket is full of treacle and the message is quite incomprehensible. On a good day the bucket is empty and if you listen hard to the tape about three times (good for Telecom's revenue) then you get a rough idea of what he is saying.

I don't gripe about the accuracy of the forecasts themselves: that's not Telecom's responsibility. But I do expect the forecast to be timely and clear even if they are lousy. What's more that is the quality of Weatherline Service for London, Thames Valley and other areas. Have they got it in for us at Dunstable?



13 Metre Class Sportsmanship

After the rampant political and commercial exploitation of the Olympics it is refreshing to see how sportsmanship still prevails in gliding. Well, up to a point. At the 15 Metre Nationals one not quite top-ranking pilot was very severely penalized for landing just inside a prohibited area. He was too sporting to denounce another, top-ranking pilot who was with him but managed to drift happily onwards, if not upwards, across the area in question and out the other side so that his landing place was in the clear; failing a denunciation by the unlucky pilot our pundit friend was also in the clear. No penalty. Except for this small rebuke.

There were also gripes about non-combatant pilots wandering over to Dunstable and strolling around the course in the company of, and in radio contact with, their competing friends, sometimes in a vastly superior glider that could not avoid getting out in front and marking the lift. Well, you can't purge the air of other gliders during a competition, and I've frequently done the same gentle strolls around the task, usually though at a late hour when only the rabbits are in the vicinity and leading results are unlikely to be affected by one's own presence. But justice is something that must be not only done, but manifestly seen to be done, and that calls for some restraint so that gripes, substantiated or not, are silenced. When in doubt, stay out.





The Windupometer: Surgeon Mike Thick wore an electro-cardiogram during some flights to record his emotional and physical reactions to the excitements of briefing, launching, starting and finishing, not to mention landing out. The lengths scientific curiosity will go to!

(On the day Mike had to bale out after a mid-air collision at the Open Class Nationals he wasn't wearing his equipment!)



"Modern contests don't sort the men from the boys. Look at the narrow spread of points on a racing day. It's boring and not a real test. I'm going to propose a new form of Comp in S&G soon". JJ's scheme sounds ominously like Pilot-Declared Goal, which the old hands (not to mention Old Hands) will remember with an affectionate shudder... (JJ is photographed with his son Toby.)



"He-e-e-re's Johnny!"

Dilys Yates never does one job when she can do half a dozen. Besides controlling the startline she crewed for John Cardiff. That over, she dashed off to Booker a few days later to direct their Regionals.



So that's how he does it! John Cardiff, 1984 National 15 Metre Class Champion, caught red-handed with a pair of ASW-20L wingtip extensions. Either that or he is aiming for the hang gliding world speed record. ("Not on our ridge he ain't" says JJ).



Mike Garrod, the Met man.



"Hat trick" Andy Davies won the last three days in a row, but only narrowed the gap between himself and John Cardiff from 294 to 208pts. He would have needed another three days to win at that rate.



Task-setter Mike Bird got away with it yet again, rescued from his blunders by superb piloting skills of the contestants seven days out of nine and 55% back with no major crashery equals happiness.



John Hands has been chief marshal donkey's years. How did he manage before those little radios came along. Just like now; immaculately.



Clive Bird (no relation to the task-setter, he insists) one of the unsung heroes on the ground.



Robin May, Britannia 737 pilot, only ended up 5th overall; but after the Nats, on August 1, he did 300km at 103km/h which he hopes will be confirmed as a 15 Metre UK record.



Dave Brown, like all scorers, is serious, dedicated and just a little exasperated with the appalling pieces of paper often illegible or just blank that the pilots bring back with them, purporting to confirm their landing places etc, etc. "Some of them don't even bother to put their names or numbers on the forms." No way even his latest, always-being-improved, computer program can deal with that.



The Jones Boys. Ralph went on to win the Open Class Nationals and Philip (centre) came first on two days in the Lasham Regionals, Class A.



Sally King. Nice to see two women in the Nationals.



Carl Withall had a good Comp.



Warren Kaye (DG-300). The slender glider with the -er- well built pilot.



"Four kilometres short!" The Whitehead digit (and grimace) indicates the frustration of not quite making it back on Day 6. A whole bunch of over-confident pilots thought they would have no problem (median speed was 86km/h) and ran into a large lump of nothing in sight of the Whipsnade Lion.



"Guinness Book of Records, here I come!" On Day 2 Mike Jefferyes earned the distinction of being the only Nationals pilot to cross a finish line properly and then go on to prang his glider outside the airfield. In 36hrs the Ralph Jones workshop had his DG back in the air ready for even more outlandish outlandings.



Cheerful "Treble Trees", Peter Stafford-Allen (PIK 20D) had a less than brilliant Comp this year.

FINAL RESULTS

15 Metre Class

Scorer: Dave Brown

Pos.	Pilot	Glider	DAY 1 15.7 254.3km A Andover, Devizes			DAY 2 16.7 210km A Northleach, Blakenhill Farm			DAY 3 17.7 185km dog leg O/R Lasham, Goring			DAY 4 18.7 190.7km A Northleach, Banbury			DAY 5 19.7 190.7km A Banbury, Northleach			DAY 6 21.7 266.3km A Dowdeswell Res, Pewsey			DAY 7 22.7 260.8km A Chipping Norton, Markfield			Tot. Pts.
			Dist. (Speed)	Pos.	Pts.	Speed (Dist.)	Pos.	Pts.	Speed (Dist.)	Pos.	Pts.	Dist. (Speed)	Pos.	Pts.	Speed (Dist.)	Pos.	Pts.	Speed (Dist.)	Pos.	Pts.	Speed (Dist.)	Pos.	Pts.	
1	Cardiff, J. D.	ASW-20e	(55.70)	4	577	83.36	1	952	88.83	4	695	131.50	-20	502	75.46	3	985	90.27	4	877	76.94	4	850	5638
2	Davis, A. J.	Ventus	(58.57)	2	588	73.93	14	812	83.08	14	630	109.25	34	402	76.44	1	998	92.69	1	1000	81.61	1	1000	5430
3	Watt, D. S.	ASW-20e	(51.80)	6	563	85.43	18	786	79.97	19	595	165.45	-6	655	63.08	17	821	89.42	6	969	72.54	11	903	5292
4	Fitchett, B.	ASW-20e	(70.46)	1	633	65.53	23	687	82.05	15	618	175.95	1	702	70.88	11	924	92.62	2	999	(257.30)	28	556	5119
5	May, R. C.	ASW-20	(57.47)	3	584	49.57	36	450	81.30	17	610	170.20	5	676	59.27	23	771	87.84	9	954	79.20	3	974	5019
6	Garton, C.	Ventus B	97.65	23	166	81.97	2	931	96.03	1	776	133.45	-13	511	73.93	6	964	87.11	11	947	(247.05)	-30	532	4827
7	Withall, C. L.	ASW-20	54.85	27	74	77.82	6	870	78.99	21	584	133.00	-16	509	73.62	7	980	88.55	7	961	66.07	18	833	4791
8	Cunningham, G. W.	Ventus	14.9	-37	0	80.14	3	904	84.15	12	842	133.45	-13	511	59.50	22	774	86.44	12	941	76.24	5	942	4714
9	Smith, D. A.	LS-4	(44.96)	12	537	85.04	24	680	78.35	-22	228	157.25	8	521	62.62	19	818	85.63	15	933	70.01	-12	878	4693
10	Wells, M. D.	ASW-20r	58.9	25	100	79.36	4	892	95.86	2	774	133.45	-13	511	78.12	2	993	87.69	10	952	(212.55)	36	451	4673
11	Hill, D.	LS-4	(49.74)	-7	555	78.50	10	831	83.53	38	410	133.00	-16	509	70.16	13	915	(256.30)	-29	541	64.87	19	821	4582
12	Woodford, J.	ASW-20	44.65	-31	53	65.49	31	589	85.18	8	653	127.00	24	482	74.07	5	986	85.38	16	931	69.25	14	867	4541
13	Murdoch, M.	ASW-20	207.3	-15	401	70.03	29	607	88.54	5	691	131.50	-20	502	74.93	4	978	(260.30)	27	550	63.10	20	802	4531
14	Throssell, M. G.	Ventus	194.8	17	374	72.33	17	788	72.38	34	510	133.00	-16	509	66.01	14	880	88.11	8	956	(247.30)	-30	532	4529
15	Spreckley, B. T.	ASW-20	158.3	19	296	84.81	13	826	85.65	7	659	125.25	-25	474	(141.20)	-39	351	92.16	3	995	73.14	9	909	4510
16	Lysakowski, E. R.	Ventus B	33.4	-35	29	78.31	5	877	74.79	31	537	116.00	-30	432	52.45	28	681	89.71	5	971	75.07	8	930	4457
17	Ellis, J. J.	ASW-20r	(48.29)	10	549	70.73	25	666	75.61	27	546	100.00	-41	360	(141.20)	-39	351	92.16	3	995	73.14	9	909	4510
18	Cooper, B.	DG-300	163.05	18	306	(47.65)	-41	51	84.93	9	651	170.45	-3	677	70.92	10	925	78.13	24	863	66.65	17	840	4313
19	King, Sally	Ventus	(48.77)	8	551	71.17	20	771	86.80	37	447	171.20	2	681	(153.45)	36	668	86.20	14	938	(236.30)	34	511	4235
20	Jones, R.	Ventus	4.4	-37	0	77.14	7	859	71.55	36	500	106.00	39	387	51.45	29	668	86.41	13	940	70.07	-12	876	4280
21	Kay, W. M.	DG-300	(49.74)	-7	555	75.26	9	832	72.95	33	516	129.25	22	492	57.71	25	751	(256.30)	-29	541	(226.05)	-37	483	4170
22	Whitehead, P. F.	ASW-20	149.55	21	277	75.14	11	830	80.05	18	596	170.45	-3	677	62.88	18	819	(261.80)	26	554	(175.30)	41	384	4117
23	Evans, C. J.	LS-4	210.56	14	407	58.65	33	585	78.41	-22	577	118.25	28	442	(165.70)	34	422	80.23	21	882	60.65	23	776	4091
24	Starkey, C. G.	Ventus	42.4	34	48	72.10	19	785	81.36	16	611	111.00	33	410	72.73	8	949	(256.05)	-29	541	54.10	25	706	4050
25	Gorringer, J. P.	LS-4	73.65	24	115	75.06	12	829	84.01	13	640	100.00	-41	360	(167.45)	31	485	75.43	25	837	61.35	22	793	4049
26	Dixon, R. T.	Ventus	50.85	28	66	66.33	22	699	71.58	35	501	155.45	-6	655	(154.70)	35	390	80.48	20	885	67.36	15	847	4043
27	Thick, M.	ASW-20	207.3	-15	401	63.05	30	601	84.69	-10	648	104.75	40	311	71.83	9	937	(256.30)	-29	541	(239.80)	-32	515	3954
28	Smith, M. J.	LS-4	(55.48)	5	578	76.35	8	848	84.68	-10	648	116.00	-30	432	(167.20)	33	426	(245.80)	37	517	(233.55)	35	500	3947
29	Campbell, D. R.	ASW-20	33.4	-35	29	68.60	32	586	87.18	6	676	111.75	32	413	60.88	21	792	78.24	23	864	(257.05)	-27	555	3915
30	Taylor, J. R.	ASW-20r	44.65	-31	53	68.17	21	728	75.06	-29	540	125.25	-25	474	58.27	24	758	(250.30)	-34	527	62.01	21	790	3868
31	Watson, A. J.	Mosquito	15.4	-37	0	60.97	28	619	75.93	26	549	125.25	-25	474	65.42	15	852	78.99	22	871	(231.05)	36	494	3859
32	Moulang, A. P.	ASW-20	59.9	26	85	68.96	34	492	77.96	25	572	136.45	-9	524	63.55	16	826	(242.30)	39	509	66.98	16	843	3859
33	Redman, S. J.	ASW-20c	14.9	-37	0	60.99	27	620	79.59	20	591	136.45	-9	524	70.23	12	916	(259.80)	28	549	(252.05)	29	544	3744
34	Elliot, B.	ASW-20	181.05	22	217	(95.00)	39	138	91.56	3	725	117.50	29	439	55.30	26	719	85.34	17	930	(239.80)	-32	515	3683
35	Betty, C. J.	Vega F	213.3	13	413	73.23	16	801	74.59	32	534	107.75	-35	395	(146.45)	38	366	(228.55)	42	478	(257.05)	-27	555	3542
36	Durham, M. W.	ASW-20c	42.9	-37	0	70.09	37	364	75.15	28	541	100.00	-41	360	62.72	20	817	(256.30)	-29	541	72.85	10	906	3469
37	Hawkins, Pam	Nimbus 15c	44.65	-31	53	182.20	38	298	61.68	39	389	106.75	38	391	53.37	27	693	(245.55)	38	516	75.05	7	940	3290
38	Zesley, T. S.	ASW-20	48.15	30	60	(47.65)	-41	51	78.24	24	575	136.45	-9	524	(48.70)	43	83	81.21	19	891	79.54	2	977	3161
39	Stofford-Allen, P. R.	PIK 20	(47.04)	11	545	(92.50)	40	133	(31.00)	42	16	127.75	23	485	(153.20)	37	385	(237.30)	40	498	54.33	24	708	2770
40	Stewart, K.	Std Cirrus	0	-37	0	51.75	35	483	75.08	-29	540	107.75	-35	395	(190.60)	30	494	(194.30)	43	399	(198.05)	40	417	2728
41	Cumner, G. M.	ASW-20	49.4	29	63	62.83	26	647	(111.75)	41	130	134.45	12	480	(121.95)	41	295	(250.30)	-34	527	(164.30)	42	338	2480
42	Jefferys, M. B.	DG-202	153.55	20	286	73.64	15	808	0	43	0	107.00	37	322	(51.20)	42	90	(229.60)	41	480	(226.05)	-37	483	2469
43	Murphy, T. J.	PIK 20e	9.15	-37	0	(31.40)	43	21	(172.45)	40	216	133.00	-16	509	(178.95)	32	454	(250.30)	-34	527	0	43	0	1727

* = photographic penalty; * = airways infringement penalty

The club news copy date for the next issue is October 9 and for February-March it is November 29 due to the Christmas break. General contributions are appreciated well before these dates whenever possible.

SAILPLANE/GLIDER/AIRCRAFT

INSURANCE

TRY THE SPECIALISTS

J. A. Harrison (Brokers) Ltd.

SECURITY HOUSE

160-161 BROMSGROVE STREET

BIRMINGHAM B5 6NY

RATES ARE REDUCED BY
QUALIFICATION

SPECIAL SCHEME FOR
EXPERIENCED PILOTS

Telephone: 021-692-1245

Telex: 335142

THE TR720 AIRBAND TRANSCIVER

For many years those involved in gliding have been aware of the advantages of airband radio communication. However in the past type approved equipment has been prohibitively expensive. It has also been awkward to position, heavy and the associated problems of where to safely put the battery considerable. Suitable secondhand commercial transceivers have also been difficult to come by and to get them on the correct allocated frequency has always been a problem.

The TR720 CAA approved airband transceiver costs only £395.00 plus VAT and, as you see in the photograph, is ideally suitable for glider operation. Having its own internal power supply, the TR720 is compact, lightweight and easily transferable from glider to glider.

Please telephone or write to us here at Matlock for a full colour descriptive leaflet.



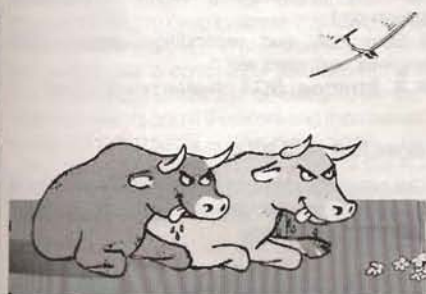
LOWE ELECTRONICS

CHESTERFIELD ROAD, MATLOCK, DERBYSHIRE DE4 5LE
TELEPHONE 0629-2817, 2430, 4057, 4995

ISLAND RETRIEVE

MIKE JEFFERYES finds more than one complication during a 15 Metre Class Nationals' field landing.

Eager to improve a disastrous overall placing, and fooled by the very good lift and streeting near cloudbase in the first ten miles from Dunstable to Banbury, I plunged on into what others later described as an awkward patch. The first sign of lift was at 500ft over Kings Sutton village and by the time I had worked this down to 300ft an immediate decision was required to land in one of three available fields.



Would the cows remain seated?

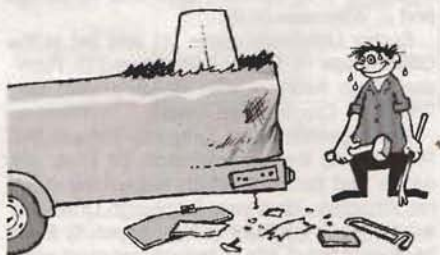
The first field was sloping with crop part harvested, but it might have been rape? The second was flat grass, but would the cows remain seated at the far end? I opted for the unrestricted approach into the third, an adequate field of cut grass bounded on its eastern and southern sides by the river Cherwell. On landing I walked to the south-west corner of the field towards the harvesters and was met by a selection of farmers' daughters. They invited me to use their telephone and said that my means of reaching them was to wade through the water (two inches deep) as it ran from the Cherwell over a small weir and thence up the western side of my field. To the north was another small grass field, but the

northern side of this field was bounded by a canal — I had landed on an island!

The farmer's wife rang the owner of my field and arranged for him to meet me at the canal with the key to the padlock for the drawbridge — the only means of access.

Inevitable motor cyclist

I met Steve and Gill with the trailer on the main road. We drove slowly over the brow of a hill to ensure traffic behind had stopped before we turned right into the farm lane. At the instant that we had pulled over to block the entire width of the road momentarily, the inevitable motor cyclist appeared round the bend ahead of us at about 60° of bank and not far short of VNE. Happily he was discharged from hospital inside a number of sticking plasters that evening, though his bike was kept in overnight. A hacksaw, a hammer and a boot soon had the trailer capable of accommodating the glider.



A hacksaw, hammer and a boot.

Despite the distorted drawbar and consequent reduction in ground clearance, the empty trailer accomplished the journey over the hump-back

drawbridge and into the field. However, the return journey laden proved more tricky. After a great many manoeuvres and with bricks and rocks under the wheels to raise the trailer we came to an abrupt halt. The trailer had yet to complete the ascent from the south, but was grounding as the hitch was pulled downwards by the car which had already commenced to descend the northern bank. Answers on a postcard please.

Our solution was to retain the trailer in a nose-up attitude by unhitching it, and to tow it by rope



Fortunately insufficient steering lock.

which was duly attached to the suspension. Anxious that our efforts to get the trailer thus far up the slope did not come to nought as we unhitched we took up our stations — Steve on the draw bar with the trailer brake vigorously applied, Gill at the rear as long stop. I had the privilege of unhitching the trailer while assisting to hang on to the drawbar.

The trailer remained rock solid under our grasp and we all watched helpless as the car accelerated down the slope and set off across the field. It was fortunate that the prime beef had already moved off, and also that insufficient steering lock was applied for the car to complete a 180 into the canal. The remainder of the recovery was amazingly, and to our great relief, relatively uneventful.

PETERBOROUGH SAILPLANES

73 HIGH ST, MAXEY, MARKET DEEPING, PETERBOROUGH

Repairers to all types of sailplanes in any material. Cs of A, recovers, resprays, canopies, at prices you can afford.

Insurance repairs with full collection and delivery.

Repairable salvage, new and secondhand sailplanes, new timber and aluminium trailers.

GRP MOULDED TRAILERS complete or in kit form with or without fittings

Rigid chassis available

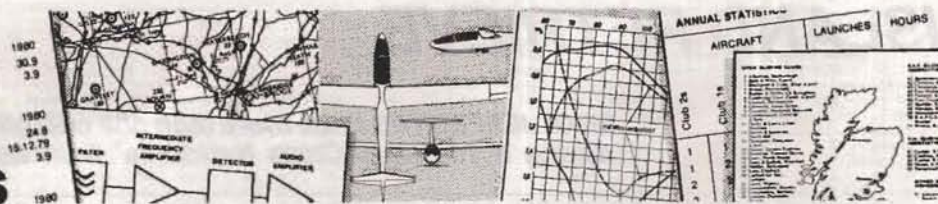
Cheaper than most aluminium types!

TEL: 0778-347506

BGA and General News

GLIDING CERTIFICATES

ALL THREE DIAMOND
No. Name
108 R. I. Cow
110 A. D. Pig
DIAMOND DISTANCE
Name Lasham



TWO MORE FATAL ACCIDENTS

A Fauvette flown by Mike Reeves at the Blackpool & Fylde GC on Sunday, July 15 spun in; the pilot was killed. The glider was at approximately 1500ft above the site but hit high ground at 7-800ft. The investigation has revealed that half of the V-tail was not locked which allowed the rigging pin to work free and the half-tail to fold up.

The second accident was to a K-6CR at the Buckminster GC, Saltby, on July 29. Witnesses state that the reverse-pulley launch was abandoned at 200ft or so. Subsequently the glider's wing appears to have fouled the cable and the glider spiralled or, more likely, spun in. The pilot, Eric Semper, died soon afterwards.

W.G. Scull, *director of operations*

TUG PILOT KILLED

Frederick Taub, a tug pilot at the London GC, was killed on August 21 when the Super Cub he was flying nose dived into the ground. The glider released and landed safely.

The accident is under investigation.

MID-AIR COLLISION

There was a mid-air collision at 3000ft between two ASW-21s at the start of a 207.9km task in the Marconi Avionics Open Class Nationals at Lasham on August 17. Both pilots, Mike Thick, a kidney transplant surgeon at Guy's Hospital, and Geoff Cumner, a design engineer, parachuted to safety.

The substantially damaged gliders landed in trees, one sliding to the ground but the other being lodged 25ft up.

OPEN CLASS NATIONALS

The Marconi Avionics Open Class Nationals was won convincingly by Ralph Jones flying a Nimbus 3 with John Delafield (Nimbus 3) second and Alistair Kay (ASW-22) 3rd.

Ralph won four of the six contest days, including a spectacular 122km/h around a 330km triangle on the last day. In a unique double, as Ralph won the first and last days of the Nationals, his son Philip won the relevant tasks of the Lasham Regionals A Class.

The A Class was won overall by John Bally who came down out of the Talgarth mountains for his first Regionals. The B Class was won by Jeremy Langrick from Husbands Bosworth.

A full report by John Williamson will be in the next issue plus all the Regionals results.

INTER-UNIVERSITY TASK WEEK

Lasham, July 29-August 4

This is a competition organised by, and for, full-time students at UK universities, colleges or polytechnics. Pilots of sufficient standard fly solo but thanks to the help of more experienced pilots, pre-cross-country and even

pre-solo students have been able to get their first taste of cross-country and competitive flying using two-seaters with the emphasis all the time on flying for fun.

This year it was jointly organised by Imperial College and Surrey University with teams from Bath, Cambridge, Edinburgh, Essex, Imperial College, Oxford, Reading, Southampton and Surrey Universities accounting for 17 gliders and almost 50 pilots and crews — the largest turn-out so far.

To prevent a task-setter's nightmare of having to set one task for both first cross-country pilots flying K-8s and an experienced PI in a Janus, the competition was split into two Classes — Wood and Glass, with Wood tasks of 100-150km and Glass of 150-200km.

We had three very good days and one marginal with Imperial College winning all three places in the Wood Class — 1st, M. Judkin (P1), A. Robinson and P. Healey (P2) (K-13); 2nd, N. Hughes (P1), K. Millington and J. Castle (P2) (Bocian) and 3rd, P. Moore and J. Wilkinson (K-8).

Surrey University came 1st and 3rd in the Glass Class — T. Gee (Janus) and C. Pater-son (Club Astir) — with Reading University 2nd — R. Cronk (Sport Vega).

The organisers and competitors thank Phil Phillips and the Lasham staff for their guidance and patience which helped the event run smoothly. Next year Edinburgh University will be the organisers though hopefully it will be at an English site to reduce transport problems. Anyone interested should contact Edinburgh University GC, c/o Students' Union, Edinburgh University.

David Keene

NATIONAL LADDER

Open Ladder

Leading pilot	Club	Pts	Fits
1. J.D. Cardiff	London	7805	4
2. P. Hawkins	Oxford	6096	4
3. L.E. Beer	Booker	6016	4
4. W. Kay	London	5867	3
5. M.B. Jefferyes	Essex	5430	4
6. M. Costin	Coventry	5405	3

Club Ladder

Leading Pilot	Club	Pts	Fits
1. E. Hamill	London	3253	4
2. D. Campbell	Dishforth	2090	2
3. J. Walker	Coventry	1749	4
4. R. Goodman	Coventry	1690	3
5. J.G. Smith	Yorkshire	1603	3
6. J.D. Benoist	Dishforth	1250	1

TUG OPERATING COSTS

The devaluation of the pound against the dollar has dramatically increased the cost of spares for American airframes and engines. Typically, a cylinder and piston assembly listed at \$2102 (ex factory) costs £1523 plus freight and VAT, ie approx £1751!

Therefore, tug managers are strongly

recommended to take the following actions:

1. Review their operating costs and charges at half yearly intervals.
2. Restrict their tug operations to essential purposes only, and certainly not use them in lieu of autotow/winches.
3. Review their operating techniques to minimise cylinder damage. (Lycoming recommend descents not exceeding 1000ft/min. with some power on.)
4. Seek out, and recondition, second-hand engines, cylinders etc.

R.B. Stratton, *BGA chief technical officer.*

HONOUR FOR BILL

Our congratulations to Bill Scull, BGA director of operations, on becoming a Fellow of the Royal Aeronautical Society.

"HOT" OPERATION PRECAUTIONS

There is increasing evidence that recent deliveries of Mogas contain more volatile elements of propane etc, which may create rich mixture situations on start-up and pre-take-off, after "hot soaking".

CAA Notice No.98 (Issue April 4, 1984), gives the following guidance, which should be brought to the attention of all operators of tugs and motor gliders.

"After any prolonged period of "heat soak" at low fuel flow (eg hot-day ground idling) establish the availability of full power before commencing take-off."

BGA comment by Dick Stratton, chief technical officer: This precaution applies particularly (but not exclusively) to aircraft fitted with engine driven fuel pumps. (Lycoming engines are more susceptible because of the rear mounted fuel pumps, and because the carb is bolted to the engine sump).

The pre-take-off power check should be prolonged enough to clear "hot" fuel out of the entire powerplant system.

NEVER TAKE CHANCES

A Vega pilot injured his arm through what he admits was his own stupidity and relates the details to ensure no one else gets caught the same way.

After a bumpy aerotow he checked and reduced the tyre pressures (main and tail) to the minimum setting before another launch and while under the Vega decided to have a quick look at the wheel bay.

As a BGA inspector he maintains his own glider and was in the habit of occasionally giving the undercarriage "overcentre lock" a quick push to ensure all was well, but always with the fuselage trolley in place and in the jacked up position, ie main wheel off the ground. On this occasion he suffered some mental aberration and pushed on

STOP PRESS!!

SQUAD TRAINING 1985!

Sponsored flying and expert coaching for bright young pilot...

1 Under 25?

2 Silver C?

3 Two closed circuit flights?

Ask the BGA office for information and an application form.

HURRY!! NOW!!

the centre lock with the glider sat on its main wheel with no trolley in place. "The resulting damage to my arm as 595lb of Vega descended was a most unpleasant experience," he added.

PERSHORE AIRFIELD

We have been asked by Allan Bland, chairman of the RSRE Flying Club to stress that the former airfield at Pershore (near Worcester) is classified as a gliding site to cover their activities but is a prohibited place under the official secrets act. Uninvited visitors could therefore find themselves in very serious trouble on this point alone.

In addition, he says that "the nature of the site activities on most weekdays and some weekends could have fatal results. You have been warned!"

FALKE (ATC VENTURE) PROPELLER STRIKES

Two recent propeller strike incidents have been attributed to the student failing to maintain a firm grip on the control column during the landing phase. There have been other cases in previous years.

The cause is a combination of factors which include light fore and aft stick forces, but the main reason is the lack of mass balance in the elevator, ie all the weight is behind the hinge line. Thus in a firm touch down or bounce the elevator tries to move down under the influence of its own weight and if you let it, will take the stick forward, or even

BGA ACCIDENT SUMMARY — Compiled by KEITH MITCHELL, Chairman, BGA Safety Panel

Ref. No.	Glider Type	BGA No.	Damage	Date Time	Place	Pilot/Crew			Summary
						Age	Injury	P/Hrs	
50	Olympia	364	N	22.4.84 13.58	Lasham	55	N	100	At beginning of aerotow tug took up slack without signal. Despite stop signal tug pilot look off thinking he had seen all out signal given from behind. Glider pilot released but rope jammed in wheel box. Glider pilot signalled inability to release but launch continued to 2000ft before tug pilot released.
51	PIK 20c	2513	S/WC	21.4.84 13.45	Talgarth	59	S	N/K	Misjudging his height pilot circled on downwind leg and then had to land in adjoining field. Flying into curl-over and sinking air aircraft stalled in from 50-100ft and then ran over the brow of a hill, down a 45° slope before crashing into a hedge.
52	Capstan T-49	1203	N	21.3.84 16.15	Challock A/F P1 P2	37 58	N N	270 22	Pupil got out of position on aerotow during turn at about 2000ft. P1 thought he heard rope back-release and took off bank. Tug was tipped into nearly vertical dive, released glider and lost 1000ft in recovery.
53	K-6cr	2503	M	26.4.84 19.20	Saltby	21	N	1½	Drifting to the left on landing the port wing hit a bush causing a groundloop into the fence.
54	K7	1287	M	25.4.84 ?	Aston Down	74	N	½	Early solo pilot flew too far downwind for approach in 15kt wind. Landed in undershoot and struck tree downwind of airfield perimeter fence.
55	Fauvelt	2201	W/O	15.4.84 12.05	Parlick Pike	19	M	12	Shr attempt in hill lift with thermals. Drifted back too far in thermal and instead of returning safely to airfield, pilot attempted to regain hill lift through curl-over and turbulence. While turning away in sinking air close to hill port wing hit hillside and glider rotated into hill.
56	Cirrus	782	N	25.2.84 ?	Parham	37	N	338	Aerotow progressed normally until glider pilot found he was unable to release. Signalled to tug pilot who released. Glider landed with rope detaching on round out. No reason for inability to release could be discovered.
57	IS-28M2A	G-BHRS	M	11.4.84 17.50	Woodford	28	N	130 Gid. 41 Pwr.	Maximum allowable crosswind, engine torque, and propwash combined to cause swing to right on take-off when tail wheel was allowed to lift off too soon. Aircraft ran off runway into long grass with damage to propeller tips.
58	Libelle	1660	N	9.5.84 14.30	Enstone A/F	62	N	1520	Pilot launched with port aileron disconnected but managed to land safely after severe vibration.
59	IS-28M2A	G-BKAB	S/WC	19.5.84 14.20	Rattlesden	63	N	120	Aircraft failed to climb after take-off and ground-looped after wingtip caught corn in an adjoining field.
60	K-6cr	2570	S	19.5.84 12.15	Graffham	35	N	119	Pilot attempting Silver distance in poor conditions. Selected good field but flew circuit fast and close and found himself turning onto base leg below level of trees on downwind boundary. Turned away and attempted landing downhill in small undershoot field containing horses. Groundlooped and struck fence.
61	K-13	2405	M	10.4.84 15.45	Parham	—	N	—	Tug approached low over parked gliders and persons trailing rope. End of rope struck person's leg and penetrated trailing edge of wing of parked glider.

BGA MAIL ORDER

In the dark about gliding facts and figures? The best way to throw some light on your problem is to look in the **BRITISH SOARING YEARBOOK**. Get the new edition of the official B.G.A. publication and you'll find all the answers. Don't stay in the gloom — order a copy of the **BRITISH SOARING YEARBOOK** now for £2.75 including postage and packing.



Order these items from

BRITISH GLIDING ASSOCIATION

SALES DEPT., FREEPOST, LEICESTER LE1 7ZB

or ask us to send you our complete sales list

Telephone 0533 531051



out of the hand, with a consequent nose down pitch.

The remedy is a firm grip on the stick and resistance to the forward control movement when a firm landing seems likely.

This information comes from the Air Cadets Headquarters with the comment to instructors: Some of the cases involved students who were doing well and were close to solo standard. Don't relax and get caught out!

GLIDERS IN BRITAIN WITH C'S OF A

The following are the number of gliders in Britain with current British C's of A on July 20, 1984.

ASW-15	7	Janus B	4
ASW-17	4	Jaskolka	2
ASW-19	22	Super Javelot	2
ASW-20	44	K-2B & K-2	12
ASW-22	1	K-3	1
Astir CS	49	K-4	6
Club Astir 3	1	K-6	1
Speed Astir	3	K-6CR	73
Twin Astir	10	K-6E	57
Bocian ID	6	K-7	41
Bocian IE	17	K-8B	58
SD3-15	2	K-13	54
BG-135	2	K-18	10
YS-55 Consort	3	K-21	23
Blanik L13	35	Kite 1	2
Bergfalke 2	7	Kite 2	2
Bergfalke 3 & 4	2	Kranich	2
Cadet 2	8	Krajaneck	1
Cadet 3	1	KH-1	1
Calif A-21	1	Kestrel 17	4
Capstan	16	Kestrel 19	47
Carman JP 15-36	2	Kestrel 22	2
Pegasus	8	LS-3	10
Std Cirrus	35	LS-4	22
Cirrus	13	L-Spatz	9
Cobra	11	Club Libelle 205	6
Condor Manual	1	Std Libelle	53
DG-100	14	M-100	7
DG-200	9	Mü-13D3	2
DG-202/17	4	Minimoa	1
DG-300	1	Meise	1
Dart 15	12	Moswey 4A	2
Dart 17R	30	Mosquito	22
Delphin	1	Nimbus 2	23
Diamant 18M	2	Nimbus 2B	3
Eagle 2 & 3	5	Mini Nimbus	13
EoN Baby	2	Nimbus 3	6
Falcon 3	1	Olympia 1	10
Fauvette	7	Olympia 2	40
Fauvel	1	Olympia 419	4
Foka 3	1	Olympia 465 & 401	2
Foka 4	3	Olympia 460 & 463	37
Foka 5	1	Petrel	1
Goevier	1	Prefect	7
Glasflügel 304	2	Pirat	49
Glasflügel 604	1	Phoebus C	5
Grunau Baby 2B		Pilatus B-4	23
& 2C	9	PIK 20B	8
Grunau Baby 3	3	PIK 20D	15
Gull 1	1	Puchacz	2
Hutter 17	1	Rhönspërber	1
Hornet	2	Rhönbuzzard	2
Iris D77	2	Rheinland	1
IS-29D	8	Sagitta	1
IS-28B2	8	SF-27A	3
IS-32	1	SF-34	2
Std Jantar	6	SB-5B & 5E	2
Jantar	6	SF-26A	3
Jantar 2	2	Sie 3	3
Jantar 2B & 3	2	Sky	5

62	Twin Astir	2399	M	13.4.84 15.30	Lee-on-Solent P1 P2	21 20	N N	157 88	During ground run after landing on grass area clear of marked obstructions struck concealed manhole cover causing burst tyre and slight damage to wheel.
63	T-21a	786	W/O	20.4.84 16.00	Dislorth P1 P2	N/K 15	S N	Exp Inst	Glider failed to respond to elevator at 150ft on winch launch. Speed increased and P1 released at about 300ft. Aircraft flew at about 70kt with elevator having no effect. P1 chose largest open field for crash landing. Disconnection of elevator connection at tailplane being investigated.
64	Astir CS	2269	M	12.5.84 14.30	Lasham	53	M	177	Pilot chose to land in area in lee of trees and buildings generally avoided in conditions prevailing that day. Encountered turbulence and acute wind gradient and landed heavily.
65	K-13	2406	N	5.4.84 19.46	Lasham P1 P2	? 23	N N	? ?	Glider allowed to weathercock at start of autotow, crossing to upwind side of runway where it picked up parked launch cable. P1 detected presence of second cable early in launch, released and landed ahead.
66	K-13	2317	M	21.5.84 14.30	Lasham P1 P2	34 ?	N N	1,000+ 1	Whilst holding off after roundout P2 moved stick firmly forward. Glider landed first on nose skid then pitched onto tailskid damaging base of fin.
67	Sport Vega	2672	S	13.5.84 12.51	Lasham	37	M	35	Autotow in 20kt wind failed at about 200ft. Pilot did not check airspeed, opened airbrakes to land ahead and became confused trying to release cable whilst using brakes. Glider landed very heavily in stalled condition.
68	Grunau 2a	1884	W/O	22.5.84 15.30	Nr Peny-Parc	40	N	1/2	On first flight on type pilot misused airbrakes having just made it over the fence glider then collided with a Landrover at the launchpoint.
69	Mosquito	2472	N	23.5.84 14.55	Lasham	55	N	320	Third flight on type. Pilot caught unawares by effectiveness of airbrakes and landed short, groundlooping.
70	SHK	1623	S	13.5.84 13.45	Nr Stocksfield	25	N	135	On marginal final glide made late field selection. Failed to notice change of slope in middle of field. Became airborne again after touchdown and then groundlooped to avoid fence.
71	Kestrel 19	1766	S/WC	2.6.84 13.15	Radford Semele Nr Warwick	63	N	844	Whilst approaching to land in a field in which a glider had already landed, indecision resulted in a base leg too close to the field. Banking steeply to miss trees port wing touched the ground and aircraft groundlooped.
72	Dart 17a	1975	M	12.5.84 15.30	Crowland A/F	33	N	40	On downwind checks pilot raised undercarriage. Having his attention drawn to this pilot attempted to lower undercarriage just before touchdown but stalled in from 15-20ft while attempting this.
73	ASK-13	1503	M	25.5.84 16.00	MorrIDGE	48	N	322	When P2 allowed wing to drop on winch take-off, instructor was unable to prevent groundloop and aircraft rotating 180°.
74	Blanik	2060	S	13.5.84 14.15	Chilton Foliat	57	N	80	A poorly planned circuit and incorrect use of airbrakes resulted in wingtip catching hedge on approach into field and resulting in a groundloop into the field.
75	Ventus	?	N	30.5.84 19.00	Lasham	28	N	306	After cross-country flight of nine hours' duration pilot landed in light crosswind close to obstructions. Exhibited lack of directional control on ground run, with both wings touching ground alternately, culminating in 90° swing into wind.
76	Jantar	?	S	13.5.84 16.00	Ginge, Nr Wantage	48	N	558	Field selection at about 1500ft. Crop was young corn, not as short as pilot had thought, and glider groundlooped on touchdown, damaging fuselage and tailplane.
77	Grob 109	N/K	S	2.6.84 17.00	Enstone	52	N	N/K	After climb out pilot switched off engine after heavy landing and made a successful glider approach. Propeller tip was missing.
78	Grob 109	N/K	M	9.5.84 12.00	Enstone	47	N	N/K	After a "normal" landing aircraft tipped forward onto its nose and then fell back into a three point position. Possible misuse of wheel brake.
79	Skylark 4	1124	M	16.5.84 N/K	Tibham	28	N	8	An early solo pilot flying from a new site being concerned with another approaching glider skidded on loose stones on the side of the runway.
80	Dart 17a	1314	M	10.6.84 15.15	Nr Billingshurst	34	N	52	On inbound leg of competition flight pilot became lost. After attempts to find site returned to previously selected field believed to be pasture. Turned out to be long barley which damaged wing fittings and tailplane.
81	Twin Astir	2343	M	10.6.84 16.00	Easton Grey P1 P2	50 20	N N	164 18	Pilot selected pasture field, being only one suitable in sight. After touchdown found ground rougher than expected and unseen undulation initiated swing and damaged undercarriage.
82	Astir CS77	2241	N	28.4.84 14.30	Duxford	53	N	133	The winch cable "hung-up" in the wheel box after a snatch start and cable over-run (the stop signal not being observed). At 600ft the cable dropped away and the pilot made a normal landing.
83	Mosquito B	2319	S	? 14.30	Grafton Nr Petworth	33	N	143	Pilot selected adequate cut silage field but placed final turn too close in light wind. Overshot through boundary fence.
84	Pegase 101	2865	M	2.6.84 16.20	Lasham	57	N	984	When airbrakes unlocked and then shut on final turn starboard brake extended fully. Pilot unable to reach airfield, landed in undershoot and groundlooped on perimeter track. Ball-and-cup connection to airbrake appeared to have disengaged, or not been fully connected on rigging.
85	K-8	183	M	17.6.84 14.05	Lasham	32	N	24	At top of autotow in light rain with six octa cumulus and cumulo-nimbus there was a white flash of lightning near nose of glider with a loud bang. No damage found after normal flight. Scattered thunder and lightning had occurred earlier but not within previous half hour.

S = serious; W/O = write-off; M = minor; N = nil.

Silene	2	WA-30 Bijave	2
Skylark 2	24	Weine	2
Skylark 3	35	YS-53	2
Skylark 4	39	Zugvogel 3	2
Scud 2 & 3	2		1532
Swallow	29		
SHK 1	15		
Std Austria	3	MOTOR GLIDERS	
Specht	1	Falke	30
T-21B	35	Super Falke	10
T-53	2	K-16/RF-5/IS-28	
Torva Sprite	2	etc	9
Vega	53	Grob	11
Ventus	9	Dimona	1
Viking	1		
Vasama	1		61

GLIDING CERTIFICATES

ALL THREE DIAMONDS

No.	Name	Club	1984
160	J. Williams	Trent Valley	13.5
161	J. E. B. Hart	Yorkshire	12.5
162	J. M. Hoyer	Kent	4.7

DIAMOND DISTANCE

No.	Name	Club	1984
1/240	J. Williams	Trent Valley	13.5
1/241	J. E. B. Hart	Yorkshire	12.5
1/242	Pamela Hawkins	Booker (in S. Africa)	16.1
1/243	E. W. Johnston	Cotswold	4.7
1/244	J. M. Hoyer	Kent	4.7

DIAMOND GOAL

No.	Name	Club	1984
2/1275	Jane Turner	Southdown	9.5
2/1276	R. J. Smith	Bristol & Glos	12.4
2/1277	M. J. Spalding	Bicester	12.4
2/1278	R. E. Matthews	Surrey & Hants	12.1
2/1279	Annabel Lucas	Surrey & Hants	30.5
2/1280	W. T. Craig	Ulster	27.5
2/1281	R. E. Perry	Dorset	4.6
2/1282	P. J. Chodera	Southdown	12.5
2/1283	C. Lowrie	Southdown	30.6
2/1284	K. S. Lines	Surrey & Hants	30.6
2/1285	J. S. Weston	Ulster	28.6
2/1286	D. V. Declancy	Wyvern	11.6
2/1287	M. Hudson	Lasham	4.7
2/1288	J. Jesty	Coventry	30.5
2/1289	J. D. Norman	Bicester	30.6
2/1290	C. J. Clarke	Cotswold	4.7
2/1291	D. Hilton	Booker	5.7
2/1292	J. P. Bartoli	Surrey & Hants	30.6
2/1293	J. Dabill	Shalbourne	30.6

DIAMOND HEIGHT

No.	Name	Club	1984
3/644	C. Armes	Bristol & Glos	13.4
3/645	F. K. Russell	London	31.5
3/646	C. Mayhew	Lasham	30.3
3/647	R. Brown	London	31.5
3/648	C. M. Cruse	London	31.5

GOLD C COMPLETE

No.	Name	Club	1984
1010	P. C. Piggott	Coventry	13.5
1011	R. Brown	London	31.5
1012	W. T. Craig	Ulster	27.5
1013	R. J. Walker	Surrey & Hants	8.5
1014	C. Lowrie	Southdown	30.6
1015	K. S. Lines	Surrey & Hants	30.6
1016	E. J. Alway	Bristol & Glos	30.5
1017	J. P. Bartoli	Surrey & Hants	30.6
1018	J. Dabill	Shalbourne	30.6

GOLD C DISTANCE

Name	Club	1984
P. C. Piggott	Coventry	13.5
Jane Turner	Southdown	9.5
R. J. Smith	Bristol & Glos	12.4
M. J. Spalding	Bicester	12.4
R. E. Matthews	Surrey & Hants	12.1
Annabel Lucas	Surrey & Hants	30.5
W. T. Craig	Ulster	27.5

A. Kangurs	Coventry	12.5
R. J. Walker	Surrey & Hants	8.5
R. Dixon	Lasham	5.5
R. Perry	Mendip	4.6
P. J. Chodera	Southdown	12.5
C. Lowrie	Southdown	30.6
K. S. Lines	Surrey & Hants	30.6
T. G. Llewellyn Jones	Essex & Suffolk	12.5
D. V. Declancy	Two Rivers	11.6
M. Hudson	Lasham	4.7
J. Jesty	Coventry	30.5
E. J. Alway	Bristol & Glos	30.5
J. D. Norman	Bicester	30.6
C. J. Clarke	Cotswold	4.7
D. Hilton	Booker	5.7
J. P. Bartoli	Surrey & Hants	30.6
J. Dabill	Shalbourne	30.6

GOLD C HEIGHT

Name	Club	1984
C. Armes	Bristol & Glos	13.4
S. Heaton	Yorkshire	21.4
C. Mayhew	Lasham	30.3
R. Brown	London	31.5
P. L. Hurd	London	13.6
R. Manning	Derby & Lancs	23.6
R. Wilkin	Yorkshire	21.6
D. E. S. Sarney	Booker	21.6

SILVER BADGE

No.	Name	Club	1984
6660	R. H. Williams	Coventry	13.5
6661	W. R. McNair	Ulster	26.5
6662	N. Howes	Derby & Lancs	13.5
6663	M. Hussain	Bicester	29.5
6664	G. D. Ridley	Northumbria	24.5
6665	J. K. Buckingham	Mendip	19.5
6666	Jane Smedley	Bicester	24.5
6667	D. P. Martin	Bristol & Glos	13.5
6668	S. R. Freeman	Southdown	30.5
6669	R. P. Shackleton	Pegasus	20.5
6670	J. F. Fitzgerald	South Wales	2.6
6671	Miranda Gladstone	Shalbourne	2.6
6672	P. V. H. Bromwich	Coventry	30.5
6673	P. M. Turner	Midland	12.5
6674	M. N. Gnap	Deeside	2.6
6675	R. J. Cronk	Surrey & Hants	19.5
6676	M. G. Davidson	Angus	2.6
6677	J. R. Long	Cotswold	30.5
6678	P. A. Brennen	Wyvern	3.6
6679	R. E. Matthews	Surrey & Hants	12.1
6680	T. Baker	Shalbourne	2.6
6681	S. D. Plant	Burn	12.5
6682	D. A. Bullock	Ouse	12.5
6683	A. A. Baker	Kestrel	10.6
6684	W. L. Jaques	Hambletons	12.5
6685	H. P. Finn	Cotswold	10.6
6686	J. B. Ranson	London	10.6
6687	Jennifer Duignan	Phoenix	11.6
6688	W. R. Schofield	Burn	29.5
6689	D. Bagshaw	Mendip	19.5
6690	M. Goodwin	Four Counties	19.5
6691	G. Dale	Dorset	16.6
6692	J. Murphy	South Wales	2.6
6693	A. J. Reid	662 GS	14.6
6694	A. Phillips	Portsmouth	23.6
6695	A. Bourne	Trent Valley	13.5
6696	J. L. Duthie	Surrey & Hants	21.6
6697	J. Talbot	Surrey & Hants	17.4
6698	S. J. Ferguson	Cotswold	21.5
6699	D. E. Harvey	Surrey & Hants	21.6
6700	P. J. Hall	Cotswold	21.6
6701	D. J. Pratt	Bannerdown	10.6
6702	A. Johnson-Laird	Surrey & Hants	20.6
6703	S. R. Green	Bristol & Glos	19.6
6704	J. R. Reed	London	18.6
6705	D. E. S. Sarney	Booker	21.6
6706	C. D. Armstrong	Hambletons	21.6
6707	R. Manning	Derby & Lancs	23.6
6708	R. Powers	RSRE Pershore	30.6
6709	A. Gibbs	London	7.5
6710	J. K. Harvey-Samuel	Bicester	29.6
6711	D. W. Cole	Midland	1.7
6712	A. F. Duignan	Phoenix	1.7
6713	R. T. Stephenson	Coventry	4.7
6714	M. Medlock	Surrey & Hants	26.6
6715	R. A. Starling	Newark & Notts	30.6
6716	W. A. Thorpe	Coventry	1.7
6717	P. R. Thody	Cotswold	30.6
6718	R. Wyld	Southdown	12.5
6719	J. McRae	Bicester	30.6
6720	T. A. Lacey	Chilterns	30.6
6721	P. Masson	Surrey & Hants	3.7
6722	Elspeth Morrison	SGU	17.6
6723	S. E. Dorling	Oxford	7.7
6724	P. A. Green	Surrey & Hants	27.6

6725	G. H. Davidson	Angus	15.4
6726	A. G. Maids	Booker	5.7
6727	W. J. Stephens	Bristol & Glos	4.7
6728	P. N. Doktor	Yorkshire	5.7
6729	T. J. Evans	Ferland	23.4
6730	R. W. Coon	Bicester	1.7
6731	P. A. Gill	Buckminster	1.7
6732	D. Donald	Borders	8.7
6733	A. D. Andrews	Two Rivers	12.6
6734	S. Lambourne	Inkpen	23.6
6735	P. Edgson	Inkpen	5.7
6736	Fiona Muir	Booker	30.5
6737	M. G. R. Seaman	Kestrel	11.7
6738	C. R. I. Emson	Oxford	1.7
6739	R. Stirk	Burn	4.7
6740	R. H. Ough	Dorset	3.7
6741	R. J. N. Pollard	Nakuru	15.6
6742	K. G. Baker	Midland	30.6

BOOK REVIEWS

Flight Unlimited by Eric Müller and Annette Carson, price £8.95 plus £1.05 p&p, available from A.J. Carson, 28 Chiltern Avenue, High Wycombe, Bucks.

Eric Müller is one of the world's most experienced aerobatic competition pilots and we are very fortunate that he has written this book with Annette Carson explaining some of his ideas and techniques. Indeed, reading through the list of his triumphs, seven times Swiss Champion, over 3000hrs on over 120 different types and participant in more than 35 international aerobatic events, I did wonder if I was qualified to write this somewhat critical review.

Glider pilots who have mastered loops and chandelies will be fascinated by the variety of other manoeuvres which are possible in other aircraft. Eric's simple explanations and super sketches give a real insight into how each manoeuvre is done and on how the expert can "cheat" a little to make them look better to the audience or competition judges.

I found myself just longing to get my hands on a Stampe or Pitts to try to improve my own aerobatics. You may be tempted to try some of them in a glider but remember that it is far safer and less expensive to learn advanced aerobatics in a fully aerobatic powered aircraft. With a glider there is very little room for error without a real risk of exceeding the design diving speed or of overstressing the airframe. (See Derek's book **Understanding Gliding**, for more details.)

However, the explanation of spinning is controversial and far from complete. In his aerobatic machines he recovers by applying full opposite rudder, stick hard **back(!)** and full "in spin" aileron. Unfortunately, he does not make it clear that there could be possible hazards in using this non standard method on other more common types.

For example, it is possible that the use of full aileron during the recovery might induce an unusual mode of spin instead of a prompt recovery. In some cases a half hearted movement forward on the stick or failing to apply the full opposite rudder has changed the mode of the spin making a recovery more difficult. Some aircraft are rudder dominated whereas others require to be unstalled to stop the rotation and even these characteristics will vary with the weight distribution and the particular mode of the spin. Even different aircraft of the same type behave very differently and in some cases only a very positive standard spin recovery action will be effective in stopping a spin.

Since each type of aircraft is tested using the standard* method of recovery, it seems prudent to use it unless the manufacturer specifically recommends some other action. Non standard or half-hearted recovery actions are almost always the cause of spin recovery problems, unless the centre of gravity is beyond the aft limit.

The rest of the book is excellent and the dedication to detail and the enthusiasm of the author which has made him such a Champion comes across on every page and must be an example to every would be aerobatic pilot.

DEREK PIGGOTT

*The standard method of spin recovery for gliders is as follows: full opposite rudder, and then (ailerons central) stick steadily forward until the spin stops. Centralise the rudder and ease out of the dive.

Aircraft of the German Academic Flying Groups from 1953-1981 and 1981-1984.

Edited and published by Pierre Schmitt, am Steinkäulchen 6, D-5202 Hennes 1, West Germany. Price DM 29 inclusive.

The German Academic Flying Groups known as Akaflieg (name of University) have without doubt been the greatest influence on the development of "men and machines" in the history of gliding. Many groups started in the early twenties and it would be difficult to imagine the progress made without the scientific and technical work undertaken by its members.

As far as I know all German glider manufacturers or their designers started their aviation

careers at one of the Akaflieds and it is to be hoped that this may continue in the future.

Pierre Schmitt, a Frenchman living in Germany, an active glider and motor glider pilot with over 1000 flying hours to his credit, is a correspondent for various aviation magazines and author of these volumes.

The volumes, one with 115pp, the other an update with 11pp, describe 46 different types of aircraft. Many are accompanied by a photo or GA drawing and all show the latest available technical data.

I don't think it matters that they are printed in German as a mass of information can be extracted from the figures in the technical data tables.

It is also rather useful for those interested in these matters to have all the post-war projects of the flying groups under one cover, with updates as and when available.

RIKA HARWOOD

Perspective in Perspective by Lawrence Wright, published by Routledge and Kegan Paul at £40.

Anyone who participates in the sport of gliding is privileged to meet some remarkable men. Such a person was Lawrence Wright whose modest and unassuming manner concealed great learning and talent. His book on perspective is a masterly achievement combining wit and encyclopaedic knowledge.

The greater part of the pleasure of flying is the picture that you see from the window and it is more fun if you understand how the picture works. The works of Professor Hoskins will help you

understand why towns and fields have the shape they have. Lawrence Wright's book helps you understand how your mind's eye places yourself correctly in the landscape.

His book is full of delight, like the account of how the wartime pilots easily found their way back to base because of the distinctive nature of the camouflage on the buildings, or how Dürer was given the names of two artists, Piero del Francesca and Leonardo da Vinci, but did not bother to call on them. Many of us have been entertained in the 1940s by Lawrence's cartoon films of the Micky Moa and are not surprised to discover the extraordinary book that his remarkable talent has produced. Do read or even buy the book.

BRENNIG JAMES

JSW SOARING

FREE OFFER! Computer print out of speed-ringing calibration*

YOUR GLIDER at YOUR all up weight with any order over £5.00.

PLUS Dolphin Vario

Conversions £27.50 and £45

PLUS Calculators £5.50 and £9

Computer training programme ZX81 £5

PLUS Tubing, Tee-pieces, calibration labels, valves etc.

* Subject to data availability.

Send SAE for full details to:

JSW SOARING

1 The Jollies, Crondall, Farnham, Surrey
or phone John Williamson on 0252-850299
(most evenings)

A VERY SPECIAL XMAS GIFT

Are you wondering what to give your favourite gliding enthusiast for Christmas? The answer is simple, give them a model of their own sailplane in its correct colour scheme.

1/32 scale — 15m glider = 18" wingspan model.

Each model is hand made to order in limewood and finished in at least 8 individually hand rubbed coats of finish plus trim colours with basic surface details engraved, models are supplied with a specially designed stand which can also be hung on the wall.

The basic model described costs £52.50 including postage, overseas postage extra.

To allow proper drying between coats, each model takes 3 weeks to complete.

ORDER NOW TO AVOID DISAPPOINTMENT

MILLER AVIATION MODELS

Red Cot, New Street, Glemsford
Sudbury, Suffolk CO10 7PY, England

Telephone: (0787) 280425

CAA APPROVED RADIOS

TR720 (LEFT) 3 WATTS PEP OUTPUT

720 CHANNELS + VOR AUDIO

3 USER MEMORY FREQUENCIES

HAND/SPEAKER MIC £18 + extra

£395 + VAT

MicroComm 722 (RIGHT) 6 x 6 x 20cm

£425 + VAT

BARCLAYCARD ACCEPTED



Also available:

Lightweight Strobes, Battery Chargers
Distress Beacons, Portable VORs

SPECIALIST SYSTEMS

32 Fernhill Lane

Camberley

Surrey GU17 9HA

Mike Yorke and 0276

Tim Newport-Peace 33706

Telex 966676 PMFAB

THE STATE OF THE CLUBS

Dartmoor Gliding Society

The club took off at the end of June after spending some months clearing the site. The location is 5km north of Tavistock and 2km south-east of Brent Tor. Land nearby was at one time used by Albatross GC. The farmer who owns the land is the club president and very supportive although not offering security longer than 364 days.

The club is in the Dartmoor National Park and can only be a winch-launch operation. At present they have a T-21 and T-31 but plan to go for a K-7 as soon as they can afford it. The group has 25 members and a properly qualified CFI and are making application for BGA membership.

Devon Air Sports (was North Devon GC)

This (proprietary) operation is now secure on its site and has a general planning permission. The site (50 acres) was purchased for £67 000. On a recent visit (June 30) it was a hive of activity with a Precision Flying Association Rally, parachuting, motor gliding and some gliding.

Much of the gliding activity (mid-week) is the provision of air experience flights for an adventure school with the prospect of a contract for 25 000 winch launch flights over the next ten years. The club now also provides aerotowing.

Nene Valley GC (RAF Upwood, Nr Ramsey)

This is one of those smaller clubs which has struggled for several years; it is now on its third site and is a little more soundly based. The club now owns its gliders (T-21 and K-2) and is solvent. Its latest problem has been due to the resignation of the CFI who in any case is returning to the USA in September. (See Club News.) The CFI designate does not return from the Falklands until October. Meanwhile with the help of the Senior Regional Examiners an acting CFI has taken charge.

Peterborough & Spalding GC (Crowland Airfield)

This is a 70-member club which has always been of a good standard. The visit on June

23 was to discuss site problems and is the subject of a separate report — a development plan. The problem, so far as securing their present site is concerned, is that they are sub-tenants of a tenant farmer; because of this they have never geared their finances for possible site purchase.

Buckminster GC (Saltby)

This club operates from a magnificent airfield using reverse pulley launch and aerotow. In the long term the site is threatened by NCB development plans (Vale of Belvoir). At present the club's membership is 96 but their instructor strength is depleted. There is also some concern over the club's safety record. Consequently the flight safety presentation was given to club instructors and a coaching weekend (also involving Senior Regional Examiners) with the theme "be a better pilot" was held in August.

Devon & Somerset GC (North Hill)

Westland's have a group operating a Super Falke based at North Hill. Naturally there are aeroplane and glider pilots wanting to fly the aircraft. At present there are only two instructors and they are only qualified to teach gliding exercises; type conversion of aeroplane pilots is therefore with a definite gliding bias. Guidance is being given on the operation to ensure compatibility with gliding and check-outs on type will be by visiting examiners.

Kent Motor Glider Centre (Manston)

This operation was visited on June 22 in connection with the report on motor gliders and motor glider clubs submitted to the Executive. The operation has become increasingly gliding orientated — 4000 launches predicted for the current year — and suggests that given the right circumstances and spirit gliding will develop alongside motor gliding. The present operation represents a merger with the Channel GC which had never established itself for lack of a site. Together the two appear to have formed a viable operation albeit with a proprietary club bias.

Make sure of getting S&G by taking out a subscription. See p236.

Traveller's Tale

Gliding in Nevada

SIMON CASSIDY tells of his wave hunt

Stimulated by reports of overseas gliding in recent issues, I have written of my gliding experiences at Minden whilst on holiday in western USA in October, 1982. A little preliminary research and correspondence with the Soaring Society of America indicated that one of the gliding centres in my holiday area (California, Nevada, Utah, N. Arizona) would be Douglas County Airport at Minden, in north-west Nevada.

Soon after arriving I gained an American PPL (land planes and gliders) for the price of a 40 minute wait at the FAA district office in San Francisco, having presented them with my power flying and gliding logbooks, licence/certificate and medical certificate.

I set off for Minden — Tahoe Aviation at Douglas County Airport — a few miles south of Carson City and found the gliding was run as part of a company, Executive Aero Systems, (EAS), with executive prices to match!

The CFI, Dick Grant, an ex-USAF Lt Col, was very helpful to a novice wave pilot and checked me out in the Lark (IS-28B2).


(As wave was very unlikely that day Simon continued with his holiday and returned when the forecast was more hopeful.)

On my second solo flight I launched into good wave with two full sets of oxygen. I contacted steady smooth lift (5Kt) and went almost magically up to 15 000ft asl. From there it got more difficult but I crept up to 19 200ft asl.

The wave system began to disintegrate and with it my hopes of a Diamond, but it was a marvellous flight with unforgettable views over the rim of the Sierra Nevada mountains into Lake Tahoe, Carson Valley and an airliner out of Reno rushing along several thousands of feet below me.

The airfield at Minden is large with six long runways. Hire of the Lark is about \$32hr with aerotows at around \$20 for 2500ft. The motel at Minden cost \$22/night. I was told by Dick that May/June was the optimum time for consistent "dry" wave.

He sent me a card last Christmas telling me that they have split from EAS to form Soar Minden and as well as the Schweizers and Lark hope to add PIK 20s, an LS-3, Cirrus, DG-400 and possibly a Nimbus 2 to the fleet.

If you are intending to glide in the USA it is worth contacting the Soaring Society of America, Box 66071, Los Angeles, California 90066, USA, Tel (213) 390-4448 before leaving for details of clubs and help with obtaining a licence, although any local office of the Federal Aviation Administration will be able to issue one. Their publication **Directory of US Soaring Sites and Organisations** is particularly useful. 

Attack on hang glider. Derek Findlay, who wrote in the last issue, p178, of his alarming experience with an eagle while flying from Aosta, was interested to find a report in *The Times* about an air battle between an eagle and a hang glider pilot in the Italian Alps. Fabio Valentini was soaring the Dolomites when an eagle attacked four or five times, slashing the hang glider wings with its beak and claws as the pilot struggled to escape. Derek's comment was "Thank heavens for perspex."

O/K BAROGRAPHS UK Agent

£155

Please ask for details



PIK 20b with instruments and good wooden trailer £9400 ono
Open Cirrus with trailer and instruments £6600 ono

Salvage and spare parts of T-21b; Pirat and OLY 463

READ NEXT S&G FOR DETAILS OF OUR MOVE TO RUFFORTH AIRFIELD!!

Repairs and C of A inspections on wooden, metal and glass-fibre sailplanes. Factory trained and approved repair agent for Glaser-Dirks Sailplanes.

BOB McLEAN

241 Bawtry Road, Bessacarr
DONCASTER DN4 7AL
Tel 0302-535861

Your Letters



SHEAR WAVES AND THEIR APPLICATION

Dear Editor,

In Tom Bradbury's excellent two articles on waves in the June issue, p118, and the August issue, p166, he describes shear waves formed over cumulus cloud streets. What is not immediately apparent from his article is that they are a potent source of lift.

This summer I was flying the usual Fuentemilanos milk run 300km in a Cirrus and making a regular pig's ear of it since I took 6hrs to get round. This was partly because a cirrus shadow lay across the course for a couple of hours and partly because an intense wind shear was chewing up all the clouds and thermals. I was having great trouble getting anywhere near the cloudbase at 6500ft when I heard Ingo Renner calling out that he had the Janus up at 13 000ft. Clearly if pilots can get to these heights without entering cloud as he did then there is no loss of performance due to ice or rain on the wings.

The main problem is to get above the inversion in the first place, and for this you need a slope which locally lifts the inversion (the one at Segovia is 5000ft high), or to do some cloud flying at first. Second you need a prepared mind so you know where to look.

You know the wind direction at ground from:

1. Your experience at take-off.
2. Waves on lakes.
3. Direction of smoke.

You can determine the wind direction at altitude from the movement of cloud shadows on the ground. Usually in the Northern Hemisphere the wind veers with altitude so if you enter cloudbase with the wind from the west, when you come out of cloud 2000 to 3000ft higher without ice on the wings you might try to scratch around on the NW face for a while.

On the flight I mentioned the wind in fact backed 90° and the edges of cloud were getting teased about like breaking waves so getting above cloudbase by cloud soaring was impossible. I don't know whether this technique has much application in contests since it may involve rather a slow climb to begin with, but the more pilots know about it and the more pilots try to apply it the more fun we are going to get out of gliding.

The idea of effortlessly slope soaring cumulus cloud streets at great altitude while all the other competitors slog around the task at great effort appeals to me enormously.

BRENNIG JAMES, Marlow, Bucks

STUD FARMS AND OUTLANDINGS

Dear Editor,

All cross-country pilots know what a stud farm looks like — they have those nice glider sized green fields with short grass, most of which contain half a dozen or so mares and foals. They stand out for miles like an oasis in a desert of standing crop. I hope this letter will make pilots think hard about their field

landing policy before they land either in a field adjacent to, or one containing horses and foals — a mistake I was stupid enough to make recently.

Most thoroughbred mares are very excitable, and particular care must be taken to ensure peace and quiet during critical phases of pregnancy, hence stud farms are tucked away in quiet little backwaters. The excitement caused by the sudden arrival of a glider and later on its giant white "horse box" could cause complications. Furthermore, mares or foals may even injure themselves by galloping around in an excited state.

The papers have recently been full of articles about the astronomical sums changing hands for top class racehorses. Just consider the consequences of causing injury or death to a valuable racehorse foal, born or unborn, by a nearby outlanding. If the owners can blame you for their loss, you could be facing a lawsuit which makes your third party cover fade into paltry insignificance.

The BGA code of conduct for field landing gives the following order of priority for field selection:

1. Avoid standing crops.
2. Land as far from livestock as possible.

In July in the UK from the height at which it is practical to select a field, it is often not possible to both land away from standing crop and keep away from livestock for the simple reason that short grass means that there are animals around somewhere. Regardless of this, 99% of all field landings go without a hitch even if you land in a field containing livestock. However if that livestock happens to be horses on a stud farm, and you are faced with the alternative of landing near the horses, or landing in corn, you should choose the standing crop every time.

Landing in corn might not win a popularity poll, but at least the damage to the third party's property is easy to assess — at the very worst you will only flatten an acre worth about £500 in the event of total loss of a good crop. On the other hand, hit a racehorse and you could be talking millions ... let alone pain and suffering that might be caused to the unfortunate animal.

The message is simple, keep clear of stud farms for field landings. Maybe it is time for a revision of the BGA code of conduct for field landings.

ANDREW DAVIS, Macclesfield, Cheshire.

MORE ABOUT THAT LEVY

Dear Editor,

Why doesn't John Gibson stop writing to S&G and give the money he saves on postage to support the British team in Rieti?

JOHN ARMSTRONG, RAF Laarbruch

EVEN A PLATYPUS MIGHT SOAR

Dear Editor,

Our egg laying friend can get all the verbal soaring advice he so desperately needs, and fully certified too, if he just applies to the BGA. They supply gliding instructors! Come on Platypus, buy yourself an Irving TE probe, seal the leaks and join the pundits! It may pad out your copy, but you've been complaining about your varicos for years. Fix them, and you might even soar like a bird!

More seriously though, it is a sheer waste of time, temper and money to "put up" with a poor instrument system. You may "manage" with it, but you won't feel at ease, and you probably won't do very well either. The less a pilot's experience, the more he needs good, clear, information. If the squeaks and groans of your audio don't, with a small lag, more or less agree with the acceleration signals experienced by your bottom, something is wrong. These signals should appear to be "in harmony".

An electric variometer should be quite fast, but not "littery". If the TE system is working properly, and the air is reasonably still, you get about the same down reading when you push the stick gently forward and accelerate through 70kt, as when flying steadily at 70kt. The down reading should increase steadily as your speed increases, with no over- or under-shoots. If your vario goes bananas, consult a vario monkey (*homus variabilis*)!

And place not your faith in computers! At best, they can only predict what should happen if their past and present information is correct, and everything goes according to plan. Mother Nature is rarely that predictable or obliging, and she hasn't even heard of computers! Only YOU can peer out into the lowering murk and head for that last elusive wisp of cloud. There is, what should be, a highly sophisticated computer between your ears. Learn to use it to the full!

Lastly, to all current National's pilots: please remember to put your rate of climb settings on zero, for at least 95% of the time in future. The rest of us will be ever so grateful!

C.J. CHAPMAN, Birmingham

NEW MEMBERS: COMMUNICATING FUNDAMENTALS

Dear Editor,

The potential recruit to our sport who may not have much time to spare and who is not prepared to "waste it standing around a gliding club all day" is deserving of sympathy as Bill Scull suggests in his article "Club Management" in the June issue, p115. As a fairly hard-worked instructor (with two clubs) however, I should be interested to know how different management could substantially reduce the amount of time pupils are required to put into training in the typical wire-launch club operation.

Even in light wind conditions, to operate one two-seater trainer requires the following: instructor, pupil, wingtip holder, signaller, towcar/winch driver, towcar observer/winch retrieve driver plus, say one more to allow anyone of the others (except the instructor!) to absent himself, ie seven in all. With just this machine flying, we might expect it to do about five launches /hr at most. Allowing for cable breaks (fortuitous or simulated), overshoots, etc, four launches /hr is probably more realistic. Pedagogically it is desirable for each pupil to receive three launches per training session, so the group of six pupils would require eighteen launches which will take about 4½hrs (given reasonably fumble-free operation).

When I started gliding it was explained to me that I should expect to spend at least a half day at the club and to either help get out the equipment before flying commences or to put it away at the end of the day. Given the foregoing manning/time requirements, it seems to me that to suggest or to expect otherwise is to delude oneself and the potential member.

Although these facts of gliding life will quickly become apparent to anyone who watches a day's operation at a gliding site, perhaps we are deficient in not explaining such aspects adequately to the potential new member.

I go along very much with Bill's suggestion of assigning an experienced member to each new recruit. He/she should point out that:

1. Basic training is perforce a particularly labour-intensive minority-participation aspect of gliding (illustrating this with the numbers outlined above).

2. Labour associated with instruction, ground-handling and launching is provided "free" at most clubs by fellow-members on a mutual-aid basis.

3. The most difficult flying skills to acquire are associated with planning for and executing the landing, so the training glider spends much of its time doing these tasks and on the ground between-times as a result.

4. It is possible to learn a great deal of airmanship in respect of safety and anticipation of conditions, from the ground by observing and talking to other pilots during flying operations.

5. Speeding up of basic training by more intensive flying, labour provision etc is possible by using aerotowing, motor gliders at appropriate stages and full-time holiday courses with employed instructor and other staff as the commercial operators and larger clubs have shown. These of course incur substantially greater costs but to the busy person they may be attractive and more appropriate if a satisfactory rate of training progress is to be achieved.

If a new member has had these fundamental constraints pointed out and has understood them but it still frustrated by having "... to stand around all day waiting to fly", he/she is probably a lost cause. However if he/she leaves without having heard and understood them, then I suggest we have an identifiable reason for a loss of potential membership which can and should be remedied (yet another? — see my letter in the August issue, p189).

For the good *management* of any system, it is a prerequisite that there should exist adequate communication between the *elements* of the system. Since recruitment and thence basic training are vital necessities for our sport if membership levels are even to be maintained, the potential new member is a vital *element* in our system.

Perhaps we have a *management* deficiency which is traceable simply to inadequate communication with new members?

TONY GEE, Godalming, Surrey

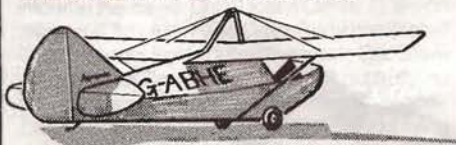
ARE WE GIVING PEOPLE WHAT THEY WANT?

Dear Editor,

Paul Williams article in the April issue, p68, makes a case for market research/product planning. Glider manufacturers will presumably continue to invest in existing competition Classes unless commercial justification for alternative outlets are developed. Could an appropriate expert first establish a "wants" product specification compiled from an all-clubs' questionnaire; the resultant product price ceiling acceptable to Paul's unsatisfied market segment should indicate viability of a new product or continued dependence upon second-hand machines.

RON PARSONS, Sevenoaks, Kent

THE ENGINE-LESS AERONCA C2



Dear Editor,

I was interested to read the review in the June issue, p135, by John Deakin of the book **Flying for Fun — An Affair with an Aeroplane**. I was a member of the small Dorset GC when we accepted the engine-less Aeronca C2 as a single-seater glider. The sketch is from a 1938 photograph taken at our hill soaring site at Maiden Newton, between Yeovil and Dorchester.

Prolonged soaring was rarely possible as the margin between an adequate wind and one too strong for safety was small, but it was certainly flown several times and I would think had a slightly poorer performance than the Pröfling.

I can't say for certain what happened to it, but as it and other aircraft were damaged in severe gales in November 1938 it probably ended up on a war-time scrap heap.

ROBERT PAGE, Farnham, Surrey

ON PRISY NONSENSE

Dear Editor,

Walter Kahn in the June issue, p136, certainly put his finger on something when he patronisingly mentioned the holiday complex in Berkshire which wanted publicity for its "nudist camp" and so he advises "Girls — fly naked!". If he intends to arrange competition TPs above what we call naturist clubs so that the photographs have an

interesting content there are about seventy in Britain to choose from. Apparently gliding women get a lot less respect and equality than our naturist women have, judging from his mickey-taking remarks.

Ladies, ignore his silly sarcasm. I shall be watching out for your circling sailplanes above our area in Bricket Wood by the A405 north of junction 6 on the M1. You might see a few dozen sun-bronzed bodies at any of the four clubs here, with some golden mermaids splashing about in the swimming pools. Beware of quite a bit of air traffic, executive twins and training singles going into Leavesden, a friendly microlight who dips a wing in response to our waving, plus a few BAe 125 and 146 jets going into Hatfield Aerodrome.

So if any of you ladies should be overcome by gravity and be obliged to land in any of the several fields near here you will be most welcome on a day visit. Don't bother to bring a bikini or a towel, you can dry off after a refreshing swim just lying in the sunshine.

Remember this, all you textile types. Only your mind needs a swimsuit, your body certainly does not. So cut the mockery and get logical, Mr Kahn. You are never too old to learn.

COLIN BANKS, St Albans

Correction: A misprint in Bob Rodwell's letter in our last issue, p189, caused some confusion. Some readers will have realised that "nationally saved" should have read "notionally saved".

50 YEARS AGO

A. E. SLATER

The 1934 Nationals at Sutton Bank were the third held, but the first to which the public were invited and catered for, and a crowd estimated at 8000-10 000 turned up. No points were awarded for performance: they were first introduced after the 1937 International Contest by Philip Wills, who thought British gliding needed them to raise its prestige among the nations though the traditionalists objected strongly, swearing that they only glided for fun.

John Laver, the only C pilot of the Dorset Club, provided preliminary publicity with a new British duration record of 12hrs 21min.

On September 4 a thunderstorm front crossed the site: G. Mungo Buxton went inside it in his Scud 2 without blind flying instruments and was tossed up to 7970ft above start. This was just short of Kronfeld's record of 1929 which was one of the feats which stimulated the formation of the BGA. However, early in 1934 a German expedition to Brazil had resulted in a climb of over 14 000ft by Heini Dittmar.

Jack Dewsbury also flew north in the thunderstorm in my Blue Wren, but Eric Collins in his Rhönadler went only a few miles southward along it, against a strong wind, following the advice of Wolf Hirth's textbook, because Hirth's only flight along a front had taken him further south than those who went north.

Sutton Bank was again in use for the 1935 Nationals, but by 1936 the Derbyshire & Lancs GC site was in action and held the Nationals. They were at Dunstable in 1938 but back at Camphill thereafter.

Correction: In Doc's last article in the August issue, p188, the first balloon flight in England was given as 1781 and should have been 1783.

AUSTIN AVIATION FOR ALL GLASER-DIRKS AIRCRAFT

The DG 500 is coming soon

The DG400 available early 1985

The DG 101G — two fixed price

options (DM. 36,620)

for Jan and Feb 1985

The DG 300 — One year

Competition results so far —

Finnish Nationals 1st

8 Days Angers 1st

United States Region 2 1st

Swiss Nationals 2nd

United States Nationals 2nd

German Nationals 3rd

European Competitions 3rd

Northerns:

1st — 15 mtr: Aircraft

4th — open class

Repairs: R. McLean

0302-64931

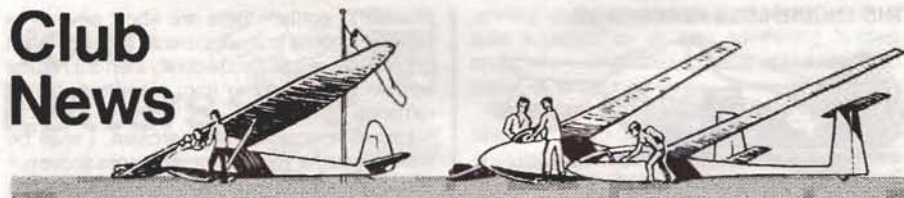
122 Main Street, Stillington

York YO6 1JU

Tel: EASINGWOLD 810255

24hr Ansaphone — Takes 2min message

Club News



Copy and photographs for the December-January issue of S&G should be sent to the Editor, 281 Queen Edith's Way, Cambridge CB1 4NH, telephone 0223 247725, to arrive not later than October 9 and for the February-March issue to arrive not later than November 29.

August 8, 1984

GILLIAN BRYCE-SMITH

BATH & WILTS (Keevil Airfield)

Congratulations to Andrew Davis, the new Standard Class Champion. Other Keevil pilots competing in the same Nationals did very well: Andy Smith 10th, Stuart North 16th and Bob Bromwich 21st. Andrew ran a very close 2nd in the 15 Metre Nationals and Andy Smith came 9th in an LS-4, see report in this issue.

Les Nay, Andrew Lauder and Bob Hitchen have gone solo and Bronze Cs have been completed by Bob Clarke, Jean Smith, Jackie Thompson, Pam Dunthorne and Terry Knight. Martyn Gingell did his 5hrs and Silver heights have been gained by Nick James, Pam Dunthorne and Andrew Lauder.

Our new glider workshop has been erected and our refurbished Auster tug is ready to fly, thanks to the efforts of Mervyn Pocock and Roger Slade. A third two-seater has been acquired and we have bought another Dodge launch vehicle.

We have had a successful soaring and barbecue season and the bar now has a liquor licence!

Expeditions are planned to the Long Mynd and Aboyn.

P.D.

BLACK MOUNTAINS (Talgarth)

Mary Koker and Ron Charles have gone solo, Mary gaining Bronze legs with her first two solo flights with a Bronze leg also for John Wood and 5hrs for Lawson Crisp. Well done everyone.

Thursday, June 7, brought light northerly winds and several visitors from the Standard Class Nationals. Unfortunately the log-keeper was presented with a problem in that one of the arrivals (LS-4) didn't technically land until June 9, courtesy of kind friends! (See Nationals report in the last issue, p175).

Congratulations to CFI, John Bally, for achievements in Competition Enterprise and our thanks to Bill Morgan for his efforts as treasurer over recent years.

P.A.J.

BLACKPOOL & FYLDE (Chipping)

Obituary — Mike Reeves

It is with great sadness that we report the death of Mike Reeves from a gliding accident on July 15. (See also BGA News).

Mike originally became interested in gliding through flying models and joined the club in 1977. He was elected to the committee in 1981 and re-elected in 1983, a fact which reflects Mike's willingness to shoulder thankless tasks behind the scenes.

His meticulous and thorough approach to life also showed in the management of his Fauvette

syndicate and his involvement in the building of a Gull 3 from scratch. A careful and steady pilot, he flew as often as family and business commitments allowed and all of us will miss his quiet, dry wit around the airfield.

In Mike we have lost a valuable member and our sincere sympathies go to his wife and family.

Val Howells

BORDERS (Milfield)

The summer has given long hours of soaring with some good cross-country flights. Colin Sword (SHK) and Derek Robinson (Oly 460) flew to the Northumbria club, got a relight from a winch launch in failing conditions but didn't quite make it home.

We have had a number of badge flights but the most commendable must be Dougie Donald's Silver distance to Middleton Moor near Dalkeith. The K-6E came to rest 50 yards from the doorway of a cafe where we all had tea. We all congratulate Dougie on his Silver C and his determination.

Membership continues to increase — 97 at the last count which keeps tug pilots and instructors busy at the weekends.

T.P.

CAMBRIDGE UNIVERSITY (Cambridge and Duxford)

June started with our task week won by Peter Baker. Our thanks to Peter O'Donald and his helpers for organising it.

We have had plenty of cross-country and local activity with a notable increase in the numbers coming out on mid-week evenings.

Congratulations to Mike Foreman (K-8) on his 5hrs and Silver distance on June 15 and to Richard Maskell and Steve Foster on their Diamond goals on August 1.

P.E.S.M.

COTSWOLD (Aston Down)

The season got off to a good start with the bar renovated and food being served in the evenings.

We celebrated the longest day on June 23, managing to get airborne by 4.35am although we didn't log a record number of flights since it turned out to be so arable and pilots insisted on staying up!

In the first week of July we flew over 6000km with four 500km triangles in two days as well as many other badge flights.

In the Rockpolishers competition, after three good contest weekends, we came first overall for the second year running.

Congratulations on going solo to Doug Jones,

Peter Barnes, Sue Bell, Alan Palmer, Miranda "Lulu" Coleman and Alayne Bradbrook.

L.M.C.

COVENTRY (Husbands Bosworth)

The early season brought some first-class days. Pat Piggott flew to Stow Moor, Cornwall for Gold distance and Chris Thomas and Stu Cooper (T-21) declared Bodmin and landed at Nympsfield.

The open weekend was most successful with brilliant sunshine attracting crowds of visitors. The flying area of our field has been drained which will be an improvement. Summer evening courses have been well booked and one student from New Guinea had read of our courses whilst at home.

Congratulations to Colin Jones, Bill Thorpe and Bob Stephenson on completing Silver Cs. Dave Asquith has taken over from Les Johnson as CFI. We thank Les for all his work. Our dawn to dusk marathon started at 5.30am, ending with a record 185 winch and aerotow launches.

Bill Clay celebrated his 70th birthday by entertaining his family and friends to a display of loops and chandelles followed by a barbecue at the club. During the same week he also passed his advanced driving test.

Bad weather resulted in only four flying days out of nine for our task week, though on two good days Gary Wills and Roy Baines (Bocian) did an O/R Tewkesbury in 4hrs 45min and John Endall an O/R to Towcester with a return leg in 12min.

The task week winners were: Open Class, Claude Woodhouse with Ernst Specht as runner-up; Club Class, joint winners David Booth and Alan Fretwell with Derek Abbey as runner-up and Vintage Class, John Osborne with Derek Harris as runner-up. A special award donated by Pete Beardmore for the pilot selected by the task setter for the most meritorious flight went to David Booth (SB-5) for an O/R to Hereford Cathedral. Our thanks to everyone who contributed to the task week's success.

N.B.

CRANFIELD (Cranfield Airfield)

Another successful summer of evening courses and air experience evenings made up for the terrible start to the season. Two members who joined last year following courses, Korsia Raja and Eddie Bowgen, have gone solo as well as staff member John Brightman. Eddie is now flying in a syndicate Oly and John in the syndicate Pirat.

Your scribe went back to school during the club flying week. Having landed in his old school playing field, he duly walked towards the school building looking forward to a warm welcome from his old masters. It wasn't till he got to the staff room door that it dawned on him that the teachers were on strike! However, the local press arrived and some valuable publicity was gained for the club. Mid-September the private owners are off to the Mynd for the week.

D.P.S.

DARTMOOR (Brentor)

We launched our restored T-21 in June and following successful trials had an open day on July 7 at our site at Burnford Common near Tavistock (one mile east of Brentor church).

We now have 48 members and as the numbers

increase we urgently need fully qualified instructors. Anyone prepared to help should contact John Bolt, 93 Powisland Drive, Derriford, Plymouth, tel. 0752 775016 (also membership inquiries). Meetings are on the first Thursday of each month at the Cottage Inn, Tavistock at 7.30pm.

Flying will be on Wednesdays (subject to negotiation), Saturdays and Sundays until the end of November, but as the site lies within the Dartmoor National Park we are restricted to winch launching only. However, the nearby tors of Dartmoor help to create some excellent gliding conditions and also provide us with a magnificent background.

C.F.

DEESIDE (Aboyne Airfield)

Visitors be warned! Aboyne is going to cost you more. Don't worry too much. Our basic charges are unchanged, but we now expect a "voluntary" donation after each flight to the local Scouts, etc. For every 1000ft gain of height/10km cross-country, one penny goes into the collecting bottle. Pilots decide on their own minima. The experts only contribute for more than 5000ft/50km; the novices are delighted to call Dinnet and back a cross-country. Perhaps other clubs might like to copy our idea.

Sea breezes produce the occasional summer diversion. The sea air can come surprisingly far inland, often reaching Ballater, 50km from the coast. Usually, it simply kills the thermals, leaving good soaring only to the west of Aboyne. But on some days, a classic sea breeze front forms, with its line of ragged low clouds. Pleasant soaring is then possible well into the evening. Apparently, Alan Middleton did his Silver distance along a sea breeze front sometime last century!

K.A.H.

DEVON & SOMERSET (North Hill)

Ian Beckett's immaculate home-built 'Duster' — a five year labour of love — appeared on site in late April, exciting great interest. He reports well of its flight characteristics and has achieved some respectable flights in it, both at home and on a trip to Vinon and Fayence.

We have a special challenge this year for two-seater flights. Julian and Martin Hine set the standard in mid-April with 160km to Salisbury and back to Sherborne. The challenge list is lengthening.

We have had a good crop of certificate claims this year with: solo and A — S. Desormes, M. Rutty, J. Pursey, D. Firth, T. Flaxman, R. Wilson and R. Hadley; Bronze C — D. Andrews, S. Fitzgerald, A. Price, P. Talbot and Silver distance — D. Andrews, I. Mitchell and C. Watt. Colin Watt took advantage of a Mendip GC expedition to Sutton Bank to gain Gold height. John Burrow, Simon Minson and Chris Miller have their full Cat ratings and Joe Acreman and Ron Smith have assistant ratings.

A successful task week in early June had a variety of short and long tasks. Dave Reilly (Libelle) won, with that L-Spatz and Albert Bourne in close contention. Ron Perry (Dart 15) from Mendip Club came 3rd, taking a 300km goal O/R flight to Redruth, which we think is the first in that direction from North Hill.

Then came competition Enterprise, with six members/5 gliders participating. With eight flying days and superb weather, we believe that everyone enjoyed themselves to the full. (See

report in this issue). Chris Dobbs (Jantar 1), Simon Minson (Club Astir) and Dave Reilly completed Diamond goal flights during the week, Eric Shore (Dart 15) and Tim Gardner (DG-100) put up good performances and Dave Reilly was 4th overall. Douglas King put in more hours than most flying John Fielden's BBC Micro, developing a scoring programme for the Competition with considerable success.

From Canada, we have news of Morven Patterson, who must be our most exalted female member having flown a 1-23 over the Rockies to 22 000ft plus.

I.D.K.

ESSEX (North Weald)

The Fighter Meet was held at our airfield so we had to close for a week, with some members visiting Nympsfield, Duxford and Roanne. We thank these clubs for their hospitality.

Congratulations to Clive Broadway, Gerry Crowe and Chris Law on going solo.

M.R.T.

HAMBLETONS (RAF Dishforth)

Summer has brought some good thermal days, giving many Bronze and Silver legs: congratulations to Mick Bowman, John Gao and Bill Jaques on completing their Silver Cs, and to Harry Birch for his Silver distance. John has now left us for Germany, after several years of hard work for the club, and we wish him well.

Other members have kept busy on various tasks and our visitors' evenings have recommenced with their usual success. David Stephenson, who joined us after the first of these evenings, has already gone solo. Solos have also been achieved by Simon Jackson, Brian Windham and Gillian Kendrew.

Many members were sorry to hear of the demise of the T-21, once our club trainer which in later years continued to fly as a syndicate machine, quite recently achieving a creditable 150km. For those of us who trained and did our first solos in this fine old glider, the absence from the hangar of those big, kind wings leaves a sad emptiness.

J.P.

HEREFORDSHIRE (Shobdon Airfield)

Membership has increased to such an extent the Blanik has been taken out of moth-balls to supplement the Twin Astir and we have use of a Grob 109B. The latter is proving a popular addition to the fleet for basic instruction, advanced exercises, general flying and wave hunting.

Our special wave membership is being operated again this winter, so write to us if you are interested. Meanwhile the summer has provided us with successful courses, sunbans and a July task week efficiently run by Di and Phil King when Shobdon aircraft held off a concerted challenge from the Long Mynd.

D.J.

INKPEN (Thrupton Airfield)

After a poor May, June and July have been good and a number of early solo pilots have Bronze and Silver C badges. Brian and Harry McBride have Bronze Cs and Peter Edgson, with a Silver height and duration in one flight, and Steve Lambourne, with a distance flight to Parham, have completed

their Silver Cs. Jack Barnes has gone solo and Arthur Downton has resolved.

Bill Murray and Melvin Ireland took the syndicate SHK to Competition Enterprise, Bill winning a day with a 487km triangle.

A "Fly for Fun" week was held in June with the BGA Twin Astir and a Super Falke available for members to try. An excellent barbecue rounded off the week — our thanks to the helpers.

I.D.

KENT (Challock)

Thanks to the work of the organisers our At Home in May was very successful despite poor weather. It is becoming an annual event and the number of visitors, even when unflyable, indicates it is worth the effort.

Our cheese and wine party when we entertain local farmers and dignitaries was a resounding success and a worthwhile public relations exercise.

At our AGM in March, Geoff Johnson and Alan Garside were elected onto the committee and John Reeves and Mike Moulang were re-elected for another two years.

Congratulations to Julie Williams on completing her Silver C, to Alan Garside on his Gold distance and to our CFI, John Hoyer, on his Diamond distance, our first from Challock.

J.B.

KENT MOTOR GLIDING & SOARING CENTRE (Manston)

We are having a marvellous year, and with the weather being unbelievably kind and Air Traffic Control at Manston being increasingly co-operative we have been keeping all the gliders fully utilised. We seem to have got over the spate of hiccups and accidents at the beginning of the year and are feeling optimistic for the future since the MoD have finally agreed to "open negotiations" for a lease on a parcel of land at the airfield so that we can erect a proper clubhouse and hangar. Progress is painfully slow but moving in the right direction.

Congratulations to the six members who recently went solo and to the two members who have just achieved their SLMG PPL.

John Salt, Tony Goodman and Alan Sweet spent a few days at Buckminster GC earlier this year experiencing the kind of soaring that we never experience at home, being surrounded on three sides by the sea. We are looking forward to the club summer holiday this month and are taking the Blanik and ten members back with us, and should like to thank Buckminster for their hospitality.

E.S.

LAKES (Walney Airfield)

Rod Murfitt gained his Silver height with a wave climb to 12 000ft in June, taking advantage of mid-week flying during the summer courses.

New aircraft on the site are Chris Dobson's Hoffman Dimona motor glider and an Astir CS77 which will replace the Pilatus B-4 as the club's single-seater.

E.K.

LONDON (Dunstable)

We were all delighted when John Cardiff flew his new ASW-20B to a home victory in the 15 Metre

Nationals which we hosted in July (see p218).

Earlier in the season, Colin Cruse, Richard Brown and "Lofty" Russell all gained Diamonds at Aboyne. "Lofty" explained that his height gain was slightly less than the others because the 604s wingspan is so large it reaches from one wave crest to another.

Nearer home, John Jeffries and Eric Hamill both came within an ace of making it home after 500km attempts in the ASW-19 Club. John actually flew more than 500km and Eric would have done so if he hadn't chosen to land at Cranfield instead of in a field.

Lastly, welcome to Mike Munday who joins us as course instructor and tug pilot.

D.S.

MENDIP (Weston-Super-Mare)

We now have our K-7 together with a K-6CR, both of which are proving very popular.

Several members entered the North Hill task week in June with Ron Perry (Dart 15) coming 3rd, having also gained Diamond goal with an O/R to Redruth mast.

In July we took all our club gliders and several syndicate gliders to North Hill for a week. Whilst there Paul Marsh gained Silver distance with a flight of 110km and "Mac" McCollum completed his Silver C with a flight of 147km, both in the Skylark 4.

Paul Marsh gained his 5hrs in his first flight in the Skylark 4.

H.P.

MIDLAND (Long Mynd)

We are in the first stages of a long term programme aimed at improving our airfield surface. With advice and assistance from a neighbouring farmer, we have cultivated and re-seeded a large area of the field. The grass, in spite of the drought, is growing, and we are optimistic that the final result will be a substantial improvement. We intend to treat the whole airfield over a period of about four years.

Our Silver Jubilee dinner is to be held on Saturday, October 20. We hope to see as many members, past and present, as possible; details available from Bob Neill, 193 Russell Road, Birmingham 13.

April was a good month with a high proportion of soarable days and quite a lot of cross-country flying. Charles Wingfield reached 12 000ft in wave on April 14. At the end of the month we were beset by easterly winds (our "awkward" direction) blowing lime dust all over the launch and landing

area from our newly ploughed area. John Stuart and Addie Brierley led a weekend expedition to Shobdon, which enabled us to fly despite the easterlies; meanwhile Peter Taylor flew O/R to Shobdon to prove the pilgrimage wasn't necessary!

From mid-May onwards we have had some superb flying with frequent 6-10kt thermals. Congratulations to Dave Cole and Peter Turner on Silver heights and to Tony Meakin on Silver distance. Diana King flew 285km to Devon in her 460 in another attempt on Gold distance and the K-21s have been used to the full in advanced and cross-country training. Peter Warwick, J. Tibbitt and George Worthington have soared.

Peter Taylor has completed a well-deserved Gold and Diamond goal with a 302km O/R on July 1. Dave Cole has completed his Silver and Ian Sherratt and Mike Godwin both have their 5hrs.

We had thundery weather when we hosted the Rockpolishers League in June, resulting in most of the Intermediate and Pundit Class being washed out of the sky at Hay-on-Wye on the Saturday. Sunday was a little better, and we managed to get in a contest weekend. In July we went to Aston Down for the last meet of the season when Cotswold GC succeeded in winning the "Rock" for the second year running. We shall have to try harder!

Ernie Ainscough popped through a small wave hole in June to climb to 13 700ft, closely followed by Rhoda Partridge. David Hocking went solo on his 16th birthday. As under-16s have only recently been able to fly here, we think this is the first time this has ever happened at the Mynd.

D.M.K.

NENE VALLEY (RAF Upwood)

There has been a fair amount of frustration recently with worry over the tenure of the site casting shadows over some of our activities. We are beginning to receive cross-country visitors and we have made two excursions to RAF Marham.

It was with great sadness that Joe Seitz, CFI, resigned but he had promised to take his wife on some trips before he left for the USA in September. Still he couldn't keep away and was last seen flying the K-6E stacked full of antiques. Thanks for all the help you gave the club Joe. Thanks also to Bill Scull and Lou Franks who helped to find gap-fillers and John, Les and Martin for filling the gap.

The chairman's been flying rather well recently, notching up 2½hr plus flights. Ted Booker has been cheating and getting aerotows from

Husbands Bosworth but has gained his Silver height whilst Neil Scanlon flew our veteran K-2 for Silver distance.

Out in the Fens we are about the only group looking forward to the stubble burning!

D.H.

NORTH WALES (Pen-y-Parc, Nr Holywell)

At our AGM on July 1 we welcome three new committee members, Jack Edge, Dave Sprake and Bruce Tweed and thanked retiring members Alan Dean, Harold Griffiths and Norman Anyon for their services.

Since Whit we have had continual flying with a very successful club week when over 500 flights were flown over nine days. During the week Gerry Maddock and our youngest member, 16 year-old Ian Birtells, went solo, Alan Howells achieved his second Bronze leg and Rory McGough his first.

The week ended with a spot landing competition, won by Ray Ball and Brian Sedgwick, both one pace from the marker, and a barbecue at the Singing Kettle.

We have had a number of visitors and a party from the Women's Institute for air experience flights as well as about a dozen new members over the last two months.

B.S.

OUSE (Rufforth Airfield)

Our busiest day in a busy summer was June 24, Midsummer Day, when we held our longest flying day, with the intention of flying from dawn to dusk to raise sponsorship money for the club and for charity, and of course to have fun. The day was a success, raising over £300, which is being split between the club, our flying for disabled people and two charities.

We started before sunrise with the first flight at 4.15am, and completed 141 flights before being stopped by bad weather at 7.30pm. Had we been able to continue, we would have beaten our target of 160 flights.

The first visitors arrived at 4.30am, and the first passenger flight was just after 5am. We flew Simon Ward (the actor playing Jesus in the York Mystery Plays), several blind people, the farmer who owned our land before it was requisitioned for the airfield during the war and more than 60 others.

Our first year of courses has got off to a good start with a mixture of courses and air experience flights for schools. We have also flown several groups of disabled people and had a Women's Institute flying day. The clubhouse is now in full



ENJOY MOTOR-GLIDING FROM ENSTONE in our fleet of GROB 109's

Motor gliding offers a range of opportunities for glider pilots from the beginner to the more experienced. We specialise in teaching basic gliding techniques, field selection for landing out and cross country navigation. We also convert Bronze/Silver badge holders to SLMGPPL. Complete beginners are welcome, we offer a training course up to and including SLMGPPL. Our aircraft are available for the private use by holders of a motor glider PPL.

NO MEMBERSHIP SUBSCRIPTION - PERSONAL TUITION BY CAA-APPROVED INSTRUCTORS
BOOK YOUR FLYING BY THE HOUR - PAY ONLY FOR FLYING - SEVEN DAYS A WEEK OPERATION

ENSTONE AERODROME, CHURCH ENSTONE, OXFORDSHIRE OX7 4NP

Tel 060872-208

Gliderwork C of A OVERHAULS and REPAIRS

By L. GLOVER senior Inspector



Husbands Bosworth Airfield, Near Rugby
Tel. Market Harborough 880375
Lutterworth 57544

use and the kitchen was inaugurated with 40 breakfasts on Midsummer Day.

John Holt, Mark Blades, Simon Forrester, Amanda Evans (one of our course members), Eddie Metcalfe, Andy Bradley, David Jones and David Watson have gone solo. More aircraft have joined our private owners' fleet — a Kestrel, an LS-4 and a syndicate T-21. Bob McClean's workshop is under construction and is moving from Doncaster to Rufforth.

At the AGM Neil Ashworth and Steve Lee retired and were replaced by Don Atkinson (one of our newer members) and David Bullock (our course instructor).

R.T.

OXFORD (Weston on the Green)

Dave Compston, Ramsey Dunning, Graham Keirle, Hank Sloka, Charlie Stewart and Mark Rowland have gone solo with various Bronze and Silver legs gained by other members, perhaps the most remarkable being the 5hrs scraped by Chris Emson to complete his Silver C in record time.

In welcoming our numerous new members, we would like to give particular mention to Allison Randle, the 15 year-old daughter of long standing members Jane and Mike.

The longest day was celebrated with dawn to dusk flying followed by a well attended barbecue. P.W.

Obituary — Peter J. Pratelli



Sadly we report the death of Peter on March 19 after a short illness.

A dental surgeon by profession he joined the Oxford Gliding Club in 1960. He frequently and willingly gave his time to undertake the chores necessary to ensure the smooth running of the club and quickly established himself as a key member becoming an instructor, tug pilot and a BGA inspector. He gave long service on the committee in various capacities including the posts of secretary and chairman.

Whilst on holiday in Germany during 1975 he flew the Astir CS prototype. Recognising its potential he formed Soaring Oxford Ltd as the Grob UK agent, becoming well known in gliding circles promoting the Astir series of gliders and the G109 motor glider.

Peter was also instrumental in re-forming the Oxford University Gliding Club at RAF Bicester in the mid 1970s, helping them to buy a K-7 and later a Twin Astir.

His tireless and generous support of both clubs will be greatly missed. Our sympathy goes to his parents and family.

Trevor Moss

RATTLESDEN (Rattlesden Airfield)

In the last two months we have had an unprecedented number of weekends spoilt by that curse of the single-strip winch site — the light crosswind. Although our single-seaters have managed a passable launch, our K-7s have suffered the ignominy of up, round and down so familiar of our T-21 days. Even so, we congratulate Kevin Garrard, Dan Stag and Grenville Cross for soloing and converting to the K-8 (the latter achieving his Bronze legs in his first three flights), and to Paul Steggle and Dave Cornish for each achieving the Silver C grand slam on the same day.

At present we are preparing our site to host a leg of the East Anglian Inter-Club League Competition and to avoid a repeat of the non-too-popular effect the runway had on the leading edges of visiting "glass" we've swept it.

On June 3 veterans of the 447th Bomber Group, who flew B-17s from Rattlesden, came for the dedication of a memorial funded and erected in their honour by the local community. Judging by the length of time their coach stayed at the end of our runway, I'm sure they were delighted at the impromptu aerobatics performed for them by two of our instructors.

R.W.

SCOTTISH GLIDING UNION (Portmoak)

In this, our 50th anniversary year, the club is looking healthier than it has for many years with membership increasing and more course members by half way through the season than in the whole of last year. Our thanks for this to Angus Napier, publicity officer, who is doing an excellent job promoting us and gliding in general.

Our open day in June was a huge success although the flying display ended in Platypus-like chaos due to the weather.

The annual fly-in barbecue will be at George Lee's farm with up to ten gliders arriving for the evening's entertainment.

A.G.I.D.

SOUTHDOWN (Parham Airfield)

This has been the best soaring season ever with 14 300km flights and over 19 000km flown up to the end of July.

Richard Hawkins set the pace with a 300km flight in April, but alas his middle TP photos were blank. Ian Ashdown did a 300km on two consecutive weekends and Kathleen Mitchell (Pirat) flew 305km but missed her Diamond.

Congratulations to Craig Lowrie, Peter Chodera and Jane Turner on Diamond goals; to Richard Wyld and Steve Freeman on completing their Silver Cs; to Nick Barrie and Paul White on



Soar with the eagles at Narromine!

Spread your wings at Australia's largest Soaring Centre

Fulfil your Gold and Diamond distance ambitions. Achieve even greater distances and higher speeds.

Our fleet includes: Cirrus, Homet, LS4, ASW 19B, LS3, Mini Nimbus, Pik, Mosquito and Janus. Aerotows by Pawnee 235's.

Call us or write for details.



NARROMINE SOARING CENTRE

P.O. Box 77, Narromine, N.S.W. 2821

Australia. Telephone: (068) 891856

Telex No. EAGLES AA 63508

Sailplane & Gliding

The magazine can be obtained from most Gliding Clubs in Gt. Britain, alternatively send £8.75 postage included for an annual subscription to the British Gliding Association, Kimberley House, Vaughan Way, Leicester.

Red leather-cloth binders specially designed to take copies of the magazine and gold-blocked with the title on the spine are only available from the B.G.A.

Price £4.25 (£4.74, including post and packing).

OVERSEAS AGENTS

CANADA
T. R. Beasley, Soaring Supplies, PO Box 4851,
St. Laurent, P.Q. Canada, H4L 4Z5.

SOUTH AFRICA
Peter Eich, PO Box 82707, Southdale 2135, Johannesburg, Transvaal.

HOLLAND
Aeropress (Ary Ceelen) P Stockmanslaan 53, 5652 RB Eindhoven

USA and all other Countries
Payable in either Sterling £8.75 or US \$17 but International Money Orders preferred, direct to the British Gliding Association.

going solo and to Steve Turner and Jim Rochelle on their full Cat ratings.

Our K-18 arrived from the Wasserkuppe in May and is giving much pleasure as well as being a picture of German maintenance.

R.W.

STAFFORDSHIRE (Morridge)

Congratulations to Dave Robbins and Derek Martin on going solo and to Andrew Chappell on gaining his Bronze C and converting to the K-18.

The postponement of our dawn to dusk flying day due to us having to dismantle two pre-fabricated bungalows we bought from the local authority proved fortuitous. Good soaring conditions on the later day soon made us lose sight of the 100 launches target in favour of achieving over 22hrs soaring on the three club aircraft alone.

We had some useful local publicity when we were visited by the Lord Mayor of Stoke-on-Trent and by a two-day camp for a group of Stafford schoolchildren who enjoyed some first-class soaring.

Ken Whitton, an instructor for 14yrs, is giving gliding a rest for a while and we thank him for his long and valuable service.

B.G.

STRATFORD ON AVON (Long Marston Airfield)

Many very good soaring days during June and July have produced some notable achievements including Fred Goodall completing his Silver C with a 5hr flight in the Capstan.

During a very successful course in July Graham McMillan, Chris Morris, Ian Wood, Allan Williams and Brian Marsh went solo, Brian on his 16th birthday. Well done Brian.

Our air experience evenings are going extremely well with two to three evenings a week to the end of August and further courses fully booked.

We have acquired two winches which are being overhauled by our ever willing engineering team with trials expected soon.

M.M.

Obituary—Matthew (Tom) Smith

It is with profound regret that we record the death of Tom Smith in a mid-air collision with a light aircraft on May 12 during a 300km attempt out of Bidford (see last issue, p180).

Tom joined us in 1980 from Doncaster GC when his job brought him to the Midlands and immediately impressed everyone with his joy and

enthusiasm, not only for the sport itself but also for the improvement of club facilities. The many projects he undertook will stand as tangible monuments to his memory. More importantly though, Tom will be remembered by those he taught to fly.

As well as his enthusiasm for cross-countries, Tom felt the need to pass on his love and knowledge of flying and pilots who had the privilege to have been taught by him will always be in his debt.

Our sympathies go to his family and friends.

Nev Skelding

SURREY & HANTS (Lasham Airfield)

The season continues to be good with 300kms for Annabel Lucas and Keith Lines and innumerable Silver distances. Diamonds have proved a little more elusive with John Bell landing after 400km on one attempt and flying 490km in over 9hrs on another. Hard luck to Dave Nunn who sailed round a "non-standard 500km" suggested by his syndicate partner in his LS-4. The reason for its lack of popularity emerged when it was measured after the flight — 490km!

On June 30 Chris Lovell and John Bastin flew a 429km O/R to Okehampton in the Janus on a UK two-seater O/R distance record attempt. Unfortunately due to a hitch in the processing their photos failed to come out. They have since made further attempts but been defeated by bad weather at the TPs.

June 30 heralded the start of an extraordinary week with flights over 500km being completed on July 1,3,4 and 5. Alan Purnell flew three consecutive 500kms in his Nimbus 3.

There has been no sign of any Dunstabiles seeking to reclaim the challenge plate we have held for more than two years. There have been suggestions we should fly it up there in our T-21 to remind them of its existence.

C.G.S.

SWINDON (South Marston)

The summer has seen expeditions to Sutton Bank, Rhigos — where our K-18 reached 9400ft asl in wave — and Lasham, where Jamie Whelan did our 50km milk-run in reverse — landing at South Marston. Our thanks to all three clubs for their hospitality.

We may not have shone in this years' Southern League but neither did the sun for most of the time. We did earn a reputation for always sending the largest contingent.

Congratulations to Les Clark, Bob Poole and Helen Wallace on going solo.

Our annual dinner-dance will be at The Post House, Swindon, on October 20 and old members and friends are invited to contact us for details.

P.M.

TRENT VALLEY (Kirton in Lindsey)

At last our much delayed K-13 has arrived and now our faithful old barge can finally be retired after many years' service.

Bob Baines and Paul Holland came 3rd in the Northern Regionals, Paul achieving Diamond goal with an O/R to Grantham. Our pilots are also doing well in the Inter-Club League, winning overall in the last round at Kirton. The final round will be at Winthorpe.

Congratulations also to Tim and Linda Woollard on going solo.

R.H.

ULSTER (Bellarena)

By the start of August we'd almost doubled last year's cross-country mileage, with nearly 5000km logged on club ladder flights — a feat owing little to an otherwise enjoyable and sweltering nine-day Easter camp with few cross-country possibilities.

Among the season's more notable flights are CFI Bill Craig's Gold C completion and Diamond goal with a 300km cross-border O/R to Oldcastle; Alan Sands' 410km round a 500 attempt; a Diamond goal triangle and the first 217km "pewter pot" run to the Dublin GC by an Ulster pilot, both achieved by Jim Weston.

During a John Willie course at the DGC, which

GLIDER INSTRUMENTS

Approved agent for PZL and Cambridge
instruments, sales and repairs

Barographs calibrated

M. G. Hutchinson

5 Glendevon Road

Woodley

Reading, Berks

Telephone 0734 696491



PIGGOTTS

Windcones made in Ministry of Defence Hypalon®, also in nylon and cambric.
Landing Marker Sets in bright orange.
National, Advertising Flags and Banners.
Canvas Covers for all requirements.
Flagstaffs supplied and erected in Steel, Aluminium, Fibreglass and Timber — suitable for Windcones.
Towing Cable Drogues.

PIGGOTT BROTHERS & CO. LIMITED
Stanford Rivers, Nr. Ongar, Essex CM5 9PJ
Tel 0277 363262

THE MECCA OF GLIDING



WAIKERIE SOUTH AUSTRALIA

Every pilot should visit it once in a lifetime. The more devout every year.

WAIKERIE has MORE GLIDING FREEDOM, SPACE, POTENTIAL, than anywhere else in the world.
WAIKERIE has the best sailplanes and facilities in AUSTRALIA, and staff to help you use your potential.

SUMMER COMPETITION — 16th-22nd December, 1984

WAIKERIE GLIDING CLUB INC., P.O. Box 320, Waikerie, South Australia 5330
or phone I.S.D. +61 85 41 2644

we supported, Robin Gibson flew his Silver distance while William McNair did the same from the home field.

A recent visit by examiner Bernie Morris gave Mervyn Farrell his full rating, while recent soloists are Walter Gilmore, Eugene McElhinny and Damian Fitzsimons.

Jeremy Bryson's ex-Kerry GC Blanik has been very active following its first flight for more than 10yrs, at the end of a painstaking restoration. A K-7 newly acquired by the Queen's University club, which will operate as an integral part of the Bellarena fleet, is coming from Lasham and will expand our overall training capacity.

R.R.R.

VALE OF NEATH (Rhigos)

You have not heard from us for some time but we are progressing steadily. We've been getting a lot of good flying from "our" ridge, straight off the winch, although we now have a tug on site, and continue to fly throughout the winter when we get excellent wave.

We now have a good nucleus of pilots, one of the latest being Arwyn Harris, a student who recently went solo within one hour of his birth time on this 16th birthday.

Our congratulations also go to Elaine Rees who went solo in June. Elaine is the first female to go solo at our present site and only the second since the club was formed. Although we are a small club we have a good percentage of Bronze Cs.

We recently held an open day in aid of "The Bone Tumour Cancer Fund", organised by Edgar Hillier and very well supported by the members, their wives and the committee. It was



Arwyn Harris, Vale of Neath GC, didn't just go solo on his 16th birthday — he managed to get launched within one hour of his birth time.

an outstanding success and we hope for a similar response on our open day in August.

V.G.W.

VECTIS (Sandown Airport)

The club was reformed at Easter with an initial membership of 22, mostly *ab-initio*, and has now swelled to 34 as the sight of our ex RAF Blanik becomes more familiar over the Isle of Wight.

Weather conditions over the last three months have been excellent with rain stopping play only once and thermals active most weekends without being affected by onshore breezes. The

occasions when there have been strong onshore breezes have enabled us to go ridge soaring above the coastal cliffs at Luccombe and Culver with, to date, flights of 3½hrs possible.

Many thanks must go to CFI, Ian Creighton, with his infectious enthusiasm and experience, John Trowbridge (currently serving with the RAF in the Falklands) and also Roy Pidgeon, who have enabled John Cliff (treasurer), Rory Carter (safety officer), Graham Deegan, Michael Fry, Terry Ratsey Woodroffe, Mike Morris, Roy Tiley and Steven Mortimore (yours truly) to go solo and for Ken Taylor, Eric Fry, Terry Brown and John Kenny to re-solo.

SOARING HOLIDAY PARTIES WELCOME

Tel. (0789) 772606 office
(0789) 778391 airfield

2 MILES SOUTH OF
BIDFORD-upon-AVON
Nr. ALCESTER,
WARWICKSHIRE

THE JANUS C

20 METRES OF HIGH PERFORMANCE 2-SEATER

YOU TOO CAN FLY THE BEST AT THE AVON SOARING CENTRE

OUR FLEET CONSISTS OF BLANIKS, JANUS, and STANDARD CIRRUS

Thanks also to the tug pilot, Dudley Morgan and his wife Irene who pop across from the mainland in their Super Cub and to chairman John Galt, who has donated the use of his Skylark 4 for the more experienced pilots and as a visual goal for the recently solo.

S.M.

WELLAND (Middleton)

The oft-postponed visit from the Velbert GC, Germany, finally happened on June 9, when Guido Obermüller and Erhard Anker flew in with their Club's Dimona. Another visit is planned by a larger party for next year.

Congratulations are due to Ron Lee on his Bronze and to Gerard O'Callaghan, Gordon Scally, Heydon McEvaddy and Dave Strachan on going solo.

Flying nights are proving very popular and are a good source of income. We are now ironing most of the gremlins out of our new two-drum winch.

R.H.S.

WOLDS (Pocklington)

It has been a good year for producing solo pilots and our congratulations to Tom Brown, Denis Pardoe and Bob Gadd. Also to Helen Revell who attended two of our now fully booked courses and went solo on the second.

Six of our pilots have competed in the Northern and Booker Regionals and our next major event is the official opening and party on August 24.

T.H.

SERVICE NEWS

ANGLIA (RAF Wattisham)

Anglia is alive and well after a rather wet and windy winter which forcibly curtailed our flying. We did however manage to get five *ab-initio* solos in April and have had three re-solos since then. We said farewell to Gordon and Kim Forsyth on posting to St Athan, congratulate John Hicks on being made CFI and welcome our second Service full Cat at Wattisham, Keith Sleight.

Our longest day on June 23 started well but was rained off in the late afternoon after only 140 launches; the bar which has recently been rebuilt by Mouse Ackroyd provided a good refuge for the evening.

We have recently exchanged our K-21 for a K-13 and the complete fleet, including the SHK, K-4 and Torva Sprite is active and we are eagerly awaiting delivery of a second bus winch.

E.W.R.

BICESTER (RAFSGA Centre)

The Talgarth expedition was a great success with superb thermal soaring and wave to 14 000ft. We flew on 12 of the 13 days, with a memorable lead and follow into the Brecon Beacons. Whilst at

Talgarth Mary Charlotte-Green broke the women's UK 300km goal and return record in her Cirrus and Paul Steiner achieved his 500km Diamond in the Janus.

We start a five week expedition to Aboyne in October, taking our own tug with us.

We have had a good collection of badge claims, among them Martin Spalding, Mick Boik, Ian Fraser and John Norman who all achieved 300km. John has joined us from Germany, with his wife Lyn, and we have said goodbye to Alfie Bass and Jeff Cowling, who have been posted to Germany.

On the staff side, Mick Alford and Pete Lewis have left the RAF and Terry and Lou Pitts have joined us. We also look forward to seeing Roger Crouch becoming deputy CFI in October. We have two new full Cats, Gary Buckner and Jeremy Berringer. Well done!

The Vintage Glider weekend at Whitsun was rained off, but in true British tradition we held a very successful barbecue and disco despite the low cloud. We also had a very successful pre-Comps party. The beginning of the Inter-Services Regionals managed to please the water authority! Day 1 saw the first rain for months.

We now have a Pawnee tug, a new K-21 and a Ventus. The new motor glider (G-SAMG) eventually arrived after getting stuck by weather in France on its delivery flight.

S & J.H.

FENLANDS (RAF Marham)

We had a successful three weeks' flying at a local airfield, Swanton Morley, incorporating an *ab-initio* course which attracted several new members. John Baker, Martin Pengelly and Brad Badger have gone solo, John having got his Bronze legs along with Merv Messenger and Andy Foley who have also converted to the K-8.

Sam Evans completed his Silver C with a distance flight and John Trubridge flew 300km at Bicester, having killed a sheep on an earlier outlanding.

The K-8 trailer has been finished and Tony Steel and Al Raffan have bought a vintage Weihe as a

long term restoration project.

Ralph Dixon, Terry Mitchell and Martin Durham have flown in the Nationals and our video crew has produced a light hearted version of the RAFSGA video.

We say hello to Malcolm and Sue Norris and goodbye to John Armstrong and Katharine Ludlow who have gone to Germany and to Andy York who has joined the RAF at last.

S.L.

FOUR COUNTIES (RAF Syerston)

We welcome John Cook, our new CFI. I'm sure Cosford are sorry to see him go. Flying continues with weather so good that even Ian Gorton has achieved 50km and with it our congratulations. Now he has to learn to soar his Swallow!

Martin Goodwin has completed his Silver C and, along with me, looks forward to an instructors' course in September.

Indifferent weather made our Competition Kitty weekend into a downwind dash affair. Next year might see us keeping the entry fees and the British team taking a percentage of the weekend's bar profits. That should buy a few blazers and ties.

An expedition is planned to Aboyne for the budding Diamond hunters and our best pilots are in various competitions.

O.B.

FULMAR (RAF Kinloss)

Graham Kirby was our first Gordonstoun pupil to go solo and managed a Bronze leg shortly afterwards. Dave Edwards flew 48.2km of a 50km attempt, getting away from a winch launch before the sea breeze and between aircraft movements. Mark Critchlow gained Silver height with a 7200ft climb in thermals over the bay and John Laurie has gone solo, while Jim Francey spends much of his time in the K-8. Full Cat. Oscar Constable has gone to Halton — and we miss his hydraulic press.

W.G.

PORTSMOUTH NAVAL (Lee-on-Solent)

The Easter course was very successful with eight solos, as well as club members gaining a number of Bronze and Silver legs, including Silver distances for Clayton Rowe and Marc Morley. We were lucky to also have the BGA Twin Astir to augment our fleet and it proved very popular. Paul Megson has bought a Swallow and several of our advanced pilots have discovered how interesting a glider this is to fly.

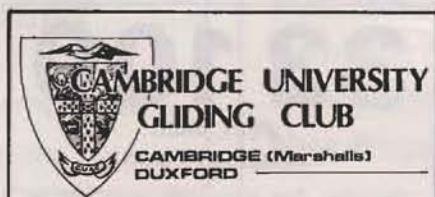
The T-21 is flying again in its new colours of silver and yellow, and the winch has completed a minor overhaul.

Our thanks to Kestrel GC for making us so welcome when our airfield was being used for cycle racing.

We welcome a new instructor, John Williams, and a new tug pilot, "Soapy" Waters. Sadly we are losing the mainstay of our winch project, Ken Stephenson who is going on draft. Ken has been very prominent in a number of projects over the years as well as being our bar supervisor and we wish him well.

Attempts to reduce the mess that comes from the bird population living in the hangar roof have not been completely successful. A dummy hawk hanging from the rafters has been totally ignored by them. Hard luck Nobby, have another try.

H.C.



The Name may sound a trifle exclusive, but the Cambridge University Gliding Club is open to everyone.

We winch and aerotow from Duxford all year, mostly at weekends, and aerotow only from Cambridge. We run holiday courses from April to September for beginners and solo pilots.

For general
information write to
The Secretary
55 Moorfield Rd
Duxford
Cambs

For Course
details write to
Course Secretary
"Cirrus"
5 Wallmans Lane
Swavesey, Cambridge
Tel. Swavesey 305533

BRIAN WEARE

**GLIDER WORKS
DUNKESWELL AIRPORT
HONITON, DEVON**

Tels: Luppitt 338 (9-6 pm)
Honiton 41679 (after 6 pm)

MAJOR OR MINOR REPAIRS ON
WOOD, GLASS-FIBRE, OR METAL.
ALSO RESPRAYS GLIDERS AND
LIGHT AIRCRAFT

C of A OVERHAULS

B.G.A., C.A.A., P.F.A. APPROVALS

Soar the Cotswolds!

Holiday course members and visitors welcome at our scenic club.

Courses from £80 to £135 with accommodation (flying extra). For details write to Bristol and Glos Gliding Club, Nympsfield, Stonehouse, Glos GL10 3TX, or phone 0453 860342.

Open all week April-October



If you're an experienced glider pilot and looking for a good base to fly from on your holiday, Coventry Gliding Club is the place for you.

Situated just outside Husbands Bosworth within easy reach of many other Clubs. Aero-tow launching ensures maximum soaring opportunity for both long distance and local gliding.

Club facilities include Licensed Bar, first class accommodation, good company and easy access from motorways.

We also extend a very warm welcome to the not so experienced and the beginner, our holiday courses are amongst the very best.

For details ring:
Market Harborough 880429 or 880521
For holiday courses ring
Market Harborough 880484
or write to: COVENTRY GLIDING CLUB LTD
Husbands Bosworth Airfield
Lutterworth, Leics LE17 6JJ

DEESIDE GLIDING CLUB THE SOARING SITE

WHAT TO DO IN 1984

(TICK BOX)

- | | |
|---|---------------------------------------|
| <input type="checkbox"/> GOLF | <input type="checkbox"/> SWIMMING |
| <input type="checkbox"/> FISHING | <input type="checkbox"/> BOWLS |
| <input type="checkbox"/> SQUASH | <input type="checkbox"/> TENNIS |
| <input type="checkbox"/> HILL WALKING | <input type="checkbox"/> WATER SKIING |
| <input type="checkbox"/> VISIT SCOTTISH CASTLES | |
| <input type="checkbox"/> GET DIAMOND HEIGHT | |
| <input type="checkbox"/> GET 5 HOURS IN WAVE | |

GET IT ALL AT DEESIDE
(NOW WITH LICENSED BAR)

Phone or write to:
DEESIDE GLIDING CLUB
DINNET, ABOYNE, ABERDEENSHIRE
Tel: 0339 85-339

BLACK MOUNTAINS GLIDING CLUB

Situated amongst the highest mountains in South Wales, one of the UK's finest soaring sites.

Longest ridge routes; wave in all wind directions.

Now with full-time tug pilot.

Visiting pilots/gliders welcome.

Bookings: Secretary, B.M.G.C.
Lower Penylan, Glasbury-on-Wye
Powys HR3 5NT
Tel: 04974-583/0874-711254

33 100

FEET AMSL

Achieved 31.12.83

Shobdon: The accessible wave site in unspoilt border countryside. Superb wave system established by nearby Welsh mountains. Private owners and club expeditions welcome but be sure to book. Restaurant and Bar on site. Summer courses, excellent area for small hotels and pubs, or, camp or bring your own caravan.



WRITE
OR
PHONE
NOW!

HEREFORDSHIRE GLIDING CLUB
SHOBDON AIRFIELD
LEOMINSTER, HEREFORDSHIRE
0905-620687

The Cornish Gliding and Flying Club
Trevellas Airfield, Perranporth
Cornwall

Tel. Perranporth 087-257-2124

Gliding courses from April to October — fleet includes motor glider — B.G.A. full-rated instructors — fine soaring — lovely coastal airfield — ideal for a different family holiday.

The Course Secretary
Tremearne, Breage, Helston
Cornwall

Tel: Helston 03265-62294

LASHAM

Does your home club operate only at weekends?

At Lasham we operate all week, every week which means we could provide a useful supplement to your training. Whether you are not yet solo and would benefit from a week's consolidated instruction, or a budding cross-country pilot needing soaring or field-landing training, we have the expertise and facilities to help.

Apart from our large 2-seater fleet and excellent aerotow and autotow facilities, we have a comprehensive briefing room for lectures or instructional videotapes if bad weather prevents flying.

On-site accommodation for club expeditions is always available by arrangement.

Absolute beginners are of course always welcome — we have a large choice of courses and types of membership to suit your needs.

Lasham Gliding Society
Nr. Alton, Hants

Tel: Herriard (025 683) 322 or 270



LONDON GLIDING CLUB

Dunstable Downs, Bedfordshire

Telephone: 0582 63419

Situated at the foot of the Chiltern hills, and within easy reach of London and the Midlands by road (just off the M1). The Club has a comprehensive fleet of dual and solo aircraft, reliable launching equipment including tug aircraft. This famous site has plentiful thermals in summer and hill soaring with favourable winds throughout the year. Resident instructors, catering every day (weekends only in winter), licensed bar, accommodation and other facilities. Visitors welcome.

Write for Course brochures or club membership details to the Manager, or ring 0582 63419

EUROPEAN CHAMPIONSHIPS

Vinon, France, June 27-July 8

NIKKI CAMPBELL

EUROPEAN CHAMPIONSHIP Vinon, France, June 27-July 8

The Championships were bathed in blue skies and sunshine with very little cumulus. Only two contest days were lost, one on a grey overcast day and one on a wave day which it was thought too chancy for a task. Not too chancy for Pam Hawkins, however, who gained her Diamond height — 23 5000ft.

The competition was very well run with all departments running smoothly in an efficient and friendly atmosphere. The site facilities have been greatly improved — a plus point if you are thinking of a trip there yourself.

Tasks were long, about 400km for the 15m Class and between 400 and 500km for the Open Class. The Open Class were set an O/R to Salanches, the other side of Mont Blanc one day and on a couple of days flew for seven or eight hours, still landing at 2145hrs. Stamina was clearly needed in large quantities!

The main lesson learnt from Vinon was the vast difference in technique required for mountain flying as opposed to any other sort of flying. Flying was very low and very fast, often through narrow mountain passes. It was mainly for this reason that all Classes were won by local pilots who knew

Please send news and exchange copies of journals to the Overseas Editor: A. E. Slater, 7 Highworth Avenue, Cambridge, CB4 2BQ, England.

their way around the mountains. Very often the 15m Class were faster than the Open Class even though their tasks were not much shorter because of their greater manoeuvrability and ability to fly closer to the rock face.

Landed in a garden

There were only two accidents. Our pilot, Peter Cook, missed some power lines and ended up in someone's garden with most of the glider hitting their house (which fortunately didn't suffer much more damage than the flowerpots knocked off the balcony by the wingtip). The owners responded with Gallic good humour and even gave the pilot and crew dinner!

The other accident befell an Italian who caught a wingtip in a tree — his glider was written off, but he got away with breaking his ankles. He spent the next day in hospital chatting to his fellow pilots on the radio as they flew over him!

Chris Garton flew well, leading the World 15 Metre Champion Kees Musters for eight days.

This was in spite of a photographic penalty of 250pts awarded to him on Day 1. He had photographed the start line missing the markers; but was nevertheless timed accurately. At first his points were reduced to zero. Even after making an official protest in which the British were supported by 16 votes to two, the director exercised his right to award a penalty and took off 250pts. This was thought to be rather stiff; but no more could be done about it. If Chris had retained these 250pts he would have finished in 6th place.

Leading results: Open Class (15 competitors), 1 G. Lherm, France (Nimbus 3) 8981pts; 2 F. Blatter, Switzerland (Nimbus 3) 8733pts; 3 B. Gantenbrink, Germany (Nimbus 3) 8161 — British places: 10 R. Jones (Nimbus 3) 5037; 13 D.G. Roberts (Nimbus 2B) 3616pts and 15 P.G. Cook (Nimbus 2C) 2054pts. 15 Metre Class (22 competitors), 1 A. Delylle, France (Ventus) 9729pts; 2 G. Gerbaud, France (ASW-20C) 9574pts; 3 E.G. Peter, Germany (LS-6) 9573pts — British places: 9 C. Garton (Ventus B) 7499pts; 16 J.D. Cardiff (ASW-20B) 4858pts. Standard Class, (27 competitors), 1 J. Lopitiaux, France (Pegasus C) 9570pts; 2 F. Ragot, France (LS-4) 9178; 3 S. Leutenegger, Switzerland (DG-300) 9144pts — British places: 17 J.D. Benoist (LS-4) 6175pts.

WINTER BAROGRAPHS

8km, 10km, 12km models in stock

£225.00 + £3 p&p

Other Winter instruments available
and wide range of second-hand instruments
Send SAE for lists

THERMAL EQUIPMENT LIMITED

Lasham Airfield, Alton, Hampshire

Telephone Herriard (0256-83) 359

SAILPLANE & ENG. SERVICES LTD.

Cs of A

REPAIRS TO GLASS-FIBRE,
STEEL TUBE & WOODEN A/C

LOTS OF K-13 & SWALLOW SPARES

WRITE OR PHONE:

KEN BLAKE

BUXTON 4365

SAILPLANE & ENG. SERVICES LTD.
HOLMFIELD RD., BUXTON, DERBYS.

HOFFMANN PROPELLERS

Overhaul and Repair Service

Fully approved by LBA, CAA, FAA

Fast, Efficient Service

Manufactured in Composites

Aerobatic or Touring

New Technology Units for the '80s

New Props in stock for Motor Gliders
and light aircraft

Prompt Attention to all your NEEDS

Repairs also to USA made props

Offer Exchange Units to keep you flying

Personal Service from Authorised Stockist

SOARING EQUIPMENT LTD

193 RUSSELL ROAD, BIRMINGHAM

021-449-1121

TELEX 335176

CLASSIFIED SECTION

Advertisements, with remittance, should be sent to Chelron Press Ltd, 7 Amersham Hill, High Wycombe, Bucks. Tel 0494 442423. Rate 30p a word. Minimum £6.00. Box numbers £2.40 extra. Replies to box numbers should be sent to the same address, the closing date for classified advertisements for the December-January issue is November 5, a.m.

FOR SALE

BOHLI COMPASSES, Winter barographs, mini Winter variometers, electric audio variometers, audios for use with mechanical variometers, 4-way pipe connectors, hand-held microphones. Lowest prices, no VAT, you save! Flotek, 581 Fishponds Road, Bristol. Tel 654800.

DART 15, 1966. Basic instruments plus horizon, oxygen, barograph, parachute, wooden trailer. £3500 offers. Tel 08846 354.

JANTAR 2A with trailer, basic instruments, never damaged, good condition, 800hrs, £15 000. Mazalrat, 20 rue Verger, 91510 Lardy, France. Tel (6) 082 7362.

ASW-20

1 year's C of A
Full comp panel, good trailer
Tel Bicester 243030

SWALLOW with trailer, both hangared and in good condition with good panel, 12 months' C of A from sale, £1000. Tel 091 416 3414 (evenings).

OLY 2B, C of A, Dart type canopy, enclosed trailer and barograph, audio vario £2000ono. 01-777 9186 (evenings).

L-SPATZ 55, 29:1 L/D, built 1958, excellent condition, enclosed trailer, based Bidford-on-Avon, 1/2 share or whole £3000. Tel 0905 424676 or 0902 743565.

ASW-20L (German), C of A, hull and trailer. Tel High Wycombe (0494) 881166.

SKYLARK 4, 1/5 share, audio vario, radio, barograph, parachute, closed trailer, based and hangared at Nympsfield. Contact Williams 027-581 3293.



GLIDER STICKPINS
for lapels, ties, etc.
Also
GLIDER PENDANTS

In 9ct gold at £24.00 each
In Silver at £10 each

Supplied in a presentation box. The above price includes post, packaging and insurance. Please allow a maximum of 28 days for delivery.

Cheques payable to:

CRADLEY JEWELLERS

87 High St, Cradley Heath, West Midlands B64 5HA
Tel (0384) 635808

BERGFALKE 2. Fly a vintage two-seat glider with near K-13 performance, steel tube fuselage, always hangared, C of A, £1500ono. Jennings, Harpenden 4389.

T-21 with basic instruments and C of A, £1200. Tel Gainsborough 788658 or Scunthorpe 863080.

SWALLOW with bubble canopy, basic instruments and trailer. Only flown 5hrs since last C of A. £1200. Tel 0392-61300.

K-6E, excellent condition. 800hrs only. PZL, electric vario, T & S, C of A to May '85. Trailer. £4850. Tel Wallingford 37269.

K-6CR full panel, 12v/12AH, rechargeable battery, closed trailer (roadworthy), one year C of A, based Portmoak. £3500. Tel 0592 755955.

OLY-463, ASI, alt, T&S, mech vario, elect vario, parachute, radio, C of A, closed trailer, offers. J. Fane, tel 0908 76961.

PIK 20-D, excellent condition. Parachute, barograph, radio, full panel. Manufacturer's trailer. £10 000. Tel 0872 54346 (evenings).

Listen to Derek Piggott's tapes for beginners, experienced pilots and instructors

"A very useful supplement to your flight instruction which will save you time and money"
"Listen as you drive to your gliding site"

BASIC INSTRUCTION for beginners (two C60) £10.95
POWER PILOT'S transition to gliders (two C60) £10.95
AEROTOWS, WINCH, CAR LAUNCHES and emergencies (two C60) £10.95
THERMAL SOARING — TECHNIQUES (one C90) £5.95
STALLING and SPINNING GLIDERS (one C90) £5.95
FIRST FLIGHTS ON NEW TYPES (one C60) £5.95

SPECIAL FOR INSTRUCTORS
Five one-hour tapes on instructing technique, including Derek giving air instruction.

£24.95 plus p&p 75p

Postage and packing:

Two cassette packs 50p Single cassette packs 35p

From

DEREK PIGGOTT

Lasham Gliding Centre, Alton, Hants GU34 5SS

"An ideal present for any gliding enthusiast"

SCHEIBE ZUGVOGEL IIIB. 39.1 at 49kts. Easy rig, large cockpit, very easy to fly. Full instruments, chute, barograph, radio, new aluminium trailer. £4500. Tel 0522 682414.

K-6CR, excellent condition. Full panel including 2 variometers, T&S, 12ch Dittell radio. Parachute, enclosed trailer, C of A March '85. £3800ono. Tel 08675 3767 or 021 744 7601. View Enstone.

PIK 20/D based Ringmer. Full instruments, price £10 500 including PIK trailer. Tel 0293 882709.

PIRAT. Good condition, basic instruments, radio, audio vario, rigging aids. Wooden enclosed trailer. £3250ono. Yeovilton based. Tel Wincanton 33900.

BOCIAN 1E with instruments and trailer. C of A part complete on this glider but main spar booms found to have sparwise cracks. These are repairable but the professional cost precludes Lasham from finishing the work. Offers around £1500 + VAT are invited. Airframe available without instruments or trailer if required. Contact Phil Phillips, Manager, Lasham Gliding Society. Tel Herriard 270 or 322.

K-8B large canopy, basic instruments, new C of A, £2500 + VAT. Chitern Sailplanes Limited. 0494 445854.

K-7 FOR SALE. C of A '85. £2900. Tel Tony Parker, Stroud 4227 (evenings).

K-13/7

Bring your old K-7 up to standard and looks of a K-13. Conversions with new C of A.

For full details contact

BOB REECE

School House, Norton, Nr Worcester
Tel Worcester (0905) 821334

DART 17R with trailer, full panel plus extras. Low hrs, new C of A. A fine example of type. £4795. Based Long Mynd. Tel 0252 513729 or 0384 375502.

STD LIBELLE, immaculate condition, very nice full panel, radio, parachute, only 530hrs. Good sound well-fitted trailer, all hangared. A dream to fly and rig. £6500. Tel Wellingborough 678595 or 663470 (evenings).

KESTREL 20M, 700hrs only, superb Torva glass-fibre trailer, instruments, parachute and radio. £10 250ono. M. Pope. Tel 01 741 2194 (office).

FOKA 5, competition ready outfit. Basic instruments, A/H, oxygen in flight battery back up system. 360 radio and Cambridge vario. Metal trailer, towing out aids and two-man rig. £4750. Tel Tony Cox, Wilney 74892.

COBRA 15 as per ad in previous issue. Superb buy either complete or 1/4 shares at Husbands Bosworth. Bennett, 3 Sheep Street, Leighton Bromswold, Cambs or Tel 0480 890773.

SCHEIBE SF-25B Falke motor glider. Airframe 800hrs, engine 420hrs. Same owner since new, never damaged, excellent condition, good soarer. C of A to August 85. £7000. Rebuilt metal trailer £850. Tel Sunderland (0783) 342411.

WASSMER WA-21 JAVELOT. Trailer, parachute, barograph, C of A to June 1985. £2200. Tel Sheffield (0742) 302201.

PIK 20E 1979 complete with barograph, parachute, glass-fibre trailer, low hrs. New C of A £12,800. Tel Eastwell Heathfield 3454 Frapple Eastbourne 34716.

CANOPIES

As wide as a Motor Falke As long as a K-13
As small as an OLY 2

BOB REECE, Rematic

School House, Norton, Nr Worcester
Tel Worcester (0905) 821334

FLY SPECTRUM 48K1 A no-nonsense glider simulator for cross-country practice. Thermals, instruments, cloud-flying, aerobatics. Uses AGF joystick. £5.95 including p&p from Mike Butcher, Church Road, Wrentham, Norfolk.

L-SPATZ-55 (29:1). Good condition, C of A to June '85. Covered trailer, TE variometers, ASI, alt, compass, £1900ono. Wing (029668) 8059.

TRAILERS MANUFACTURED to your requirements. Timber or Aluminium. Very competitive prices. **GLIDER REPAIRS**, C of A. Martyn Wells, Long-Compton (Warwickshire) 217.

SHK 1 day winner at Enterprise with 486km. Selling complete Solflahrgeber, electric vario and audio, horizon, parachute, tidy rot free ply trailer, Scott stabilizer etc. Two-person rig. Asking £5700. View Thruxton, Hants. Tel 0635 67873 or 0264 66108.

Witter. You can't buy a better towing bracket

Send for the price list and name of your nearest Witter stockist, or find him in Yellow Pages
For information or advice: C.P. Witter Ltd., Chester. Tel. 0244 41166

WITTER
TOWING BRACKETS

SHK with alloy trailer. All in very good condition and never pranged. 576hrs flown from 409 launches. Good panel including Crosstall audio and TM6 radio. Brand new OK barograph. Alan Askew 0843 581553.

THE LAST SHK: excellent condition, with trailer and two-person rigging tackle. Circa £4500 or possibly sell two 1/2 shares. Tel Westbury 822037.

TIMBER CONSTRUCTED trailer suitable for modern 15m glider. Enquiries to Linee, Higher Bockhampton, Tel Dorchester (0305) 62307.

ALUMINIUM TRAILER suitable 15m fitted for K-18. Movable axle. Good condition, view Dunstable. £1450. Tel Potters Bar 55326 (evenings), Hemel Hempstead 42061 (daytime).

SHK recently resprayed, 1/3 share, based Aboyno. Excellent condition, parachute, barograph, oxygen, good trailer. £1800ono. Enquiries Sant, Cervantes, Dundee (0382) 66866.

"MITY" stainless weak links, 900 or 1100 lb. Aerotow ropes. Winch chutes. Astleys Ltd, Gosford St, Coventry, CV1 5DJ (0203) 20771.

STD CIRRUS, 1/4 share available at £1875, based at Lasham and includes metal trailer, full equipment and instruments. Tel 0264 73 520.

K-8B, excellent condition, C of A to May '85. Full kit including radio, barograph and recently re-covered trailer. Parachute negotiable. £3250. Tel 066-62 2769 after 8pm.

BLANIK. Complete with dual set of basic instruments. Enquiries to Bloicester 243030.

SUPER CUB, 180hp engine, 375hrs since new, 720/VOR. New 3-year C of A. Tel 0238 532407.

DART 15, good condition with basic instruments, Cook electric vario, £3000. Trailer, radio, parachute, barograph and A/H also for sale. Tel Barton-under-Needwood (028371) 2401.

SPORT VEGA, winner Booker Regionals 1984 Sport Class. Excellent condition, never damaged, one man syndicate from new. Suitable for pilots with low hrs yet ample performance for competitions. Hull with basic instruments and full set of trailer fittings. Best offer over £7950. Trailer available. Tel (089274) 585.



AEROGRAF The Barograph

- new electronic concept
 - no smoking, no sealing, no fuss
- Sole UK agent: **SUNSAIL, ANDREW DAVIS**
2 Padstow Close, Macclesfield. 0625 23564

BLANIK, Lt. 600hrs, recent major overhaul including painting. Instrumented, C of A to April 85, open trailer. Offers around £4250. Tel 0846 682580.

MINI NIMBUS C, 350hrs, full instruments including Rico, radio, barograph, parachute and trailer. C of A. £13 750. Tel Salisbury 743804 (evenings).

HOBBIES

What's NEW

SEGELFLUG

BILDKALENDER 1985

CHRISTMAS CARDS

BOOKS

SOARING MAGAZINE

OXYGEN

- GIFT TOKENS* (available in multiples of £1)
- Ideal for Birthdays, Christmas or anytime you are stuck for an idea.

- Order NOW and ensure your copy for next year.

- Amusing gliding themes. 12 cards (with envelopes) £3.00

- Over 50 titles available. Reichmann, Piggott, Moffat, etc.

- American monthly gliding magazine. Save the hassle of sending abroad for it — get it from us.

- Portable systems for hire. Inflatable masks from £24.

PRICE LISTS on request. Please send 16p stamp for full details* of stock.

DON'T FORGET — if you give, give HOBBIES GIFT TOKENS.

HOBBIES, 144 Lythwood Road, Bayston Hill, Shropshire SY3 0LW. Tel 0743 723885
(sometimes answering service)

New from the U.S.A.!

AFTER ALL

by Gren Seibels

An amusing, insightful collection of anecdotes and reflections on soaring in the United States. Some of the chapters were featured in SSA's *Soaring* magazine; there is much brand new material as well. A good read for pundit and tyro alike.

Available from Soaring Society of America, P.O. Box 66071, Los Angeles, CA 90066 U.S.A.

\$15 plus \$2.50 overseas surface; \$6.50 airmail.

Distr. by Morris Aviation Ltd., P.O. Box 718, Statesboro, GA 30458 U.S.A.

STD CIRRUS (Comp No 909). Excellent condition with 18 months' old metal trailer. Tel Malcolm Allan 051-224 3610 (W), 051-336 7604 (H) or Chris Aldis 051-236 4321 (W), 051-852 2980 (H).

DART 17R full panel, oxygen, barograph, radio, parachute, trailer, two-man rig/derig aids. All excellent condition, fully insured. C of A till July 85. Based at Long Mynd. 1/4 share £1150 or offers for complete outfit. Tel St Albans 30343 (evenings).

OLY 2B. £1400. Tel 0904 26113 for details.

WANTED

STD CIRRUS or inexpensive 15m in good condition at reasonable price. Would consider hull only with basic instruments. Tel Andover 66108.

PRIVATE COLLECTOR wants pre-1951 model aircraft engines, please state price. Miller, Redcot, New Street, Glensford, Suffolk, CO10 7PY. Tel (0787) 280425.

LET IT be known that the Avro Gliding Club in Cheshire are interested in purchasing a Pilatus B-4 and a K-18. Please send details to the Secretary, Mark Niman, c/o 9 Montgomery Drive, Unsworth, Bury, Lancs.

FOR HIRE

FOR HIRE (Australia) DG-202 c/w trailer, two-man rigging A\$500 pw (collect Sydney) lande Ferranti, 1/190 Ocean Street, Narrabeen 2101 Australia. Tel (61-2) 913 9411. Teléx Techni AA 23369.

SERVICES

GLIDER AND TRAILER repairs to all types, Cs of A and overhauls, re-covering, resprays, all types of glider wiring and rewiring undertaken and instruments fitted. BGA inspector. Tel Tony Cox, Witney 74892.

CRSM — Sell or buy your glider using the Central Register of the Sailplane Market. Details Hobbies Tel 0743 723885.

SANDTOFT AIR Services Ltd flying instructors really enjoy converting glider pilots for PPL at highly competitive prices, seven days per week until dusk. Phone Wendy Mills on Epworth (0427) 873676 or 873672 for more details.

Marchington Gliding Club: On behalf of the surviving members of the Leicester Aircraft Preservation Group I would like to express our deep appreciation to the Marchington Gliding Club members for their assistance at the scene of the Varsity crash. R. Somerville.

PERSONAL

FOR MEN! VASECTOMY

Everlasting alternative to the Pill.

No fuss. No waiting lists. One visit. Low cost. In...

BIRMINGHAM LONDON PLYMOUTH LIVERPOOL

GLOUCESTER MANCHESTER SOUTHAMPTON NORWICH

LEEDS NEWCASTLE SWANSEA

Write today. Booklet by return. Plain cover. Or phone:

LONDON 01-388 2585

LEEDS 0532 440685

MANCHESTER 061 832 4260

Name _____

Address _____

Marie Stopes House,
108 Whitfield St., London W1P 6BE
Caring clinics since 1925

MARIE STOPES

SG4

SEND NOW

PUBLICATIONS

NEW ZEALAND: "Gliding Kiwi" official Gliding Magazine of the NZ Gliding Association. Printed October and alternate months. Write NZ Gliding Kiwi, Private Bag, Tauranga, New Zealand. £7.00 Sterling for year's subscription (inclusive of postage).

SLOPE SOARING with a radio control model seaplane is a fascinating pastime and a typical phase of aeromodelling. Read about this and other aeromodelling subjects in *Aeromodeller* and *Radio Control Models and Electronics*, the world's leading magazines published monthly. Model & Allied Publications Ltd., 13-35 Bridge Street, Hemel Hempstead, Herts.

"SOARING" — official monthly journal of the Soaring Society of America. The only US periodical devoted entirely to the sport. For subscription send \$25.00 US by international money order or international cashiers check payable to the SSA at PO Box 66071, Los Angeles, CA 90066.

AUSTRALIAN GLIDING, monthly publication of the Gliding Federation of Australia. Editor Allan Ash. A complete coverage of Australian Soaring and exclusive features of international interest. Subscription, \$A16.00 by cheque on an Australian bank or by money order. Airmail extra \$A21.25 Box 1650, GPO, Adelaide, South Australia 5001.

ADVERTISERS' INDEX

AMF Enterprises	207
Aero Marketing	209
Aerospace Information Centre	IFC
Air Apparatus & Valve	202
Anglo-Polish Sailplanes	201
Austin Aviation	231
Avon Soaring Centre	238
Black Mountains Gliding Club	240
Bristol & Gloucestershire Gliding Club	240
British Gliding Association	225
Cambridge Aero Instruments	203
Cambridge University Gliding Club	239
Chiltern Sailplanes	200
Classifieds	242-243
Cornish Gliding & Flying Club	240
Coventry Gliding Club	240
Cradley Jewellers	242
Deeside Gliding Club	240
Fieldtech	199
Glider Instruments	237
Gliderwork	235
HT Communications	202
J. A. Harrison (Brokers)	222
Herefordshire Gliding Club	240
Hobbies	243
Holmes Hulbert	200
JSW Soaring	228
Kent Gliding Club	244
Lasham Gliding Society	240
London Gliding Club	240
London Sailplanes	202
Lowe Electronics	222
R. L. McLean	229
Midland Gliding Club	244
Miller Aviation Models	228
Mowbray Vale Insurance	IBC
Narromine Soaring Centre	236
Nine Four Aviation	201
Norfolk Gliding Club	244
Oxfordshire Sport Flying Club	235
Peterborough Sailplanes	223
Piggott Bros & Co	237
Piggott, Derek	242
RD Aviation	234
B. Reece, Rematic	242
Sailplane & Engineering Services	241
Sailplane & Gliding	236
Scottish Gliding Union	244
Selbels, Grenville	243
Soaring Equipment	241
Soaring Oxford	234
Soaring Society of America	202
Southdown Aero Services	198
Southern Sailplanes	BC
Skycraft Services	203
Specialist Systems	228
Speedsoaring	198
Speedwell Sailplanes	213
Marie Stopes	242
Thermal Equipment Ltd	241
Brian Weare	240
Waikerie Gliding Club	237
Westley Aircraft	198
C. P. Witter Ltd	242
Yorkshire Gliding Club	244

MIDLAND GLIDING CLUB THE LONG MYND



Extend your soaring season throughout the year.

Bungy into hill lift and climb into wave from our famous airfield.

Unique winch launching system (up to 190 launches per day) for maximum time in the air.

Visitors always welcome, Prior arrangement advised.

The Course Secretary
Midland Gliding Club
Church Stretton
Shropshire SY6 6TA

Tel: Linley (058861) 208

KENT GLIDING CLUB

Challock · Ashford · Kent TN25 4DR
Ring: Challock (023 374) 274 or 307

Provides gliding holidays for both the beginner and the more advanced pilot, including professional instruction in club gliders and full accommodation on the airfield.

Provides year-round launching facilities for its members to go soaring in either their own or a club glider.



£140 - £200
4 or 5 day holidays courses
March-October
(All inclusive of professional instruction, accommodation, meals and VAT)

NORFOLK GLIDING CLUB

Holiday courses from June to September — beginners to Silver C. Book now!

Motor Glider Courses throughout the year — Bronze or Silver C to PPL (SLMG).

Visiting Aircraft welcome — ideal cross-country site — cheap aerotows and temporary membership.

Friendly club — accommodation on site — licensed bar.

Write to the C.F.I.
Roy Woodhouse
Oak Cottage, The Hill, Long Stratton
Norwich NR15 2AH
Tel: Long Stratton 31406

PORTMOAK

IS THE PLACE

FOR WAVE — U.K. altitude record made from here in 1980

FOR RIDGE — our two hills give more soaring opportunities

FOR THERMALS — they're not bad, either!

Holiday courses continue throughout October at reduced prices. Please write or phone for details.

VISITORS ALWAYS WELCOME

SCOTTISH GLIDING UNION
PORTMOAK, SCOTLANDWELL
Nr. KINROSS Tel. 059-284-543

SOAR YORKSHIRE

For your COURSE!

For your EXPEDITION!

For your HOLIDAY!

SUTTON BANK

We offer top class accommodation, instruction facilities and opportunities.

RIDGE SOARING
12 miles in suitable conditions

THERMAL SOARING
Club record is 582 km. from aerotow, 524 km. from the winch

WAVE SOARING
Club absolute record is 30,200 ft. Club record gain is 29,500 ft. Both from the winch

Our rates are amongst the best — £7.00 for aerotows to 2000 ft. Visit us and stay in our fully licensed residential clubhouse. Full catering available in season. Self catering at other times.

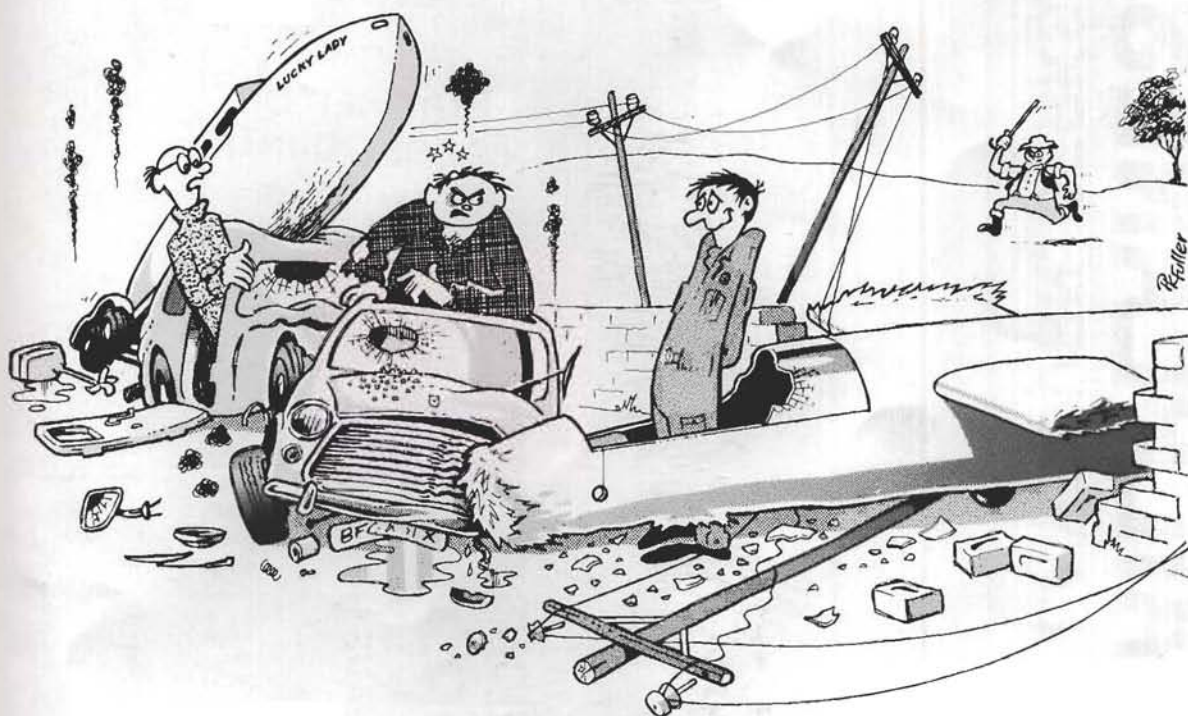
COURSES — April to October

Visitors always welcome

YORKSHIRE GLIDING CLUB, SUTTON BANK, THIRSK

Tel: 0845 (Thirsk) 597237

Life's Rich Tapestry...



Can become a little threadbare at times!

It's at these times you could be very glad that your glider (or boat, or car) has the best available insurance.

Although Mowbray Vale are experts on aviation insurance, they do cover just about everything else as well!

So if you need a policy that's cut to suit your particular cloth, it makes sense to go to the best Taylor!

Carol Taylor
Thirsk (0845) 23018 – 24hr. Ansaphone Service

Or write to:

MOWBRAY VALE INSURANCE

8 Castlegate, Thirsk, North Yorkshire YO7 1HL.

Telex 587470

Represented at Lloyds

SOUTHERN SAILPLANES

(R. JONES)

MEMBURY AIRFIELD

LAMBOURN, BERKS

DISCUS
TOMORROW'S STD CLASS
TODAY!

THE ULTIMATE NIMBUS 3

20 METRE CROSS
COUNTRY SHIP
A MATCH FOR
MANY SINGLE
SEATERS

JANUS C

ALL CHAMPIONS FROM
SCHEMPP-HIRTH
DESIGNED BY KLAUS HOLIGHAUS

JANUS B 18.2 m
TRAINER OR
CROSS COUNTRY

VENTUS

FLAPPED 15 metre RACER
or 16.6 m

Tel: 0488 71774
FOR MORE INFORMATION