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# CHAIRMAN'S REPORT, 1977 

ROGER BARRETT

This was a very frustrating year for glider pilots: the number of hours flown - more than 100000 - was $22 \%$ down on 1976 and the number of pilots who completed Silver and Gold Cs was only $60 \%$ of the 1976 total. Yet ironically the year saw a record number of gliders in the UK (1255) flown by a record number of flying members (10622) from a record number of clubs (99). Most of the time they stayed on the ground waiting for suitable soaring weather.

We welcomed four new clubs to membership of the Association: Ridgewell Oatly, Tyne and Wear, Worcestershire Dowty and Greylag (RAFGSA). We are delighted that the Doncaster Club continues to operate after the Secretary of State rejected the local council's application to build a housing estate on Doncaster airport. However, Doncaster's survival at their present site is by no means assured. As is the case with the large majority of our clubs, they have no long term security of tenure so how can they be expected to invest in the future by re-equipping with modern gliders and improving their buildings? Despite considerable grant aid to gliding from the Sports Council, for which we are very grateful, this underlying problem of site security still has to be solved before most of our clubs can expand to meet the increasing demand from young people.
During 1977 the Executive Committee continued its work on long-term objectives and those concerning airspace were finalised and published. Work is still progressing on membership growth, sites and launching methods in the light of future energy supplies. Other longer term matters as yet unresolved include the advisability of promoting the design of a new British glider capable of being home-built and the implications for our clubs in the continuing increase in the hang glider population. It is apparent that before long the dividing line between a glider and its hang glider cousin will become blurred and hang gliders will soon be seeking to fly from fields away from hills. We must co-operate with these latter-day Lilienthals, both at local and at national levels, for there can be no benefit to either us or them in any other policy.
The Technical Committee's work on reducing aerotow noise levels continues and we received a grant of $£ 1000$ from the British Light Aviation and Gliding Foundation to help finance this project. We thank the Foundation for their encouragement and hope that 1978 will see some positive results from the research and development now being undertaken. The BGA continues to enjoy airworthiness privileges that are the envy of other sporting aviation interests world wide. Our Technical Committee administers the largest private airworthiness organisation in the world and we can be justifiably proud of our reputation for cost-effectiveness.

After spending some time considering the pros and cons of changing the existing methods of identifying gliders it was decided there should be no change in 1978. A working group chaired by Keith Mansell is keeping a watching brief on the subject, however, and will make further recommendations after consultation with Government departments about radio call signs.

Gliders in British skies will from next season be more conspicuous. Recommendations have been published regarding colour schemes and these will be mandatory for gliders in all BGA competitions from now on.
We are pleased that the accident rate per 1000 glider launches did not increase in 1977 but we would have been
even more pleased if there had been a significant reduction. One worrying figure in the past year was the increase in the accident rate of tug aircraft. Our committees are continually looking at trends indicated by the accident statistics and they try to take preventive action as rapidly as possible.

The Instructors' Committee examined the needs of clubs in the next five years and as a result of their recommendations the Executive has now approved the purchase by the BGA of a Twin Astir high-performance two-seater glider. This will be purchased with financial assistance from the Sports Council and used by our National Coaches on a programme of advanced training. The Twin Astir will also be used on an exciting new training scheme for competition pilots that will commence next year. Pilots who show ability will be selected and sponsored by a grant from the Sports Council so that their training to Nationals, and hopefully, eventually, British Team, standard will be accelerated.

After chairing the BGA's Development Committee so successfully for 11 years Joan Cloke handed over this position to Keith Mansell and took on the job of BGA Treasurer. The accounts for 1977 suggest that she is equally good at running our financial affairs - in this case aided by the administrative expertise of our General Secretary, Barry Rolfe.

Other changes in committee chairmen brought Rex Pilcher to look after Airspace and Gordon Camp to the Competitions and Badges Committee. Our considerable thanks are due to Lemmy Tanner for chairing the Competitions Committee until he was obliged to retire owing to a move to Scotland. That Committee's, and indeed the BGA's, most publicised action in 1977 was to reject a fraudulent claim for new world altitude and gain of height records. A more pleasant task was the introduction of a BGA " 750 km Diploma" for flights starting in Britain that exceed 750 km .
During the year Johin Large, our past Treasurer, was awarded a Tissandier Diploma by the FAI for his excellent stewardship of our financial affairs for so many years. BGA Diplomas for services to British Gliding were awarded to Albert Johnson (RAFGSA), Doug Jones (Bristol and Gloucestershire Club) and to Chris Wills, founder of the Vintage Glider Club. Britain's World Champion, George Lee, went to America and finished second in that creme de la creme event, the Smirnoff Derby; he also went to the Royal Aero Club to receive from the Prince of Wales their premier award - the Gold Medal. The whole of the British Gliding Team in 1976 were also honoured to be the first ever winners of the Prince of Wales cup. Our four pilots for the 1978 World Championships have now been selected and we wish John Delafield, Bernard Fitchett, George Lee, Steve White and their Manager, Dickie Feakes, every success in France next July. During 1977 Dee Reeves was appointed Public Relations Officer to the Association and she has been doing sterling work publicising gliding with the particular aim of attracting sponsors to our sport.
In the last year we have endeavoured to encourage participation in BGA affairs by club members all over Britain. The BGA Weekend held at the Long Mynd in March attracted pilots from far and wide and the occasion was voted a success. The Executive Committee also held one of its meetings at Ilkley on the occasion of a Northern Regional Meeting. This gave BGA Officials and Executive members an excellent opportunity to meet club members on
their home ground and we hope clubs will organise similar regional meetings away from London next autumn. After much consideration the Executive created a precedent last year by agreeing to assist members of BGA committees and working parties with a contribution towards their travelling expenses when they have journeys of more than 50 miles to attend meetings. With good reason in my view, the BGA has been reluctant to take this step although it is common practice in other sports. We were, however, persuaded that much advantage is to be gained by attracting out-of-London members to help in our work. It will certainly be very encouraging if BGA meetings are enlivened next year by accents normally heard hundreds of miles from the metropolis.

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# Spinning is not dangerous except! 


near the ground; most times it will be fatal. In 1977 trees prevented a fatality on two occasions (not in the case shown); damage and injury, nevertheless, was substantial. In view of the seriousness of this type of accident it is evident that it should be given much more attention - especially in training. The pilot's attitude after basic training may, at one extreme, be a belief that the risks are slight and it couldn't happen to him anyway and at the other that it is thoroughly dangerous and - no way - is he ever going to do it at any height. Yet, flying near to the limits above 1500 ft or so has no significant risk - unless of course there is another glider underneath. So why not get some practice?

The only time when there are risks is when the ground is in close proximity. If a full recovery drill in the standard way consumes a certain amount of height, then lower than that you depend on a recovery just by relaxing the backward pressure which may work at the incipient stage.
But can you rely on it? Appreciate that very quickly most gliders will be in a steep nose down attitude and the relative merits of hitting the ground in a spin, spiral or having just executed a high-speed stall are academic. Indeed, below a certain height the ground's proximity will preclude you relaxing the backward pressure on the stick, let alone easing it forward, and your only protection is accurate flight: close attention to the airspeed, "flying clean" and avoiding any harsh use of the controls - especially the elevator. However, in phases of flight where the work load is high, such as an imminent field landing or a critical launch failure, you may not devote - or be able to - sufficient attention to the one critical factor.

Typically, a glider spins at $20-25 \mathrm{rpm}$ in a $60-80^{\circ}$ nose down attitude with height losses of $250-400 \mathrm{ft}$ per turn. At 800 ft you are, potentially, four seconds from death - hardly a time to concentrate on the vario. radio or landing back at the launch point.


This "shock" feature is the work of VIC CARR, the new Chairman of the BGA Instructors' Committee, and BILL SCULL, Senior National Coach, who have joined forces for this direct approach to the continuing theme of accident prevention.

Accidents to Gliders - 1977, a summary of the BGA Accident Reports by the Safety Panel. Published by the BGA and priced 75 p, 90 p including p\&p.
The article above is an extract from this BGA publication which describes in some detail the 119 accidents/incidents during 1977. Pilots reading this review can assess very easily the high risk areas: airbrakes opening unnoticed, launch failures at low height, failure to hill soar and spinning.

The review also brings to light the increase in the number of accidents to tug aircraft. The rate is $50 \%$ worse than that
of other civil light aircraft, which points to a lack of airmanship or poor tug pilot training. Six accidents are described in extracts from AIB bulletins and should be read by all tug pilots.

Last year was a more typical British picture than 1976 and launches, hours and accidents were back to about the average rate. However, we must not become complacent and every measure must be taken to reduce the accident rate and thereby (hopefully) heartaches and insurance rates.
B. H. BRYCE-SMITH

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## THE BRITISH TEAM

Last October the top 24 competition pilots selected the four members of the British Team from a shortlist of 12 to represent us at the World Championships at Chateauroux, France, from July 15-30. They were George Lee, the reigning World Open Class Champion. Bernard Fitchett, John Delafield and Steve White, the only newcomer to the World Championships, with Dickie Feakes as the Team Manager.
George, a Squadron Leader, flies Phantoms from RAF Leuchars where he lives with his Norwegian wife Maren and their two young children. He started gliding at Bicester in 1963 and entered his first competition in 1970.
Bernard, an accountant, is representing Britain for the fourth time. On the last occasion in Finland he won a day with a flight of 407 km in dreadful conditions and for this was presented with a cup for the most outstanding flight of the Championships. He went solo at 16 and entered his first competition in 1966. Bernard now flies at Lasham, though started gliding with the Coventry GC.
John, a Wing Commander, has been gliding since 1955 and this is his third time in the British Team. He lives in Wendlebury with his wife Jane and their two children and glides at Bicester.
Steve, an airline captain on Tridents with British Airways, has been gliding since 1965 and is the Chairman of the Airways GC. He was the National Champion last year and has been one of the top pilots in British competitions during the last five years.
Dickie, a Squadron Leader, soloed with the ATC at Detling in 1952, is the Chief Instructor at the Central Gliding School, Syerston, and a member of the BGA Instructors' Committee. He holds the Diamond C No. 85, formed a gliding club at Winnipeg, Canada, in the 1960s and has been CFI of two Services clubs in the UK. He has flown in the British and South African Nationals and was crew chief for John Delafield at two World Champs.

## DICKIE FEAKES brings us up-to-date.

Shortly after the four members of the team were chosen I met them to discuss Class selection. The BGA Executive had previously indicated that the UK would support all three Classes and the final outcome was that George Lee and Bernard Fitchett would compete in the Open Class, Steve White in the 15 m Class and John Delafield in the Standard Class.

The next few months were spent endeavouring to find a sponsor to support the Team and on deciding which aircraft each pilot would fly. The basic concept of aircraft selection used was that each pilot would have the best available. At the present time, George and Bernard will be flying ASW-17s with Steve an ASW-20 and John an ASW-19.

On the sponsorship scene, the news isn't as good. At the moment the only major donation received is $£ 2000$ from Mike Carlton's British Light Aviation Gliding Foundation with the proviso that any advertising carried on Team equipment is for a British company. Many thanks Mike. However, a number of companies are interested and it is hoped that by the time this appears in print we will have a major sponsor. A further setback to the Team budget is the loss of the $£ 2500$ Sports Council grant. Recent Government instructions have meant the withdrawal of any Sports Council assistance to national teams competing in any event in which South Africa is also represented.

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Dickie standing with, left to right, Bernard, John, George and Steve.
All four Team members will be competing in the National Championships at Lasham, flying the gliders they will be using in France. Familiarisation with the Championships' territory will start when the Team travel to Romorantin, some 50 km to the north of Chateauroux, towards the end of June. Practice will continue at Chateauroux from July 8 with the opening ceremony on July 15. The first competition day is planned for July 16, with the last day on July 29 and the closing ceremony the following day. By then we hope to have a British World Champion for the second time running.

With the World Championship venue on our doorstep for the first time for many years, I know a number of British glider pilots will be visiting Chateauroux to support the Team. While they are most welcome. I hope they will understand that the pressures on the pilots once the day's briefing has started are far higher than those in National Championships. A constant stream of well wishers and supporters can have an adverse psychological effect and I would be grateful if the Team could be left to prepare for the day without interruption. The evenings are, of course, another matter and the excellent French wines serve to complement the many discussions that will inevitably take place on the day's flying.

## ATTEMPT NUMBER 27

## Condensed from an article by DICK GEORGESON

# The story of a joint claim by three New Zealand pilots for the world singleseater record when Dick Georgeson, David Speight and Bruce Drake flew their Nimbus 2s approximately 1254.9 km on January 14. 

Since 1960 four world records (one height gain and three goal-and-returns) have been achieved in New Zealand, the last one in 1972. In 1976, Gerald Westenra, Dave Speight and myself felt that if the goal record was not broken soon, it would be put beyond reach of New Zealand, as the country is too small for great distances. A total of 14 trips were made to Tower Peak Station, a change in weather preventing us flying on six occasions. Seven times Gerald and I drove the 650 km from Christchurch to Tower Peak, the property of Dave Speight. On the other seven trips we flew down, Bruce Drake flying us south on five occasions.

This time we were able to get Bruce's Nimbus 2 to Tower Peak and this enabled him to join us on attempt 27.

## "We've got something unusual - tomorrow is the day...

It began when I made my daily weather call to Alan Ryan of the Met office. His words were something like this: "I think we've got something unusual - not the situation we have had in mind previously, but if you are going to do this flight - tomorrow is the day . . " These were to prove prophetic words and the cat was really among the pigeons if we were to be ready by next morning.

Bruce Drake, after working seven days a week for most of the year, was on a much needed holiday in North Canterbury with his family, hoping to do a little gliding in the Janus whilst he was there. I rang Bruce and his first word was "Gawd!" I said: "You are on holiday with your wife and family - can you make it?" But Bruce answered with: "This is your thing, I have backed you in the past and will do so now."

Then I rang Marie Speight, to find that Dave was out mustering cattle. They had had a very worrying time with blizzard conditions at the end of their shearing when over 100 sheep were lost. However, there was a gap of two days in their farming programme and an attempt would brighten up life. So with "great news - we expect you before dark" Helen, my wife, and I set off for Christchurch airport. Bruce managed to borrow a Cessna 185 from a local farmer and

The solid line shows the course taken by Dick Georgeson, the dotted line an earlier ottempt on February 2, 1977, which ended in 1013 km flight to Nopier. Bruce Drake and David Speight took almost the same track as this earlier flight from Mount Cook to Nopier, except they crossed Cook Strait north of Blenheim.
was to pick us up at the airport. However, on arriving there we found that the Crown Prince of Iran had just flown in and the airport was closed. We eventually got away only half-an-hour late at 18.07.

It was a turbulent, slow, anxious trip south. Over the Hakataramea valley the turbulence became severe, progress dropped substantially in the strong headwinds and Bruce was having a hard time. The light was bad, the sun being in our eyes and I expected Bruce to give up and I would have fully agreed with his decision, but he kept going until we arrived at Tower Peak. The weather by now really did look hopeless with odd rain showers thrown in for good measure. Marie greeted us with "Ross Sparkes has phoned from Blenheim to say that the weather is building up nicely for a good flight tomorrow." Just then, Bill Speight, Dave's brother, came in commenting that the TV weather map to him looked the best he had ever seen for an attempt. Our morale thus lifted we sat down to an excellent dinner. Dave was tired and hungry, having got in just before we arrived from his cattle muster. At 11 pm Bruce suddenly got all energetic and said "let's go and rig" and so out we went into the cold, icy blast and darkness - all I wanted to do was to go to bed! However, we rigged two machines and just after midnight we were all in bed.
I was awake at 4.15 am ; outside a cold, blustery wind was blowing, but there had been little rain overnight. At 5 o'clock I got up, shortly followed by the others. We had breakfast and while we rigged X-ray X-ray, Woody Rouse, who had also stayed the night, got organised for towing in Dave's Cessna.
We had a late start, Dave being launched at 07.20 , Bruce at 07.35 and myself at 07.45 . The Takatimu's worked well. The trip across into the sun into the Five Rivers area was
less dramatic than usual. We spent too much time trying to get into wave at Five Rivers instead of hill soaring to Queenstown, but then we had a good run to The Hermitage and were within 15 miles or so of each other. Here, cloud cover appeared extensive at FL240, I reversed my decision to climb over the top of the cover and descended to get under the cloud. But 1 made a series of wrong decisions and finished up at Hororata at about 1800 ft with my morale virtually gone, just when Helen came on the radio saying: "You are not to talk about landing - you are to get going!" From the time I made the first mistake until I got re-established took about three hours, and I think they were the most gruelling and demanding hours I have spent in a long time.

In the meantime Dave and Bruce had continued to move north and were making good time, but I lost contact as they changed from Christchurch to Wellington control.

## "the fight against darkness was going to be with me"

Air Traffic Control were tremendous, they kept me informed of Bruce and Dave's progress and also relayed how they experienced conditions. By 15.00 I was ready to leave Hororata and got ATC clearance straight away. A delay at this time would have been critical as the fight against darkness was going to be with me from now until I landed. Because the wind was coming from $260^{\circ}$ the wave system was behaving in an unusual manner, and I could easily have lost the system which would have put an end to my flight.
Progress was now satisfactory and altitude maintained or increased and in due course North Island was reached. My first fright there came when I failed to contact wave over a roll cloud, the second, when Doug Yarral, who was flying in the Wairarapa area, told me he could not stay airborne. Doug then gave me instructions where to go at Masterton and at 7000 ft I headed into the bush country to follow his advice. It was a tremendous relief when sink stopped and I slowly started to climb.

On changing from Wellington to Ohakea ATC I heard the voices of Bruce and Dave, they were in the vicinity of Napier and still doing well. Above me was a huge lenticular and soon 1 was heading north at 70 kt climbing under this giant, so called by my two partners. At last, no doubt because we were in contact again, excitement really gripped me and I had the feeling that with luck all three of us would be at the long awaited goal of Te Araroa.

I climbed all the way till 20 miles NW of Napier, hearing the others setting off on their final glide. I called Ohakea who told me that I had 125 nm to go. At FL287, in a temperature of $-41^{\circ}$, and with a completely iced-up canopy I called them again. They gave me the heading for the goal followed by a final small correction and wished me good luck.
As I could not see anything at all, I watched the compass like a hawk, sitting in my little ice-box at 28000 ft . I was bitterly cold, and felt very isolated, then I heard Bruce overhead Te Araroa and Dave followed shortly - what a tremendous thrill. The 14 -odd years of trying for a world goal record was now an actual fact, and with any luck I would be joining them.

In due course the ice melted and my heading still looked as if it was taking me right to Te Araroa - it did just that, thank you, Ohakea Radar.

Helen had reached Irishman Creek and was with Sir William and Lady Hamilton (my gliding supporters since 1949) when I had still 40 miles to go. Relayed radio messages gave her a detailed report and with two minutes to go Helen got the message that I too had virtually arrived.

On arrival we were immediately welcomed. We rang our wives, we laughed - we damn near cried. We talked far into the night and came to the conclusion that we were at our goal because of the help and support over many years by a lot of people.

To me, starting 12.5 hrs before in South Island, to arrive at our goal and be together again, completed the adventure to the full. The only regret was that Gerald Westenra, who had accompanied us on so many previous attempts, was not with us.


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# Thoughts on New Contest Philosophy in Gliding 

As a result of the CIVV Bureau meeting last October, its members were asked to give some thought on how to bring about a new contest philosophy. The paper below, including his own proposal, was written by FRED WEINHOLTZ, of Germany, in the hope that it would instigate constructive ideas and comments which could be followed up. It was circulated for discussion among glider pilots in the German Aero Club at the turn of the year, and is published here just after the March Meeting of CIVV and therefore does not include any other papers which may have been tabled at that meeting.

Ever since the late 1930's when Wolfgang Späte thought up the theory of thermal dependent speeds, competition gliding in particular has undergone rapid development. Today air races are trumps. Taking no account of wind direction and strength, contest pilots rush around closed circuits - seconds are decisive between winning and losing.

The philosophy that has prevailed for the last 40 yrs has brought us to almost undisputed recognition that gliding is a high performance sport. It has given us the wonder and admiration of the public and has also led to really marvellous work on sailplanes, their beauty and their speed.

But this era also developed some less welcome consequences. Nationally and, as evidenced at the last CIVV Bureau meeting, internationally as well, pilots and officials are tending to be more and more uneasy. The worries include the machines and the men alike.

## Crazy speeds over

## colossal distances

As a consequence of the contest philosophy pursued hitherto gliders are becoming ever faster, but by no means more suitable for getting the best out of weak weather conditions. Taking it to extremes the end of this development could mean a glider which could only do crazy speeds over colossal distances on the few days in the year with strong thermal conditions. As to whether the desirable goal for technical development should be "faster flying" or "more flying" - on that everyone may form his own opinion.

The result of researches in the USA shows that in our latitudes a glider with a sink rate of only $1 \mathrm{ft} / \mathrm{sec}(30 \mathrm{~cm} / \mathrm{sec})$ could double the number of thermal soaring hours per annum compared with modern types. The dream-like landing characteristics of such a glider can only be hinted at here.

But also the man, the contest pilot, has, to a large extent, adjusted himself to the prevailing concepts. Naturally the first condition for success in competition is first class flying competence. But to me it seems that the virtues of airmanship, which we have always regarded so highly, are less apparent in contest gliding.

What has happened to judgment, the pleasure of making decisions and preparations combined with the fun of taking sporting chances or risks in competitive gliding? What occurs is that before the start gliders are circling, often for an hour or so in a stack, until at last one of the favourites pushes off. Then the whole pack storms off after him.

The gaggle reels across country. The motto is keep high. Someone below may fly on, from inexperience or dying thermal. and when he starts circling again the rest come in above - high and secure. Anyone who leaves the gaggle is deemed stupid as his risk is increased. Moreover, at the latest he will be caught up with at the next compulsory turning point. Only the favourite must not be allowed to get out of sight.

What then is the value of individual judgment, reading the weather, the surface structure and its suitability? To stay above the opposition is the ideal, in any case it means saving time at the end, and if that is not possible, then at least one must fly with them so as to lessen the risk of too great a gap.

Some of the many possibilities are shown here and will serve to make this clear:
-A whole gaggle misses a TP by 30 km . The favourite had made a slight error.
-Six competitors in the same Class land together from 600 m (2000ft) so as to ensure for themselves the best possible spread of points.
-Almost the whole of one Class wastes time behind the startline because the leaders have not yet left and so loses the chance of completing the task. Some few, however, low down on the daily scores, and therefore unconsidered, leave at the right time and complete the course - they are the only ones.
Do we want to encourage this attitude in our competitions? Do we wish to see on the podium the best of ice-cold computer brains or the best of glider pilots? Pursuing a course of tactics which triumphs in the end over flying know-how and skill cannot and must not be our goal.

In no way do I assert that contests are only flown in the manner described above, but these practices constitute a considerable nadir in our ranks. It is, however, possible to give credit in contest flying to virtues such as judgment, personal initiative, decision making and the taking of sporting chances. We must merely have the courage to think along new lines, to develop a new contest philosophy so as to ensure that our glider pilots have more demands made on them as individuals.

I suggest the following idea of mine which, incidentally, I will table at the next CIVV meeting in March, 1978, for discussion among glider pilots. It is based on present theories but in some respects differs materially from them.

## Outline of a contest day

-A detailed Meteorological briefing is given.
-The day's set task is announced, eg a triangle.
-Eight turning points, perhaps only six, are announced with possible distances of between 200 and 500 km (or more in good weather).
-Each pilot (teams of pilots are also allowed) is responsible for selecting his own task and seals his declaration in an envelope which he hands to the organisers before take-off. -A thermal snifter is employed and launching commences as soon as usable thermals are found. Whoever wants to wait, perhaps because his AUW needs stronger conditions, may do so.
-The startline opens 15 minutes after the last competitor on the day's launching order list has taken off.
-After the last competitor has started the envelopes are opened and the declarations made known.

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-Timing across the finish line is done as customary.*
-Scoring is done in the evening, each kilometre flown earning one point and each $\mathrm{km} / \mathrm{h}$ earning three points.

| Example | Pilot A | Pilot B |  | Pilot C |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 300 km | 300 pts | 400 km | 400 pts | 520 km | 520 pts |
| $80 \mathrm{~km} / \mathrm{h}$ | 240 pts | $60 \mathrm{~km} / \mathrm{h}$ | 180pts | not completed | Opts |
|  | 540 pts |  | 580 pts |  | 520 pts |

In order to make an equal comparison of the different tasks and different days the points for the day winner are made up to 1000 ; the points for the rest being multiplied by the factor of the winning pilot, ie

$$
\begin{gathered}
1000 \div 580=1.724 \mathrm{~F} \\
\text { Order: Pilot } \mathrm{B}=1000 \mathrm{P} ; \mathrm{A}=930.96 \mathrm{P} ; \mathrm{C}=896.48 \mathrm{P} \text {. }
\end{gathered}
$$

I consider that such a system has a great deal to offer. -Contests will again become simple and can be carried out without complicated data processing machines.
*In Germany the finish line is similar to a fixed startline, and doesn't necessarily lieocross the last leg of the course for a straight in approach.
-Each competitor can look through and check his scores.
-No one can reproach the task setter for setting wrong tasks.
-The excitement among the bystanders increases.
-Waiting behind the startline stops.
-The building up of gaggles will become more difficult (an argument which flight safety authorities might be pleased to hear).
-Team work is encouraged.
-Only flying ability and proficiency will decide the winner.
-Not only will the development of very fast gliders be promoted, but also a wide range of gliders suitable for weak conditions.
A further advantage, not to be underrated, could be that all contests, at any level, even those in clubs at weekends, could be scored on such a system. Variations are possible, for example, for purely "junior" contests the speed points could be scored at only two points per $\mathrm{km} / \mathrm{h}$.
I look forward with interest to opinions and comments, but would be especially pleased if this system could be tried out in some of the 1978 competitions.

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# day return to MAFEKING  AND OTHER EXCURSIONS <br> Mafeking! But first something far more exotic; an excursion of 762.67 km at $104.01 \mathrm{~km} / \mathrm{h}$ in a twoseater Janus by Con Greaves and me from Vryburg airfield via Campbell town centre, Odendaalsrus airfield and back. CHRIS SIMPSON describes a World and British National record-breaking Christmas, briefly mentioned in the last issue, p48. 

The day began with the usual Met man's promise of better things to come, of sunshine and cumulus and thermals and other good weather phenomena expected but not experienced by us in South Africa at this time. We were to ignore the enormous area of cirrus spreading from the north and the 15 kt of wind from that direction. Some pilots were heard to mutter that not only did Met man Mike Edwards always forecast the previous day's weather, but also Contest Director Alf Thompson always set the task the night before so that he didn't have to get up too early. Together with other disbelievers we accepted a launch at 10.40 , crossed the startline 15 minutes later and enjoyed 4 kt in our first thermal which, together with other lift of this order, kept us going for some 50 km until 6 kt took us to cloudbase at 10000 ft . It will be recalled that Vryburg is situated some 110 miles north of Kimberley in the high veldt of southern Africa, and has an altitude of some 4000 ft above sea level, which brings the ground a little nearer to cloudbase than some of the figures would suggest. Conditions continued to improve with cloudbase rising to 12000 ft , except for one particular cloud some 70 km short of the first turning point which kept us in difficulties for some time. We arrived in the vicinity of Campbell at 12.15 and listened to pilots on the radio seeking reassurance from each other that the featureless terrain below was indeed that which required to be photographed. Over-convection was appearing and we fled east with Erwin Müller, the German Champion, to an 8 kt thermal just short of the Vaal River which at least placed us back safely at cloudbase.

Fortunately the second leg was only 314 km , of which the next 100 km was spent in a joyous run at cloudbase along several cloud streets. We now found ourselves heading into the second turning point under a layer of cirrus, but fortunately cumulus was still forming in a manner rather similar to an approaching English warm front to give lift at an average of $4-5 \mathrm{kt}$. We turned at four o'clock into a depressing sky with 220 km left. Fortunately, the clouds were still working and at 5.45 pm we were at ShweizerReneke with only 60 km left to go. Ahead lay a leaden sky
with no cumulus. We had a head wind of some 20 kt and the proposed excursion had distinct possibilities of being just another pipe dream.

In our party there was a Cirrus, an Astir and a Nimbus, all endeavouring to climb in the dying lift as high as possible, and at 12000 ft the decision was made and we set off on our final glide to Vryburg. With only 10 km left to go, it was only the sight of several gliders on the ground that convinced us we could increase our speed and complete the task, joining 11 Open and four Standard Class aircraft, including Chris Rollings, in celebrating the end of a unique day. We only had to pray that the barograph and photographs would substantiate our claim for two Multi-Seater World records. (Con and Chris are claiming the 750 km triangle speed and the triangular distance records for both the World and British National categories. ED.)

## SA Championships the excuse

It all began when Mike Carlton asked me to join the British contingent who would be sharing the Janus in Africa, very kindly lent by Tim Biggs. The prospect was of course very exciting as Tim Biggs, flying the same aircraft, had recently broken three World Multi-Seater records at speeds exceeding $130 \mathrm{~km} / \mathrm{h}$. The excuse for this expedition was to be the South African Championships at Vryburg which were being sponsored with great enthusiasm by the local Rotary Club under the leadership of Wally Brink. The contest attracted pilots from Germany, Switzerland, Great Britain and Rhodesia.
Vryburg always seemed to be on the dividing line between two different air masses which made weather forecasting difficult and on very many days random thunderstorms developed, these being not unnaturally over turning points, and so by Christmas Day although we had flown some 2300 km the records remained unbroken. The days sped by with our skills improving, our knowledge of the country expanding and the daily contest flights adding to our experiences.

On one particular day a group of luckless pilots were sitting together at Bothaville airfield awaiting retrieves when they were startled by the sight of the two German Janus pilots in their immaculate white flying suits marching towards them from the direction of an adjacent field of mealies, which, as agriculturists will know, stand some $5-6 \mathrm{ft}$ high with trunks as thick as your arm. It appears that through some technical oversight they had decided to land their Janus in the middle of the mealies, and behold, it was unbroken. However, the reason for this unprecedented luck was brushed aside by Gunther's laconic remark: "We are very experienced pilots."

The first of the serious contest days which Mike and I shared was an out-and-return of 512 km to the junction of the Vaal and Orange Rivers. Thunderstorms made large deviations necessary and our final glide of 120 km through dead air resulted in a landing only 3 km from the airfield. Such was the glide angle we never saw the airfield. This was followed by a suitably epic retrieve. To locate the crew Mike had to hitch a lift back to the airfield after walking two miles to a road whilst carefully inspecting every footfall for snakes and other nasties. Having little confidence in his ability to find his way back by road, I astonished myself by managing to borrow a bicycle and proceeded to cycle back towards the airfield along a dirt track running parallel with the main road. Mike still swears that the distant sight of me on a bike was a mirage. The outcome of all this effort was the necessity for an aerial search for the glider and a very tiring and miserable after dark retrieve with Mark French, our crew chief, having to round up all the local boys to carry the parts from the field.


Con and Chris relaxing after their World Record flight.
Probably our most interesting landing of the whole contest was the conclusion of a fairly abortive out-and-return to Belmont, some 275 km to the south of Vryburg. At 6 pm we were only half way home with a dying sky and very inhospitable country ahead. Quite surprisingly, we noticed a private dirt strip some 3000 ft below and after a healthy argument Mike and I decided to call it a day. The landing was quite exciting as it proved that the strip was narrower than the wingspan of the aircraft, but fortunately no damage was done and the events which followed more than justified the excitement.

David Thompson, the owner of the Cornforth Hill estate upon which we had landed, greeted us as if we were the original relief column, and indeed the farmhouse, which was built in 1874 as a fort, had been relieved before. David Thompson's grandfather, Francis "Matabele" Thompson,
in 1878 narrowly escaped with his life when the fort was attacked by natives and he was the only survivor. We had in fact landed on very historic ground since Francis Thompson had been Cecil Rhodes' principal assistant in obtaining the mining concession which resulted in the creation of Southern Rhodesia and Rhodes himself had often stayed in the house

We were entertained in truly prodigal style and were retrieved by aerotow the next morning just in time for Mike and Con Greaves, who had arrived at Vryburg on a fortuitous Christmas holiday, to fly a 250 km out-and-return to Ottosdahl - the second shortest task of the contest.

Christmas Day was a rest day - only the second one in the contest - and justifiably so in view of the overcast sky which persisted for most of the day. After lunch Mike flew to Johannesburg and home to pressing engagements in England.

## Organisers set a short task

On December 27 both Classes were set an out-and-return of 431 km to Dealesville. The forecast was for good convection with less chance of cunimbs than previously, the wind veering from $020 / 10$ at 5000 ft to $120 / 25$ at 15000 ft . On discovering that the organisers had set a comparatively short task because so many pilots had landed out the previous day, Con and I decided on Belmont and return 550 km .

After a second crossing of the startline at 12.18 we found ourselves in good lift and the first part of the flight passed uneventfully with thermals averaging from 4 to 6 kt . However, abeam Kimberley the air seemed to change and just north of the Riet River we were rewarded with a climb from 6800 ft to cloudbase at 13000 ft at an average of 9 kt . A straight run of 60 km from here to the turn point lost only 3000 ft and improved our speed dramatically. The likely looking cloud over the turning point was producing rain by the time we arrived at 15.30 , so after some hasty photography we fled north again. By now the gaps between the clouds were larger and there was some over-development. We were glad to have chosen our turning point correctly since to the west of track was a large patch of blue air, and further west over the desert were two of the most enormous and perfectly developed thunderheads that I've ever seen.

Some 70 km out and slightly to the east of track a large cumulus produced good lift to enable us to climb to 12000 ft and start our final glide in approved fashion below the calculated glide path, whence without further circling we arrived home having established the new British National Multi-Seater 500 km goal and return with a speed of $101.15 \mathrm{~km} / \mathrm{h}$ and to claim the British National goal and return.

And so to Mafeking. In contrast to the previous day the 311 km out-and-return was almost local soaring. No need even to draw a line on the map - just follow the railway there and back, passing en route Kraaipan, where the South African War began and where George Eckle had previously landed his Nimbus and then spent two days looking for it - but that's another story. (This flight gave them the British National 300 km goal and return record with a speed of $100.01 \mathrm{~km} / \mathrm{h}$. ED.)
Thus ended a fabulous Championship full of unforgettable friendship and hospitality and, with luck, the addition of some British names to the international record list and some new British National records for others to break.

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The Jantar 2 is the latest product from Poland in a range of Jantar gliders that started with the 19 m Jantar 1. My brief acquaintance with the "One" was in the 1975 Nationals when I was placed second, and which left me in no doubt as to the overall ease of handling and performance that I could expect from my new Jantar 2 .

The main differences between the "Two" and its predecessor are the increased span of 20.5 m , the use of a four-piece wing and the substitution of a low set tail á la ASW-17 in place of the original T-tail configuration. The reason for redesigning the back end was to reduce twisting loads on the rear fuselage now that the fin and rudder had grown to over six feet in height.
My biggest delight on taking delivery of my Jantar 2 last April was the improvement in finish compared with the earlier efforts. The cockpit is roomy, the front fuselage has been stretched and as I am six feet I have the adjustable rudder pedals and seat back in their mid-position. Cockpit loads are generous in the range of 175 lb to 255 lb , although lighter pilots would need to sit on a lead cushion. Ready to fly, my machine weighs 7701 l , giving me a range of wing loadings from $6.21 \mathrm{lb} / \mathrm{ft}^{2}$ when empty to $8.21 \mathrm{~b} / \mathrm{ft}^{2}$ when loaded with 300 lb of waterballast. A further 50 lb of lead can then be placed in the cockpit to bring me up to 1305 lb AUW for a wing loading of $8.5 \mathrm{lb} / \mathrm{ft}^{2}$.

The layout of the cock pit leaves something to be desired. I find the airbrake lever is placed too far back for comfort, leading to a case of severe contortion when extending full brake. I also dislike the wheel brake being activated by a toggle at the base of the panel. The flap lever is well placed but rather stiff due to the force needed to bend the integral wing surface flap hinge. Undercarriage and trimmer levers come well to hand and both are easy to use in flight.

## Excellent cockpit visibility to the side and rear

Visibility from the cockpit to the side and rear is excellent, but forward it is somewhat restricted by the large instrument panel and coaming as well as the frame of the detachable canopy.

Rigging is fairly straightforward and, with the aid of a trestle, I manage with just one helper. However, at 220 lb for each inboard wing section, all is not lightness, although a stub spar at each end of its section gives you something to hold. By contrast the tips can be assembled by one person and join most neatly onto the inboard sections. Only the ailerons require connections, all other controls join automatically.

Arrangements for waterballast comprise separate tanks in each wing, filled and drained from underwing outlets. Filling is done using the rather extraordinary ram's horn devices supplied with the glider. Partial dumping is possible and the system is free of leaks.

Take-off is straightforward with little tendency to wing dropping, provided full negative flap is selected for the initial ground roll. Lift-off is achieved by selecting first or second stage positive flap. The single tow hook is placed midway between the nose and mainwheel, but curiously
winch launching is not permitted. The reason for this is not given in the owner's handbook and one can only speculatewhy it is not allowed.

Aerotowing presents no problems, the machine is particularly stable in pitch due to the conventional tail and elevator. In free flight the rate of roll at 45 kt is approximately $5 \frac{1}{2} \mathrm{sec}$ and quite good for such a large glider. However, the rudder cannot cope with a full aileron turn at speeds of less than 50 kt , this being particularly disappointing in a glider which will happily thermal at 40 kt . A bigger rudder would seem to be the answer.

## The machine is <br> reluctant to enter a spin

Low speed handling is docile with plenty of warning buffet and ASI flicking to indicate the onset of a stall. Except at full aft CG positions, the machine is reluctant to enter a spin, but once fully developed it takes about one turn with full recovery action applied before she will snap out.

Like all Polish gliders, aerobatics are permitted and no concession is made for the 67 ft of wing. High speed flight is a particular delight and even at the placard speed of 135 kt , light turbulence can be encountered without any tendency towards PIOs.

The trimmer is effective and at my weight of 185 lb including a chute, trimmed speeds are from the stall to approximately 120 kt . Approach and landing with the help of large top and bottom surface airbrakes is quite straightforward and 50 to 55 kt seems about the right speed, the flaps anywhere between neutral and plus eight degrees. Side slipping is not recommended due to a pronounced pitch-up which occurs when the elevator becomes blanked.

Once on the ground the airbrakes remain extended whilst the left hand transfers to the powerful disc brakes - a real stopper! The ailerons remain effective during the landing roll, especially when landing with zero flap. Ground looping has not proved to be a problem.

So what about performance? Having now done about 100hrs on type, including a win at the 1977 Nationals, in my opinion it is in the climb that the Jantar 2 scores highest of all. The design of the wing root, fuselage junction seems to be absolutely right allowing the glider to be banked over and cored just like a 15 m . The wing does not appear to be separation sensitive and carries bugs and rain with less detriment to performance than its closest competitors.

In the glide the Jantar 2 appears to be in the same league as the ASW-17 and Nimbus 2. Variations between individual gliders of the same type are often greater than between the different types themselves. For example, during the Nationals some Nimbus 2 s seemed to have the edge on my straight from the factory Jantar, whilst others were slightly worse. It rather depends how much time one can spend on fettling. At speeds in excess of 80 kt the Jantar 2 seemed more than able to hold its own.
For anyone wishing to fly a top performance yet docile glider at a price less than its competitors, the Jantar must be a leading contender.

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## THE TRANS-EUROPEAN

A new competition - The TRANS-EUROPEAN - will probably be born this year. Known as the TE for short, it will be a long-distance rally starting from Angers and passing through Germany, Austria, Switzerland and Italy before returning to Angers. There is already some support and a preliminary set of rules has been prepared.

Many precedents for such a Tour d'Europe exist in other sports, but the only parallel in soaring is the American Smirnoff Derby, with which we are now more familiar, thanks to George Lee and his excellent article in S\&G, August 1977. pl46.

The promoters of the TE produce a number of reasons for their initiative (dare 1 use the proprietary word "Enterprise"?) They sound rather like Philip Wills's reasons for Competition Enterprise, which although dogged by bad weather is attracting a good following. In addition, it is hoped that the TE will attract public interest and draw in new people and perhaps money, in the same way that long-distance racing has attracted attention to yachting in the last few years.

Many people have dreamed of such a tour and the time is now ripe for the dream to come true. The machines have reached a level of performance, the pilots a level of competence and the network of gliding clubs a density which make the whole thing feasible. It required someone of sufficient stature to put it all together, and Jean-Claude Penaud has emerged as that person. Jean-Claude is well known to the European gliding fraternity as a member of the French national team, a consistent competitor at the

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Angers meeting, and the son-in-law of "le patron", Rene Hersen, founder of the Huit Jours d'Angers.

Reaction to the idea of the TE has been positive. For example, in 1977 Hans Bohli, a Swiss pilot well known in European competitions and the constructor of the famous compass, covered 8000 km along a possible route for the TE scouting out usable airfields and testing out soaring conditions.

Another promoter of the TE is Bernard Chabbert, who published an article about the idea in Aviasport in May 1977. With his permission, I translate at length his notion of how the competition might work.

## From plastic to wood and canvas machines

"Imagine a race starting from Angers, with pilots from France, Germany, UK, Switzerland, Italy . . ., with machines of all types from the plastic ASW-17 to the K-8 in wood and canvas; with pilots of all types from the lead-sled driver with computers in his head (and crowded instrument panel) to the flying poet for whom any heading between 050 and 110 is 'east'; some with the idea of winning at all costs over the competition, the elements and themselves; others quietly setting off to live an adventure sufficient in itself.
"All are launched the same day and leave in the direction of Germany; no field landings, landing only on a gliding airfield after flying as far as possible, and after having photographed certain points en route. Once landed, each pilot calls Angers and gives a series of code numbers (position, etc). He has his log signed by a local dignitary and has only to prepare to continue his journey the next day, with the help of the local club, which has already agreed to participate. He has then the whole evening before him to yarn with the pundits, make new friends, learn about 'house-thermals' and local knowledge. And the next day he is off across Germany, then Austria, then, why not, northern Italy, then Switzerland; and return to France and Angers."

The Angers club is working hard on the details and searching for sponsors. Already the main features are known: Dates, June 3-25; entrance fee, 400 francs (which includes launches at Angers only) and pilots, FAI Gold badge.

NB. Two pilots may share a single-seater: four pilots may share a two-seater.

Winner: First man home: or if nobody succeeds in completing the circuit after passing through the obligatory check-points, the winner will be the nearest man to Angers.
Intermediate landings: On certain airfields only (list to be supplied).
Penalty for out-landing: The glider must be retrieved by road back to the nearest airfield in the official list.

Circuit: This will be made known one month before the competition.
On going to press we were told that the Trans-European will be launched this summer. Anyone interested should contact: Le Club de L'Ouest, Angers, Aurille, 49240, France.

INTERNATIONAL GLIDING RECORDS (Correct as at 15.3 .78 )
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| Height Gain | 12.894 m |
| :--- | :---: |
| Absolute Altitude | $14,102 \mathrm{~m}$ |
| Straight Distance | $1,460.8 \mathrm{~km}$ |
| Triangular Distance | $1,063.53 \mathrm{~km}$ |
| Goal and Return | 1.634 .7 km |
| Goal Flight* | $1,254 \mathrm{~km}$ |
| (Jointly |  |
| ciaimed) |  |
| 100 km Triangle | $165.35 \mathrm{~km} / \mathrm{h}$ |
| 300 km Triangle | $153.43 \mathrm{~km} / \mathrm{h}$ |
| 500 km Triangle | $143.04 \mathrm{~km} / \mathrm{h}$ |
| 750 km Triangle* | $140 \mathrm{~km} / \mathrm{h}$ |
| 1000 km Triangle* | $109.5 \mathrm{~km} / \mathrm{h}$ |

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L. Edgar and H. Klieforth, USA
I. Renner and H. Geissler, Australio
C. Greaves and C. Simpson, Gt Britain (in South Africa)
E. Minghelli and R. Gravance, USA
lsabella Gorokhova and Z. Koslova, USSR
E. Mouat-Biggs and Mr. Murray, South Africa
E. Mouat-Biggs and Mr, Murray, South Africa
E. Mouat-Biggs and Mr. Murray, South Africa
C. Greaves and C. Simpson, Gt Britain (in South Africa)

SGS 1-23E
SGS 1-23E
25.2.1961
25.2 .1961

4,102m
$1,460.8 \mathrm{~km}$
$1,063.53 \mathrm{~km}$
$1,034.7 \mathrm{~km}$
$165.35 \mathrm{~km} / \mathrm{h}$
$143.04 \mathrm{~km} / \mathrm{h}$
$140 \mathrm{~km} / \mathrm{h}$
$109.5 \mathrm{~km} / \mathrm{h}$
Height Gain
Absolute Altitude
Straight Distance
Triangular Distanc
Goal and Return
Goal Flight
100 km Triangle*
300 km Triangle*
500 km Triangle*
750 km Triangle*
$11,680 \mathrm{~m}$
$13,489 \mathrm{~m}$
970.4 km
762.72 km
751.30 km
864.86 km
$147 \mathrm{~km} / \mathrm{h}$
$135 \mathrm{~km} / \mathrm{h}$
$138 \mathrm{~km} / \mathrm{h}$
$104.01 \mathrm{~km} / \mathrm{h}$

SINGLE-SEATERS (WOMEN)
(W) Gt Britain (in South Africa)
Height Gain
Absolute Altitude
Straight Distance
Triangular Distance
Goal and Return
Goal Flight
100 km Triangle
300 km Triangle
500 km Triangle
750 km Triangle
Height Gain
Absolute Altitude
Straight Distance
Goal and Return
Goal Flight
100 km Triangle
300 km Triangle
500 km Triangle

## Height Gain*

Absolute Altitude**
Goal and Return
100 km Triangle*
300 km Triangle*
500 km Triangle*

## Height Gain

Absolute Height*
Goal and Return*
Gool Flight
9.119 m

12,190.2m
837 km
769.4 km
672.2 km
731.6 km
$127.24 \mathrm{~km} / \mathrm{h}$
$114.45 \mathrm{~km} / \mathrm{h}$
$113.9 \mathrm{~km} / \mathrm{h}$
$73.62 \mathrm{~km} / \mathrm{h}$
Anne Burns, Gt Britain (in South Africa)
Betsy Woodward, USA
Adela Dankowska, Poland
Adela Dankowska, Poland
Adela Dankowska, Poland
Tamara Zaiganova, USSR
Adele Orsi, Italy
Susan Martin, Australia
Yvonne Leeman, South Africa (in Rhodesia)
Adela Dankowska, Poland
ASW. 12
25.4.1972
$\begin{array}{ll}\text { ASW- } 17 & 18.1 .1977\end{array}$
$\begin{array}{ll}\text { ASW-17 } & 9.5 .1977\end{array}$
Nimbus $2 \quad 14.1 .1978$
Nimbus $2 \quad 14.1 .1978$
Nimbus 2 14.1.1978
Kestrel $17 \quad 18.7 .1974$
Kestrel $604 \quad 3.3 .1972$
Nimbus 2 27.11 .1976
Nimbus $2 \quad 8.1 .1978$
$\begin{array}{ll}\text { ASW-17 } & \text { 17.2.1978 }\end{array}$

MULTL-SEATERS (WOMEN)
Adela Dankowska and M. Matelisko, Poland
Bocian
Pratt Read G-1 $\quad$ 5.11.1966
$\begin{array}{ll}\text { Colif A-21 } & \text { 19.3.1952 } \\ \text { 27.1.1975 }\end{array}$
Janus $\quad 28.12 .1977$
$\begin{array}{ll}\text { Prue 2A } & 26.7 .1975\end{array}$
Blanik $\quad 3.6 .1967$
21.11 .1977
16.11.1977
17.11.1977
28.12.1977
$\begin{array}{ll}\text { Skylark 3B } & \text { 13.1.1961 } \\ \text { Pratt Read 195 } & 14.4 .1955\end{array}$
Jantar $1 \quad 19.4 .1977$
Jantar $1 \quad 2.6 .1975$
Jantar $1 \quad 29.5 .1973$
A. $15 \quad 29.7 .1966$
$\begin{array}{ll}\text { Kestrel } 604 & 19.8 .1975\end{array}$
Kestrel $17 \quad 11.2 .1972$
Libelle $301 \quad 16.10 .1974$
Jantar 1
2.6.1975

Bocian
Tatiana Pavlova and L. Filomechkina, USSR
Adela Dankowska and E. Jagiello, Poland

| SGS 2.32 | 5.3 .1975 |
| :--- | ---: |

Blanik $\quad 3.6 .1967$

Isabelia Gorokhova and Z. Koslova, USSR
Adela Dankowska and I. Kostka, Poland
Adele Orsi and F. Bellengeri, Italy
Tamara Zaiganova and V. Lobanova, USSR
Hainy
26.5 .1977
3.6.1967
$\begin{array}{lr}\text { Halny } & 12.8 .1975 \\ \text { Colif A-21 } & 18.8 .1974\end{array}$
INTERNATIONAL MOTOR GLIDERS
SINGLE-SEATERS
H. Lehmann, W. Germany RF-58
4.5.1977
4.5.1977
28.12.1977
W. Collee, W. Germany (in South Africa)
K. Heimann, W. Germany
F. Rueb, W. Germany (in South Africa)
F. Rueb, W. Germany (in South Africa)
28.4.1976
2.12.1977
27.12 .1977
28.12.1977

## MULTI-SEATERS

100 km Triangle
300 km Triangle

32 Triangle
33 Straight Distance
34 Goal and Return
35 Goal and Return
36, 37, 38 Gool Flight
39 Triangle

| Height Gain | $8,870 \mathrm{~m}$ |
| :--- | ---: |
| Absolute Height | $11,500 \mathrm{~m}$ |
| Straight Distonce | 741 km |
| Triangular Distance | 770.99 km |
| Goal and Return | 801.3 km |
| Goal Flight | 579.36 km |
| 300 km Gool and Return | $141.3 \mathrm{~km} / \mathrm{h}$ |
| 500 km Goal and Return | $117.3 \mathrm{~km} / \mathrm{h}$ |
| 100 km Triangle | $143.3 \mathrm{~km} / \mathrm{h}$ |
| 300 km Triangle | $146.8 \mathrm{~km} / \mathrm{h}$ |
| 500 km Triangle | $131.9 \mathrm{~km} / \mathrm{h}$ |
| 750 km Triangle | $109.8 \mathrm{~km} / \mathrm{h}$ |

-Flights subject to homologation
1000 km FLIGHTS
Since our last list was published, April-May, 1977, p73, the followin
1.063 .53 km
$1,063.53 \mathrm{~km} \quad$ H.W. Grosse, W. Germany (in Australia)
$1,013 \mathrm{~km} \quad$ S. H. Georgeson, New Zealand
1.634 km
1.009 km
$1,254 \mathrm{~km}$
$1,000 \mathrm{~km}+$
K. H. Striedieck, USA
G. Vakkur, Australia (in USA)
B. Drake, D. Speight, S. H. Georgeson, New Zealand
H.W. Grosse, W. Germany (in Australia)

BRITISH NATIONAL RECORDS
SINGIE-SEATERS
G. J. Rondel
H. C. N. Goodhart (in USA)
P. D. Lane (deceosed) (in Germany)
M. R. Carlton (in South Africa)
C. Garton
H. C. N. Goodhart
E. Pearson (in Rhodesia)
C. M. Greaves (in South Africa)
E. P. Hodge (in Rhodesia)
E. Pearson (in South Africa)
E. Pearson (in Phodesio)
M. R. Carlion (in South Africa)
22.3.1977
22.3.1977
28.5.1977
28.4.1976
19.4.1976
6.6.1976

RITISH NATIONAL RECORDS (continued)
MULTI-SEATERS (**Also Multi-Seaters (Women) Record)
L. S. Hood and M. Slater (in France)

Anne Burns and Janie Oesch, USA (in USA)
J. S. Fielden and Valerie Fielden
C. M. Greaves and C. R. Simpson (in S. Africa)
C. M. Greaves and C. R. Simpson (in S. Africa)
J. S. Fielden and Valerie Fielden
C. M. Greaves and C. R. Simpson (in S. Africa)
C. M. Greaves and C. R. Simpson (in S. Africa)
E. Pearson and A. Martin (in S. Africa)
J. R. Jeffries and Gillian Case
J. R. Jeffries and Gillian Case
C. M, Greaves and C. R. Simpson (in S. Africa)

SINGLE-SEATERS (WOMEN)
Anne Burns (in S. Africa)
Anne Burns (in S. Africa)
Anne Burns (in S. Africa
Anne Burns (in S. Africa)
Ann Welch (in Poland)
Karla Karel (in S. Africa)
Karla Karel (in Rhodesia)
Karla Karel (in Rhodesia)
Karla Karel (in Rhodesia)
Angela Smith (in S. Africa)
UNITED KINGDOM RECORDS (Correct as at 15.3.1978)
SINGLE-SEATERS
G. J. Rondel
G. J. Rondel
J. Wills
C. Garton
C. Garton
H. C. N. Goodhort
D. G. Lee
C. Garton
R. Jones
R. Jones
R. jones
D. G. Lee
R. Jones
C. Garton
K. A. Harrison
I. W. Strachan
A. H. Warminger
J. Wills
H. C. N. Goodhart

## MULTI-SEATERS

J. R. Monteith, USA and M. C. Mahon
$7,620 \mathrm{~m} \quad$ J. R. Monteith, USA and M. C. Mahon
J. S. Fielden and Valerie Fielden
J. R. Jeffries and N, Foster
J. S. Fielden and Valerie Fielden
J. R. Jeffries and N. Foster
J. R. Jeffries and G. E. Love
J. R. Jeffries and A. Kirtly
J. R. Jeffries and Gillian Case
J. R. Jeffries and G. E. Love
J. R. Jeffries and Gillian Cose
D. B. James and K. O Riley
B. J. Wilson and H. Daniels
W. A. H. Kahn and J. S. Williamson
K. 7
3.2.1970

SGS 2.32
5.1 .1967

Bergfalke 3
14.8.1970

Janus
28.12 .1977

Janus $\quad 27.12 .1977$
Bergfalke $3 \quad 14.8 .1970$
Janus $\quad 29.12 .1977$
Janus $\quad 27,12.1977$
Kranich $3 \quad 7.1 .1968$
Calif A.21 29.5 .1974
$\begin{array}{ll}\text { Calif A-21 } & 31.5 .1975\end{array}$
Jonus
28.12 .1977

| Skylark 38 13.1.1961 |
| :--- | :--- |

$\begin{array}{ll}\text { Skylork 3B } & 13.1 .1961\end{array}$
Skylark 3B 31.1.1961
Std Austria $\quad 6.1 .1966$
Jaskolka
20.6.1961
1.1.1975
16.10.1975
2.11 .1975
15.10 .1975
28.12 .1972

| Olympia 2B | 18.6 .1960 |
| :--- | ---: |
| Olympia 2B | 18.6 .1960 |
| Sid Libelle | 1.8 .1976 |
| Kestrel 19 | 10.6 .1976 |
| Kestrel 19 | 22.7 .1976 |
| Skylark 3 | 10.5 .1959 |
| Kestrel 19 | 17.8 .1975 |
| Kestrel 19 | 22.7 .1976 |
| Nimbus 2 | 30.4 .1974 |
| Nimbus 2 | 30.6 .1975 |
| Nimbus 2 | 29.5 .1974 |
| Kestrel 19 | 19.5 .1974 |
| Nimbus 2 | 31.5 .1975 |
| Kestrel 19 | 10.6 .1976 |
| SHK | 13.4 .1969 |
| Skylark 4 | 2.6 .1963 |
| Kestrel 19 | 24.4 .1976 |
| Std Libelle | 7.6 .1976 |
| Skylark 3 | 10.5 .1959 |
|  |  |
|  | 2.11 .1972 |
| Capstan | 2.11 .1972 |
| Capstan | 14.8 .1970 |
| Bergfalke 3 | 17.8 .1975 |
| Calif A-21 | 14.8 .1970 |
| Bergfalke 3 | 17.8 .1975 |
| Calif A-21 | 22.4 .1974 |
| Calif A-21 | 5.8 .1974 |
| Calif A-21 | 29.5 .1974 |
| Calif A-21 | 31.5 .1974 |
| Calif A-21 | 27.5 .1975 |
| Calif A.21 | 11.7 .1970 |
| Gull 2 | 14.4 .1958 |
| Blanik |  |
| Eagle |  |
|  |  |

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For this third edition C. E. Wallington has reshaped the book according to the way pilots have tended to use it and has revised it 10 include recent developments. The book now takes account of international weather
conditions.
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## Book Rewiews

Patter Notes for Instructors with Cassette Recording by W. G. Scull. Published by the BGA, price $£ 3.70$ including p\&p.
As a member of the Instructors' Committee one is too frequently confronted during tests for the full instructor rating, by candidates whose eloquence on the ground is belied by the inadequacy of their oral performance in the air. Nowhere in gliding is good oral communication so necessary as during a pupil's first few flights, and this communication relies entirely on the commentary, or "patter", the instructor uses as he gives his demonstration of each aspect of the basic flying techniques. The latest example of Bill Scull's prodigious industry on our behalf is a cassette, pre-recorded with a form of patter, and an accompanying booklet of amplifying notes and explanations. The package covers effects of controls, turning, use of trimmer, and symptoms of, and recovery from, the stall.
As Bill explains in his introduction, a large part of each instructor's course is devoted to the way the basic techniques are taught. Necessarily a degree of standardisation of patter is aimed at and a lot of time is spent perfecting this patter. But the courses are shorter than they used to beseven days instead of nine - while discussion of modern soaring techniques and the problems of operating and supervising the flying of modern sailplanes are now essential additions to the syllabus. More and more pre-course study has Become necessary and the new cassette with notes is seen as an excellent way of giving each course member a preview of the requirements and some practice at using the words himself. The cassette - a standard type using 4 mm tape running at $4.5 \mathrm{~cm} / \mathrm{sec}$ - is intended to be used on the ground and in the air, so the budding instructor would need the use of a small portable cassette player to take aloft.

Bill is at pains to emphasise that he is not aiming at producing stereotyped instructors, each like ". . . a parrot perched on the student's shoulder". His sole aim is to shorten the learning time on the instructors course, so leaving more time for the advanced techniques which recent experience has shown to be necessary. The patter he uses is carefully tailored to be practicable in the time available in an average circuit.

The new system could have some snags, of course. Acquisition of a plausible set of words might lead some budding souls to believe they had already mastered the quite considerable skills required as an instructor. and pre-condition their response to the material which is presented during the course proper. To counter this, use of the cassette would need to be carefully monitored by the club CFI. It should be made available only to genuine applicants for the instructors' course. and to existing instructors as brush-up and standardisation material.

The notes accompanying the cassette are not without minor blemishes and might have benefited by additional editing. For example the Concise Oxford Dictionary is quoted, but is then inexplicably referred to as the OED. Occasionally the notes slip from direct to a third-party mode of address and back again, while a paragraph entitled "Choice of Words" includes, with equal apparent emphasis, words which should, and which should not, be used during aerial demonstrations.

Any apparent anomalies are quite easily resolved, however, and should not deter any CFI from acquiring the package as essential equipment for pre-instructor training and for standardisation of basic instruction at his club. And just think! For another $£ 1$ or so - the price of a blank cassette the club. using the portable recorder, could allow each instructor to record his own everyday performance with real pupils. He may wish to replay the result in private but the lesson, started by Bill Scull, would be driven firmly home!

JOHN WILLIAMSON

Weather Flying by Robert N. Buck. Published by A. \& C. Black, London. Available from the BGA at $£ 6.25$ including p\&p.
This is a difficult book to review for a British gliding magazine because it was written basically for American aeroplane pilots. But this should not deter any pilot anywhere from reading it, because it contains in a very readable form the distilled wisdorn of a lifetime of flying.

Bob Buck first took to the air when he was 14, in a home-built glider, and some $40 y$ yrs later retired as a senior TWA captain. He still flies both aeroplanes and gliders, and along the way researched the insides of thunderstorms (intentionally) in a Black Widow fighter.

For a glider pilot, even one who has no intention of entering cu-nim, the thunderstorm chapter is of real interest. particularly the descriptions of where severe turbulence is to be found. However, on lightning strikes.
although the author makes the valid point that the size of surface damage may be small, he does not mention the need to make a really thorough inspection inside the wings and the aircraft generally, where hidden damage may be serious - important for the glider pilot doing his own maintenance.

Weather Flying is a chatty, rather than a technical book, but it does contain useful and often lesser known bits of information, such as the considerable extent to which an altimeter will over-read in extreme cold, as when wave flying.

ANN WELCH

## FORTHCOMING EVENTS

MAY 3-14: Inter-Service Regionals, Little Rissington. Glos.
MAY 6-14: Dunstable Regionals, London GC.
MAY 19-28: Hahnweide International Contest, Kirchheim/Teck, W. Germany.
MAY 20-29: Nationals, Lasham Gliding Society, Lasham.
MAY 28-JUNE 11: European Motor Glider Contest, Feuerstein Airport, Nürnberg, W. Germany.
JUNE 2-11: Swiss Nationals, Grenchen.
JUNE 3-11: East Midlands Regionals, Buckminster GC, Saltby, Lincs.
JUNE 3-15: Trans-European (long distance rally), Angers, France.
JUNE 17-25: Scottish Regionals, Portmoak, Kinross.
JUNE 17-25: Competition Enterprise, Devon \& Somerset GC, North Hill.
JUNE 20-29: USA 15 m Class Nationals, Ephrata, Washington.
JULY 4-13: USA Standard Class Nationals, Marana Airport, Tucson, Arizona.
JULY 15-30: World Gliding Championships, Chateauroux, France.
JULY 20-29: OSTIV Congress, Chateauroux, France.
JULY 22-30: Southern Regionals, Booker.
AUGUST 1-10: USA Open Class Nationals, Chester, S. Carolina. AUGUST 5-13: Northern Regionals. Yorkshire GC, Sutton Bank, Yorks. AUGUST 19-28: Euroglide, Bristol \& Gloucestershire GC, Nympsfield.

## The Romanian Newcomer



Thas is the 15:32, the new Romanion two seater mentioned briefly in the fost aswe, p31, and more fully by sob Rodwell in the Augus, 1977, iswe I' Window Shoppang in Paris p156), when he gave the fechnical data and o three view drawing the UK apent is Vickers. Slingsby.

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Distributor of Hamilton Instruments The British Gliding Association's AGM was held at Keble College, Oxford, on March 18, during the BGA Weekend which will be reported on in the next issue. The following are brief extracts from some of the Annual Reports.

Instructors Committee. A record number of instructors, 105, were trained during the year and only three failed to reach the required standard. There has been some improvement in the standard of candidate for the assistant instructor course though some still aren't prepared sufficiently well. which takes up the National Coaches time going over what should be familiar ground. Instructors' Committee members have offered to visit clubs and help in the preparation process if the CFI feels this would be useful.
Although the experience level needed for the assistant and full instructor rating was increased last year there hasn't been a shortage of candidates. There were 50 successful full category tests, which is about $50 \%$ of candidates. The format of the assistant instructor course has been changed slightly. After seven days training candidates are asked to return a few months later for the final two days of their course, and $70 \%$ have done so. This is so that subjects such as airfield supervision, solo pilot supervision. check flights and flight safety can be discussed by the new instructors after having had some practical experience in instructing.
A small study group from this Committee was formed to look at the likely instructional needs for the next five years, particularly advanced training. It was recommended to the BGA Executive Committee that a programme of advanced training should be started and Sports Council assistance is being sought to buy a high-performance two-seater for task weeks, escorted cross-country flights, dual crosscountry flights and wave flying training in the winter months.
Safety Panel. Of the 119 accidents during the year. 50 were substantial and 69 minor. This is a $15.6 \%$ decrease compared with 1976 ( 141 accidents) but the launch rate decreased by 8.38 and the hours flown by $25.5 \%$. Of the 30 people injured in 27 accidents, there was one double fatal, ten serious and 16 minor. The disturbing factor emerges that eight accidents involved "pedestrians" and in six the "pedestrians" sustained injury. in one case serious. Incident reports also show two cases of injury to "pedestrians".
There were two other areas of concern - a large increase in occurrences (five accidents and one incidence) due to airbrakes opening unnoticed, although invariably the pilot appreciated something was wrong, and two incidents and two minor accidents, all potentially fatal, due to misrigging. In some cases the misrig had apparently taken place two or three days before. suggesting daily inspections may have been less than thorough.

The report also mentioned the substantial reduction in the number of accidents involving low time (less than 100 hrs ) pilots. While this could be pure chance, the Chairman. Arthur Doughty, reasons it may be indicative of raised standards of basic training following on from intensive instructor training courses of the last few years. The accidents involving 100 to 500 hr pilots may ako lend support to recent decisions by the Committee to concentrate more on the teaching of soaring techniques.
Competitions and Badges Committee had a busy
year with one of its many activities being the introduction of a 750 km diploma, along the lines of the FAI 1000 km diploma, for flights of this distance starting in Britain.
Development Committee. The Sports Council revised its system of grant aid to include loans, also raising the upper level of grant available. A satisfactory number of gliding club applications were successful during the year. The Committee has been involved in the Sports Council projects on Centres of Excellence and Preparation Training Schemes. Proposals have been accepted by the BGA Executive Committee and forwarded to the Sports Council.
Technical Committee. During the year 106 new registration numbers have been issued to gliders, of which 50 were new machines and most of the others second-hand imports. The total number of active gliders registered with the BGA is approximately 1255 . The Committee has continued to encourage clubs to develop the technical capability to carry out the routine inspection and maintenance of their own machines and there are now 291 active BGA Inspectors.

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The structural safe-life of metal gliders, and in particular the LI3 Blanik, has taken a great deal of time and effort and a survey was made on each Blanik operating in the UK. The proforma analysis has been passed to the manufacturer and negotiations continue.
DIY construction is limited to not more than four or five projects, which include the American "Duster" design. (The lack of original design activity in the UK is consistent with the overall state of the aeronautical industry.) A design competition for a multi role club glider is being considered.
Philip Wills Reserve Fund. The present balance stands at $£ 5250$ and of this $£ 2000$ is on offer to one club for buildings. A further $£ 2000$ is temporarily earmarked for another club to buy land.

## STOP PRESS

## AIRSPACE LATEST

## Kemble Restricted Area

There has now been a Restricted Area introduced at RAF Kemble (See A/C 6/1978) as from February 1. 1978, to protect the Red Arrows aerobatic team. The area extends 5 nm radius and up to 6000 ft agl during the notified hours of Kemble Airfield ie 08.30-16.00 local time Monday-Friday or when promulgated by NOTAM.
Gliders may not enter this airspace without prior permission either by contacting the Air Traffic Control Unit on Kemble (STD 028-577) 261 or by contacting the ATC Unit on 130.1 MHz .

Provided that the area is not being used by the Red Arrows during that period, pilots will be given clearance to transit although there may be other forms of flying and training in progress. and all pilots must take the usual precautions while in the vicinity. Glider pilots are asked to give as much notice of an intended crossing as possible, in the event that the restrictions are in force, due to aerobatic training. This area will not normally be active on weekends. Please ensure that you have read the relevant NOTAM or AIC.

## Wanted: (please) colour slides of glider accidents - with details if possible to Bill Scull e/o BGA.

## Gliderwork <br> C of A OVERHAULS and REPAIRS

By L. GLOVER senior inspector


Husbands Bosworth Airfield. Near Rugby Tel: Husbonds Bosworth 880375


Philip in his Skylark 3 (No. 13). phofographed in 1959.
With the death of Philip Wills on January 17 at the age of 70 , a great mass of British gliding history seems to have suddenly shifted into the past, to be temporarily resuscitated by the great number of friends from that past who packed St Clement Danes Church in the Strand at the Memorial Service on February 3. His part in that history has been well covered in his books On Being a Bird, Where No Birds Fly and Free as a Bird; so here it would be best to concentrate on a few events of special significance which reveal the sort of part he played in that history.

The records show that he began gliding, not in 1932 as widely stated, but on April 9, 1933, when he arrived at Dunstable in his own Fox Moth light aeroplane, qualified for his A and B Certificates (No327 in the British list) and tried for his C, there being a moderate west wind. But, the Club News writer (Sebert Humphries) refers to "the Fox Moth owner's unique Prüfling landings on assorted and highly unusual parts of the landscape". One, I remember, was due to an attempt to cross the projection known as "The Bastion" instead of flying round its windward edge. But, being an intellectual rather than an instinctive flyer (the two categories into which the Germans divided their pupils, Kopfflieger and Gefühlsflieger), he soon got the hang of it and gained his C Certificate on June 17, 1933.

Then came the news of the first British thermal flights by Eric Collins in Wiltshire. Philip was not there, nor had he attended Hirth's lectures earlier in the year, so he invented his own thermal technique, starting with a furn towards a suddenly lifted wing, using first the club's Professor and then a Scud 2 in which he had bought a share, coming out in mid-week as well as weekends. It is character-

Philip prepares for take-off in his Skylark 3 on a maiden flight at the Long Mynd in 1956.

istic that he eventually wrote a series of articles in S\&G telling readers all he had learned. Collins, by contrast, never wrote up any of his flights, and we were only able to publish accounts of them because one or two people, like Ashwell-Cooke and Geoffrey Bell, had the knack of getting his story out of him.

Because of all this I soon got to know Philip in his Chelsea home and his City office. After aviation (and presumably his shipping and export business), his greatest interest appeared to be in music, especially Rachmaninov's Second Piano Concerto; he could play the popular theme from the last movement by heart - also the tuneful middle section of the same composer's $G$ minor Prelude, and the Choral from Franck's Prelude, Choral and Fugue (not the Franck Choral for organ played at his Memorial Service - had he asked for the other one?).

His office revealed his strong business sense; it consisted of a number of small rooms, and, on taking over from a relative, he had installed windows in all the internal walls so that, he said, the staff should no longer spend their time reading novels.

## For a while internal politics



But before the end of 1933 Philip's elation at the discovery of this marvellous sport became tarnished by his getting mixed up with the great quarrel between the BGA and the leading gliding clubs which I outlined in S\&G for December 1974, p252. He heard by chance that. the London Gliding Club had disaffiliated from the BGA on the grounds of its extravagance and incompetence, and he was obviously determined that an activity in which he had become so involved should not put up with such a situation, so he wrote a letter to S\&G to ask what it was all about and why the members of both bodies had not been told. He soon found out which side he was on but, like others, grossly underestimated the time it would take to put things right. I remember his words: "You can't tell the truth about these people because it would be libellous." The offer of a Government subsidy for gliding only prolonged the quarrel, as the "others" were determined to get their hands on it.
The matter was finally settled at a meeting in London of the whole London Gliding Club on the request of the Air Ministry, at which Philip circulated reprints of a magnificent letter he had sent to S\&G (November 1934) setting out the club's case; how the BGA Council had only eight club members and 22 others; how, during a spell as BGA Treasurer (an appointment made in the hope of keeping him quiet) he had gone through the BGA files and seen how "first one club or person and then another had been first irritated, and then infuriated, by the incompetence of the BGA ..."; and finally: "My resignation has been in the hands of the President for some time... If the charger could also be loaded with the willing heads of Mr

A. E. SLATER

England and a very few others the battle would die a natural death." (Gordon England, three years Chairman, could scarcely believe his eyes.) The meeting voted almost unanimously not to re-affiliate to the BGA until it changed its constitution to represent the gliding clubs. Philip, needing a change after this long and bitter quarrel, was fortunately able to take a business trip to Japan.


## Sutton Bank but no Good Friday flying

Simultaneously with this affair, he put in an immense effort to establish a "National Gliding Centre" at Sutton Bank, to be run by the Yorkshire and neighbouring clubs. His reason was actually meteorological; more cross-country and altitude flying was essential to British gliding progress; it was difficult to contact cloud lift from Dunstable Downs with an escarpment of under 250 ft , but Sutton Bank had an escarpment of over 600 ft , a rough figure already accepted in Germany for a take-off for cloudland. He collected a loan, but the Ecclesiastical Commissioners, who owned the land, were at first sticky about Sunday flying; however, they were persuaded to climb down as far as a sole ban on Good Friday flights. And at his instigation a wealthy resident in the district, Major Shaw, not only helped the scheme but enabled Slingsby to create his factory at Kirkbymoorside by investing the needed capital.

As if these activities were not enough, 1934 was also the year of the first British Silver C badges. It was a race between him and Eric Collins. Philip, after a 56 mile record flight in March, needed only the duration, whereas Collins needed the distance, so it was a meteorological race between a good thermal day and a good west wind day. The thermals won and Collins became the first British Silver C pilot with international number 26 (just after Hanna Reitsch). Philip's west wind then obliged and his international number was 45

An outstanding month in pre-war years was April 1938, when an unstable north-easterly blew nearly the whole time and British cross-country flights totalled 1016 miles, mostly from the Cambridge University Club's camp in Wiltshire and an aerotow rally near Leicester. Philip had just received his Minimoa from Germany and contributed 250 miles to this total, entailing 700 miles of trailer driving by his wife Kitty. These included a flight of 110 miles from Leicester to a country estate whose owner came up wearing the Old School Tie (Harrow) and was delighted to see Philip wearing the Old School Blazer. Finally a magnificent flight of 209 miles from Heston to Cornwall which, fogether with a subsequent height record of 10080 ft at Dunstable, won him the third Gold C in the world.

An earlier pre-war event was the first International Contest on the Wasserkuppe in Germany, in which he flew his entirely Britishdesigned Hiordis; as one result of this experience he introduced a marking system for the first time into the British Nationals, to the displeasure of a few old hands who asserted that they only flew for fun. I see that there is little room left for Philip's post-war activities,


Kitty, the perfect gliding wife, adjusts Philip's "Aying hat" before launching at the 1959 Nationals ot Lasham, where he flew three tasks before leaving to compete in and win the Dutch Nationals.
which were great, but his fundamental contributions to the establishment of British gliding in its early days are little known to present-day readers, if at all, and the memory of them deserves preserving.

Post-war flying activities include winning of the 1952 World Championships in Spain, when he overtook the young French pilot Pierre by having the good fortune to be launched directly into a strong thermal at the beginning of a rather short race. The whole British party celebrated this first British international win with a memorable dinner, but the officials refused to confirm it until after their siesta, which was most awkward for British newspaper correspondents. Philip continued to represent Britain until the 1958 World Championships in Poland, at which, on one of his flights, he decided he was a bit tardy in recognising a change in the atmospheric conditions, attributed this to his advancing age and altruistically decided that he must now give up World Championship flying so as to give younger pilots a chance.

But he continued flying in other parts of the world: visiting France, Holland, Italy, Yugoslavia, the United States, Australia and especially New Zealand, where he had relatives, with its terrific lee waves.

Oddly enough, it was not until the 1954 World Championships
Waiting for the rain to stop at North Hill in 1974 when Competition Enterprise was launched, due to Philip's inspiration. Photo: Tony Smallwood.

that he made his first wave cross-country flight, and he was comparatively late in crossing the Channel, being the only pilot to be obliged to search for lift over the sea - he relates, in his article " 1 too can cross the Channel," how a passing cargo plane saw him and alerted the Air Sea Rescue service, saying that "the pilot seemed to be lost, as he was going round in circles

Coincident with all this flying were all his tremendous administrative services, which others will be writing about. It was a wonderful life, devoted to the sort of flying which aviation prophets down the centuries imagined would be the first, and perhaps the only, type of flight that man would achieve.

## Appreciations

Ken Wilkinson, Vice-President and former Chairman of the BGA Philip was a man whose aviation interests were wide ranging and whose experience in many branches of the art was profound, stemming as it did from responsible involvement in whatever he touched.

The gliding world, with good reason, regards him as rather especially their man, because he was one of the pioneers who demonstrated time and again to pilots that there were new frontiers to conquer and, in addition, taught the movement how to organise itself and look after its interests. He was always out there in front showing how it should be done and expounding with irrefutable logic why things should be that way.
The clarity of vision that he always displayed in arguing such matters as the freedom of the air and the nature of risk were well matched by his persistence in pressing home the attack whenever he saw violation of the basic principles he held dear. There is no doubt that the gliding fraternity's enjoyment of its sport today would have been much diminished without Philip's constant fight over the years to preserve its freedoms. He sometimes said in reflective moments, that he had enjoyed his gliding so much that he felt he owed it to coming generations to see that they had the same opportunity; no one could have done more to ensure just that, and I am sure he would like to be remembered for it, more than anything else.

The same clear sightedness and ability to act decisively underlay his wartime success in ATA. The task of creating a safe and efficient aircraft delivery system required original thinking of a high order some of Philip's ideas on this are on record in the Journal of the Royal Aeronautical Society and they display the same ability to get to the heart of the matter that he demonstrated in so many other fields.

If one needed another illustration of this, his support for Coanda and his "effect" is perhaps a good example: Philip had an unquenchable belief that Coanda had something important and gave him practical and financial support at a time when no one was interested. It now, of course, is the basis of such diverse developments as fluidic circuits and high lift military transport wings.


Lord Brabazon presents the Frank Foster trophy to the joint winners, Philip and Nick Goodhart, at the BGA Ball in 1963.
Unfortunately the application was too late in coming to reward what was a remarkable piece of intuition.

I had the pleasure, for two short years immediately after the War, of working with him in BEA, where some sort of order had to be introduced into the newly burgeoning world of air transport. Philip took on the difficult task of starting up the technical operations side and had Flight Operations, Communications and Engineering as a somewhat troublesome troika to guide. It was also a time of chaotic and unrealistic ambitions on the aircraft manufacturing side when BEA was expected to support the pet civil projects of an over inflated wartime industry which had a long way to go before it got down to peacetime fighting weight.

He had no doubt that the Viscount was the important future for European operations and gave it his unswerving backing; indeed, his departure from BEA in 1948 was largely due to his disagreement with a wavering in support for the project. It has to be said, in fairness, that improvement was necessary before a competitive airliner was produced and this improved V700 version was ultimately to form the backbone of BEA's fleet for many years, but that was after his departure.

## WINTER BAROGRAPHS

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Before he went he had set a new style in the maintenance branch by bringing in Hugh Gordon from the manufacturing industry, a move of fundamental consequence which radically altered the management of this branch of the business in a way which shows to this day in the merged British Airways.

Philip's many achievements as a pilot hardly call for comment from me - they are probably the best known of his exploits in the gliding game. This is not only due to the intrinsic interest of what he did but because he wrote so well about it. It was not simply that he could write a wonderfully descriptive piece but that he could also make the reader understand, quite painlessly, his analysis of the significant features of a flight - at times it was as though one was reading a detective story - it added a dimension to one's appreciation of the art which was peculiarly his own. One had a glimpse of the intuitive cum analytical flair and airmanship that distinguished a great glider pilot from a capable practitioner. I wonder how many people have been drawn into the game by just that gift of putting into words what it is all about?

For more than 40 years Philip has been a towering figure in the gliding movement and now we have to get on without him - but not without his ideas and philosophy, which he has recorded for our benefit; nor without his legacy to the movement, which is all around us in a flourishing and well ordered association which owes a large debt to his creative thinking and activity.

## Rear-Adm H. C. N. Goodhart, former British Champion

It was my privilege to work with Philip Wills on one particular problem - airspace for gliders to fly in. It fell to me to deal with the numerical aspects, but it was Philip who provided the inspiration and commanded the respect of all with whom he had to deal. He successfully combated the conventional wisdom of the period, which demanded the total exclusion of gliders from all airspace used by commercial aircraft.

But it was as a competition pilot that I knew him best. In the early post-war years competitions were a far cry from today's fixedcourse racing. They had been moulded by that small group of pre-war pilots of whom Philip was the archetype. These competitions had a wonderful quality about them; a sense of mystery, of the unknown, of harmony with the air, of almost unbearable excitement as you waited for the pilots' telephone calls to learn who had made the best flight. It was nearly always Philip who would call late in the evening, telling of yet another fantastic achievement. He had an uncanny knack of seeking out weak lift at low altitude in the evening, and staying airborne while lesser mortals fell to earth. When finally even he had to land, he would put down in some pocket handkerchief of a field which an ordinary pilot would have discarded as totally impossible. Then another mystery would manifest itself; his wife Kitty would turn up in the car with the trailer within minutes, perhaps two hundred miles from the starting point and entirely without any communication other than telepathy. I never did discover how, in her delightfully vague way, she nearly always got it right.

In those early days the mere ability to stay airborne and go somewhere was a major achievement. It was this above all that we learned from Philip, for he was always willing to pass on to a tyro his own hard-earned experience. His peak as a competition pilot was reached in 1952, when he won the World Championship in Spain. It was probably from about this time onwards that the post-war crop of glider pilots began to assert themselves and competition flying began to move inexorably towards closed-circuit racing. Philip was against this trend, but it would hardly have been possible to refuse the new developments; glass-fibre structures, radio, oerodynamic improvements, racing techniques. He was quite
right nevertheless, and we lost a whole quality of life in the gliding world, a quality so closely allied with the attributes of fellowship, sportsmanship, understanding and devotion to the cause which made him the fine man he was.

## Roger Barrett, Chairman of the British Gliding Association

Philip and gliding were as near as you will ever get to a round peg in a round hole. He found what he described as "the most absorbing sport of all time", and glider pilots for generations to come are going to benefit from that decision in 1932.

Born with a brilliant and creative mind, Philip acquired a rarer attribute - a high degree of wisdom. Always interested in the world of ideas, he developed a clear philosophy that he was able to apply during his 19 years as Chairman of the BGA.

Philip Wills ${ }^{*}$ premise was that a degree of risk in life is essential to the progress - and indeed to the survival - of society. He went on to define the role the State should take - and, more importantly, not take - in regulating affairs so that the individual has the maximum of liberty.


Philip was famous for his smoke rings. This photo was taken at a commiffee meeting with Basil Meads (centre) and Bill Mackworth-Young.

Throughout his life Philip fought against any red tape, rules and regulations that could not be seen rationally to be necessary. He attracted some highly competent men and women to work alongside him in applying his philosophy to gliding, and from them we have inherited an incredible legacy. In what other form of aviation in Britain, let alone elsewhere, are neither state pilots. licences nor aircraft registration required? But the confrontations with the powers that be over airspace in the 1960s stand out as the most significant of Philip's many battles on behalf of those of us who fly for fun. He and Nick Goodhart took on the conventional wisdom of the time with logical arguments about collision risk. The result may not have been a complete victory, but there was certainly a change of attitude from which all sport pilots continue to derive benefit.

Philip wrote about his libertarian philosophy and these times in Free as a Bird (1973). His other two gliding books, Where no Birds Fly (1961) and On Being a Bird (1953), describe his love affair with the air. His marvellous descriptive writing in On Being a Bird encouraged me to take up gliding, and I am far from being alone in drawing inspiration from him. Philip was a quiet, sensitive man with great strength of character and integrity. He was generous, and had a gentle humour and a unique way of filling a pipe. Kitty and the children made up the gliding family par excellence. They now have the affection and sympathy of pilots wherever gliders fly.

The Gaffer has gone and it is the end of an era for us. British gliding today is what it is because of Philip Wills. We are proud of our heritage.

## Operations

During the year ending September 30, 1977 (1976 figures in brackets), civilian clubs flew a total of 84004 (110822) hours from club sites from 302428 (329801) launches.
Club owned gliders totalled 317 (301) and privately owned gliders 789 (731). The combined Services flew 23864 (26369) hours from 91009 (102169) launches.

## Certificates

Certificates were issued as follows: A and B endorsements 1890 (2229), C endorsements 120 (193), Bronze C 516 (657), Silver C 286 (451), Gold C 45 (93). Diamond goal 93 (102). Diamond height 16 (51) and Diamond distance 7 (37).

A and B certificates were applied for by 1080 (1200) holders of the ATC proficiency certificate.

## TURNING POINT PHOTOS

A number of official observers have inquired whether the requirement emphasised in the last issue (p30) for turning point films to include a photograph of the task declaration means compliance with all the provisions of FAI Sporting Code para 2.7.2

The only answer the BGA can give is "yes" Although the BGA is represented at the CIVV meetings which decide the Sporting Code rules. and indeed has had a significant influence in recent years, the BGA has no power to vary the requirements for the awarding of FAI International badges. Minor departures in procedure can be considered on their merits, but regrettably following the rules is the price we have to pay to maintain the integrity of FAI awards as genuine achievements of which we can all be proud.
Chairman BGA Competitions G. W. G. Camp, $\begin{gathered}\text { (\& } \begin{array}{c}\text { Badges) } \\ \text { Committee. }\end{array}\end{gathered}$

## CHURCHILL AWARD

The Churchill Award of $£ 100$ a year is to assist a project organised and carried out by an individual glider pilot. Eligible projects must include flying and could, for example. involve meteorological research by glider, development and flight testing of new instruments, or investigation into some quite new aspect associated with gliding.
Application forms are available from the BGA and the closing date is May 31 .

## TECHNICAL NEWS

There is a new three year certification scheme for tugs which come into effect after April 1. The Light Aircraft Maintenance Schedule scheme is in two categories: public transport/acrial work and private, the latter having an "on condition" engine TBO and pilots will be eligible to carry out 50 hr inspections.
Therefore, BGA clubs should renew their tug $\mathrm{C}^{\prime}$ ' of A in the private category. The BGA has
taken legal advice and this category covers all bona fida towing of club members by tugs operated by club members and does not qualify as "hire and reward". Likewise, the hiring of tugs between clubs (provided significant profit is not invoked) is deemed not to be "hire and reward" in the commercial sense. (Ref Article 90 and Schedule 9 (a) of the Air Navigation Order.)

Further advice will be transmitted as and when available. Meanwhile CAA Notice 87 authorises a one year extension of current two year C's of A.

## YOUR TIME IS PRECIOUS - SAVE IT:

Each year the number of privately-owned gliders increases and with it the number of radios. Each year the plea for better radio discipline seems more urgent.

At a recent count some 600 ground mobile radios were registered for use on the glider frequencies. If each base had a glider anxious to talk to it, and all the gliders were within radio range of each other, then, in a five hour period a typical day - each would have a total ration of radio time of just 30 seconds!! The situation isn't really quite that bad. From 5000 ft over Husband's Bosworth, for instance, a glider could probably hear only half of the registered radios - so one minute! And there are two channels - so two minutes! But that's all!

## Economy.

To squeeze the most out of your two minutes, strict message economy is vital. The pundits already know and appreciate this. Some practical tips may help the newcomer.

1. Cut back on call signs. With two way contact established, voice identity is usually enough.
2. Use simple messages to convey the idea of your progress back to base. Exact positional information is difficult to convey and usually unnecessary. "One six - first leg, 40 miles. going well," would be ample in good visibility and away from congested glider routes. Otherwise use a simple position report for the benefit of other pilots as well. "One six, three miles south of Basingstoke, at cloudbase." This warns local pilots of your presence.
3. Save time by omitting the "Do you read?" routine. Transmit your (short) message first time. If they read, they will acknowledge. If not they probably wouldn't have heard your "Do you read?" either. Repeat the message and finally sign off "Nothing heard - one six out."
4. Use standard acknowledgements:
"Roger"- I hear you and I understand.
"Willco" - I hear you and will comply (with your instruction, etc).
"Say again (height/place)" - repeat only relevant part of message. I heard the rest.
5. Simplify channel-changing:

Pilot: "one six - change channel acknowledge."
Base: "one six - changing channel - go."
No need to quote the new channel frequency. With only two to choose from, it's obvious.

## Priorities.

Finally a couple of ground rules about message priorities.
130.4. This is the prime operational channel. Cloud-flying "pairs" must be given absolute priority. If you hear two pilots maintaining vertical separation by radio, keep quiet until they are clear of cloud.
130.1. This tends to be the "natter" channel. Remember that it is also used for startline organisation in all contests. For his flight to count, a pilot must be observed at the line. Peak period is the first hour or so of good soaring and at times the startline radio traffic is almost continuous. There will be a contest somewhere practically every day from May 1 so please be a good neighbour and respect their situation. Next time it may be your start call which is jammed out!

John Williamson,
Chairman of the BGA Radio Committee

## BGA Note.

A comprehensive Glider Radio Handbook will be available this year. Draft copies will be distributed to club Radio Officers.

## JUST NOT ROOM

Although we have four extra pages, there has been such a heavy demand on space in this issue that a number of articles and letters have been held over until June. Our apologies to those contributors who have been disappointed.

## CAN ANYONE IDENTIFY IT?

With thanks to Hans Zacher, recently retired from the DFVLR (German Research and Test Institute for Aeronautics and Space Travel), and the many other "detectives" who wrote in, the photo in the last issue p15 has been identified and is, according to Hans Folgmann of Duisburg, that of a Krähe 2 owned by Wilfried Kohnen of Heinsberg-Straeten.
The Krähe was designed by Fritz Raab, and built by Anton Spiegelsberger of Münich. They

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| Wing fouding ( $\mathrm{g}_{\mathrm{g}} / \mathrm{m}^{2}$ ) | 24 |
| Empty weight (ky) | 230 |
| AUW dyt | 340 |
| Max yped ( $\mathrm{km} / \mathrm{h}$ ) | 120 |
| Cruising speed ( $\mathrm{km} / \mathrm{h}$ ) | 95 |
| Glide ratio | 1:20 |
| Sink (m/ mec ) at $65 \mathrm{~km} / \mathrm{h}$ | 1 |
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## GLIDING CERTIFICATES

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| :---: | :---: | :---: |
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| DIAMOND HEIGHT |  |  |
| No. Name 3/329 A. T. Mellor | Club | 1977 25.10 |
| 3/329 A 330 D. A. Benton | Bratol 8 Glos | 28.12 |
| 3/331 R L Meyer | Cranmell | 4.11 |
| 3/332 5. Hymers | Four Counties | 1.178 |
| 3/333 E.C. Neighbour | Derby \& Lancs | 1.1 .78 |
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| 647 R.1. Wiliams | Inperial College | 29.12 |
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| A. T. Mellor | Fulmar | 25.10 |
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| D. 1. Soker | Chilterns | 26.10 |
| T. Roland | Thames Valley | 26.10 |
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# OVIERSEAS <br> Please send news and exchange 

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## AUSTRALIAN NATIONALS

This year's contest, held at Narromine. NSW from January 3-14, was marred on the second contest day when John Trevithick of Canberra had a fatal accident while (it is assumed) attempting an outlanding.

The 81 pilots entered flew in three Classes with 19 in the Open. 23 in the 15 m and 38 in the Standard Class. Visitors included Swiss Champion. Herbert Frehner, flying a Std Cirrus in the Standard Class: Ivan Evans, New Zealand Champion. Nimbus 2 in the Open Class, and the designer of the LS-3, Walter Schneider of Germany, flew a LS-3 hors concours in the 15 m Class. The Open and 15 m Classes flew the same tasks throughout the contest.

The contest started with a 320 km triangle for the Open/ 15 m Class and a 271.5 km triangle for the Standard and all but five pilots completed the course.

Two days of bad weather followed and the 251 km triangle set for all Classes on January 6 resulted in early outlandings which included the fatal accident mentioned above.

Fast times were recorded on Day 3 with triangles of 463 km for the Open/ 15 m and 384 km for the Standard Class. Some of the unfortunate few who had to land out were involved in very long walks and time consuming retrieves.

Day 4 - A 346 km triangle for the Standard and 380 km quadrilateral for the Open/15m Class. The day had started well but deteriorated rapidly during the afternoon and only 12 of the 79 pilots managed to scrape home. the others littering the countryside for miles around, and long and wearisome retrieves became the order of the day.

One pilot damaged his glider while being towed off an agricultural strip and one landed back at base when, shortly after take-off, he lost his canopy in flight.

Day 5 - The Standard Class were set a 413 km triangle but the task for the Open/ 15 m was revised to a 337 km triangle after launching had been delayed for an hour to 12.30.

As it turned out the long 185 km first leg was a hard grind for the Standard Class pilots, but with improving conditions later in the day, all but five completed the course. The Open/15m Class had an easier time on their shortened task in improving weather, the fastest speed being $126 \mathrm{~km} / \mathrm{h}$ in the Open Class.

Day 6 - After two non-flying days triangles of 286 km for the Open $/ 15 \mathrm{~m}$ and 245 km for the Standard Class were straightforward with lift up to 6 kt to 6000 ft .

Day 7 - With a good forecast the tasks. a 538 km quadrilateral for the Open/ 15 m and 433 km for the Standard Class, produced good speeds, the fastest for the day being $117 \mathrm{~km} / \mathrm{h}$ for

Ingo Renner in the 15 m Class. Only three pilots landed out.

Day 8 - Quadrilaterals of 334 km for the Standard and 369 km for the Open/ 15 m Class were super tasks for the last contest day with thermals up to 10000 ft , only two pilots failed to complete the course. The 75 pilots who made it provided plenty of excitement for onlookers and crews with some spectacular finishes en masse.

Leading Results: Open Class, Malcolm Jinks. Tony Tabart and Terry Cubley. 15 m Class. World Champion, Ingo Renner. John Buchanan and Maurice Bradney. Standard Class. Herbert Frehner of Switzerland, Geoff Cleland and John Rowe.

The team selected for the World Championships: Ingo Renner. Malcolm Jinks. Tony Tabart and John Buchanan.
Condensed from information received from Bill Pitl of Sydney

## CHATEAUROUX

With 103 pilots representing 29 Nations entered for the World Championships, to be held at Chateuroux, France, from July 15-30, it is no doubt going to be a busy time for the organisers.

Although not all pilots or machines have been named indications are that all three Classes will be fairly evenly divided. Bolivia and Luxembourg are sending one pilot each for the first time. Of the 84 pilots named so far 55 have flown in World Championships before, leaving at least 29 new hopefuls.

Surprisingly Yugoslavia is not on the entry list, neither is East Germany, otherwise the East European countries are well represented.

Both South Africa and Rhodesia have nominated the maximum of four pilots. In order to avoid an Olympic type of situation all participating National Aero Clubs will be asked to state in writing, well before the start of the Championships, that no objections will be raised to these countries taking part.

## ARGENTINIAN NATIONALS

These were held during January at Gonzales Chaves, south of Buenos Aires province.

Adverse weather conditions resulted in only six days for the 28 pilots in the Open and five days for the 22 pilots in the Standard Class.

The National 500 km triangle record. however, was broken by Luis Urbancic at $83 \mathrm{~km} / \mathrm{h}$ in a Nimbus 2, and Alberto Araoz broke the 100 km triangle two-seater record in a Janus.

Roberto Rizzi, Kestrel, the winner, and Jorge Riera, Austria SH, second in the Open Class, as well as the winner of the Standard Class. Nestor Reinoso, K-6, have been selected to represent Argentina in the World Championships later this year.

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Last year, 1977, was my 11th successive year of competing in the French International Mountain Competitions. The year before (1976) after the firse race it was announced that the British had won both competitions, Justin Wills the Standard Class and myself the Open Class. This was followed by joking, "If the British do this again we will stop the Competitions." Unfortunately my photo of the second turnpoint was imperfect and I was not the winner after all. Last year (1977) there were three Classes, The Open, and "Course", defined by the new unlimited 15 m Class, and the Standard. Justin Wills won the "Course" in his Mosquito (see "Britain's Airborne Invasion of France - 1977", S\&G October, 1977, p207).

To give an idea of how he flies, on the last day, a Cat's Cradle, I just scraped home with 400 ft to spare and a thumping heart, as the last six miles was at 400 ft . Justin arrived with 500 ft in hand, took a photo of the turnpoint and flew up the valley as far as he could to a field to gain 3 kms . I should explain that I have a horror of landing out and rarely leave an aerodrome or an area of flat fields unless I have plenty of altitude. Hence I do not score very well, but nobody enjoys themselves more than I do. Justin's crew says he always glides out to the limit.

In this competition I was handicapped in several ways, my Mosquito was new and had flown a total of only four hours. It had many bugs and teething troubles. The wings would not hold their water. The wheel brake was almost useless and the canopy needed many Karate chops from the outside to close it. Long grass on some aerodromes bent the undercarriage door hinges three times, and although I wrote for new hinges it took the manufacturers two months to send them. Now superior water valves have since been fitted to the wings by Tony Hanfrey, who also promises that the manufacturers are producing a modification to the canopy so that the pilot can close it himself
from the inside, which at the moment cannot be done.
However, on the plus side, the Mosquito can win competitions. It scored first and third in Euroglide. The cockpit is roomy and comfortable, visibility is better than most, and the wonderful airbrakes are supreme holding the speed to 90 kt in a vertical dive without waterballast. This means that if the brake is used in a steep dive to the flareout, somebody, some day, is going to find that the vertical interia is so great that a high speed stall will occur on flareout and a nasty cruch will be the result. It nearly happened to me in Germany in 1976 when I flew the prototype. The push pull of the stick prevents PIO. The stability is so good that even in thermals it is possible to use two hands to attend to the requirements of nature without the risk of unfortunate consequences. Having a tailwheel prevents awful ground loops, and also makes ground handling so very much easier.

## FLYING CLOSE TO THE ROCKS

Of the competitions themselves, when thermals and anabatic upcurrents permitted, the Mosquito without water could almost keep pace with the Nimbus and other Open Class gliders. With the anabatic winds up the steep slope of a mountain ridge, one can fly much closer to the rocks on account of the very quick response of the ailerons. Banking from $45^{\circ}$ to $45^{\circ}$ only takes three seconds. The rolling on effect of a strong anabatic current is similar to the wind gradient that one is used to on flat aerodromes, but on a very steep slope it tends to roll the glider into a turn towards the rocks. The slow response of the 20 m Nimbus made one very cautious when getting into the strongest part of the anabatic currents.
The competition on July 22, 1977, deserves special mention. An out-and-return task of

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308 km to Chamrousse near Grenoble was set. At Chamrousse the turnpoint was the lower station of the ski-lift. The Met briefing was the most wonderful any of us had ever known. Strong lift to cloudbase at 13000 ft was the forecast for the second half of the course, and everybody was suitably excited.

The start was very good, cruising between 80 and 100 kt along cloud streets at 8000 ft taking us to the promised land where the cloudbase was going to be 13000 ft . However, when we reached this area there were no clouds at all. Sinking to mountain top height of around 6000 ft it was discouraging to find that even the anabatic winds were very weak. On reaching the Pic de Bure, whose flat top is 9000 ft and which had steep sun-facing slopes, with several other gliders I struggled to gain height without success. Soon they all went off to the shadow side of the mountain. Thinking that they must know something, I followed, and found a sun-facing textbook ridge about seven miles long. Here the anabatic winds were quite non-existent, and to my amazement I found myself looking down on $8 / 8$ clouds covering the area of the turnpoint.

With a sinking heart in a sinking glider I turned back towards the plain where there was an aerodrome, Gap Tallard. I only just managed to clear the saddle and received no lift from thermal or anabatic source. I only had enough height to make a proper approach and landing. Later on the weather improved and I was able to fly home. Now the most fantastic thing came to light, Justin Wills flew below that $8 / 8$ cloud and took a picture of the turnpoint from below it, and finished the course. Flying with such skill it is no wonder that he won the competitions.
For me there is nothing to compare with the wonderful joy of mountain flying. Along one ridge up to the Fort of Dormillouse, one expects and does climb gaining 1500 ft while no more than $20 f$ above the rocks. On arrival at the top there is often such a strong thermal that it breaks through the inversion, and the view from there is magnificent. Where in our country can you indulge in low flying at great altitude? Mountain climbers wave from the peaks when only one wingspan away. Before, during, and after, it all seems like a fabulous dream. I am always conscious of the very great privilege of being allowed to see such wonderful sights which only we glider pilots can enjoy. As Edward Heath says "There are moments of intense beauty." Life is enriched.

## EAGLE ATTACKS PILOT

An Italian glider pilot. Antonio Boozzi, was attacked by an eagle when flying at $4500 f$ over the Arpone mountains near Turin on February 8. He described how the bird came straight at him like an arrow, crashed through the cockpit and tore at his flesh.

He estimated he battled with the bird for about three minutes and eventually got his right hand round the eagle's throat - "it beat at me and then went limp".

Antonio later commented: "It was the uttimate fear. But I shall continue to fly."

# your <br> letters 

## THE RULE MAKERS

The article by Dave Watt in the December issue of S\&G, p254, has brought a flood of letters. Some of the first were in the last issue, p36, with the pick of the rest printed below.

## Dear Editor,

Dave has about 1000 hrs on gliders with 2000 hrs powered flying and has held the CFI endorsement since 1971. He says he has "had to enforce several rules 1 personally disagree with" over the years.
It's no good. I can't help it. I have not been able to treat Dave's article with the contempt I feel it deserves. I'm afraid if it is not answered some of our less experienced pilots may feel he has a valid case. His points are unfortunately a little disparate, but I shall attempt to put my own side of the argument as I am probably one of those to whom he objects.
The various points he makes basically-break down into having a go at the CFIs and criticising the mindless enforcement of the rules they have made. With the criticism I would agree, the "having a go" I object to.
It is very easy to criticise someone in a position of authority and responsibility. However, in my experience, in many clubs the CFI is not so much chosen from a host of suitable applicants but is the only one prepared to take on the job. Many of his pilots have more experience and perhaps even more ability than he has, but for that he cannot be blamed. If you feel that your CFI has less experience than yourself, you should be giving him help whenever you can. That will of course include constructive criticism, but if you can't help him then don't hinder him by moaning about him to others. If, on the other hand, you agree that he has more experience than you then I suggest you listen to him.
Dave considers that a private-owner should be allowed to do as he likes "provided he doesn't endanger anyone else". However I would stretch that to read "provided he doesn't endanger or inconvenience anyone else". Freedom of the individual must not be allowed to interfere with the majority's interests. I have no objection whatsoever to Dave ramming his car with his glider provided that he pays for the damage out of his own pocket. If he claims from his insurance policy and thereby increases my premium, then I'm afraid it is my business.
Low finishing and low flying are in many cases quite safe, but in a club environment which includes inexperienced pilots in the circuit, the finisher must ensure that he keeps out of everyone's way. They should form part of advanced training, be properly taught and only be flown at club sites under controlled circumstances.
The main question is: "Why are rules made in the first place?" In an ideal gliding club every pilot has been imbued with enough airmanship to understand exactly what he is doing, how it affects himself and others and just how far he can go while still safe. Unfortunately this situation doesn't exist; as the accident reports show, man is fallible.
So as the ideal doesn't exist, we must replace it with supervision. Each pilot is made to understand, by an instructor who knows him well, exactly what his own limits are and he is allowed to fly to these limits. Because the instructor is keeping an eye on the pilot's actions, he can spot possible hazards before they become dangerous. Where have you seen such a Utopian arrangement? Nowhere. In a small club the instructors are too overworked to make it work and in a large club no one knows enough about any individual pilot to supervise that closely. Even if it were possible, such supervision would involve more dual flying, comprehensive briefing and debriefing, all of which is resented by most pilots who just want to go flying with the minimum of interference.

Nonetheless, we have got to try and avoid accidents, if not to protect the pilots involved, at least to protect third parties and certainly to reduce everyone else's insurance premiums. So something has to take the place of close supervision, and that, I m afraid, is the rule book. Rules can never stop an accident from happening, but they can impose general limits
within which an ordinary pilot can gradually and safely build up his experience, ability and airmanship with little outside interference.
The rules have been set for the average pilot. However, at some stage in his flying, every pilot decides that he now has enough experience to look after himself. It is at this stage that the rules must be rigidly enforced, because now is the over-confident time when he is going to try and bend or break the rules. The more often he does it, the less likely he is to survive it, because he does not possess the necessary experience or ability. Only after he has survived this stage and matured as a pilot can he start to question the rule book.

The first thing our experienced pilot can do if he thinks a particular rule is bad, irrelevant, over-cautious or just out-dated, is to discuss it with his CFI. He can bring it up at an instructors' meeting. If the arguments against his case are too strong, he can put himself up as a special case as an individual. He can say to his CFI: "I think I personally have enough experience and skill to look after myself. I am a responsible pilot and 1 would like to fly outside the limits imposed by this rule." If you think you're that good, why not? I think if you can prove to your CFI that you are that able and responsible, he would allow you to fly to what he considers to be your limits, which would probably be mutually acceptable. This effectively means that the top pilots in the club are close to receiving the ideal supervision I talked about earlier.

However, before you moan about his saying "No", just remember he is not only responsible for the standard of instruction on his site but for the safety of those flying from it. How many nightmares do you have about going to someone's front door and telling a wife that her husband has just killed himself by crashing during a beat-up which you said he was capable of doing safely?

Lastly, I would point out that no matter what you may be allowed to do on your home site, when you visit another site you are expected to get to know their rules and fly to them. That may not be good airmanship but it is common courtesy. If you want to do something out of the ordinary - and I don't care if you are the best aerobatic pilot in the world - ask first. If you don't, you will get no sympathy from me when you get banned from that site by an over-sensitive CFI who has had to make that nightmare trip twice in the previous year.

## Huntingdon, Cambs.

DAVE COCKBURN

## Dear Editor,

I have read Dave Watt's article with considerable pleasure. He is to be congratulated on an exposé of a growing menace affecting mannerable conduct on the gliding fields, as well as gross interference in affairs that are usually the province of the CFI and assistants. Your magazine is also to be commended for publishing the article, since there can be very few pilots with the dash and skill of Dave Watt amongst your readers. But the "Rule Makers" appear to be legion and cannot fail to recognise themselves, with attendant offence I fear.

However it is not, I hope, an article to be read by management and dismissed "as a bleat" by one disaffected but skilled pilot. The problem goes deeper than that, for the pressures that are placed on those who are somewhat unconventional are becoming greater with the result that there is less and less individualism. If you are a person of normal convention who accepts and abides by the standards of the majority, it is natural that you will make an attempt to get the rest of humanity on the same lines. This is known as herd instinct and no bad thing at all for life, as we know it, would be difficult without the discipline it maintains. But the unconventional, who are often amongst life's most talented, need on occasion special support from authority and that means acceptance of certain risks, for to spend a life avoiding areas of danger is to the unconventional, hardly living at all.

Your author's unerring accuracy for description is remarkable, for few of us have his flying skill, but most will have met those characters whom he describes. How often does one become confronted with some flying arbiter, who, almost beside themselves with controlled rage, tell you how to prolong your life and, at the same time, indicate the loss of it would not be a major tragedy? The answer must lie outside the realm of flying: this strange need to reduce all to a common level must be more deeprooted than I could describe.

I merely hope that those who have authority over flying matters, indeed all management areas, will try to understand that individual capacities can only develop to their full potential if the avoidance of the creation of too many rules is maintained. Many of the rules regrettably enough are created to cover a certain amount of incompetence and, indeed, should an error of judgment occur, authority can always point to some rule that has been broken, thus covering themselves against blame.
We need a variety of thought as well as action in this life and the
tolerence of a few idiosyncrasies, even dangerous ones, seems, to me, essential. From my point of observation I am of the opinion that, for sheer joy, a mixture of flying talent, a little eccentricity and maybe some youthfulness creates a character worthy of preservation and encouragement. The squalid levelling of the mindless rule makers should not be allowed to make a life that is less abundant in excitement and beauty than it might otherwise be.
Denham, Bucks
KEN WHITE

## Dear Editor,

Dave Watt has raised several points which are valid and many of us will find ourselves in agreement with his attitude that it is entirely up to us to risk our own lives and gliders providing we do not endanger others. However, if we are honest we shall probably have a nasty feeling at the back of our minds that he has overstated his case. May we suggest that the clue lies in his remarks about towing gliders behind cars. He writes that assembled ab-initios only gain from the example of a private-owner glider which has run into the back of a car, because there was nobody on the nose to stop it. It is our belief that the example which will impress the inexperienced is the private glider which does not come to harm. The effect being that the first glider that finishes up modified by the back of the tractor will be the club two-seater! "The pundits all do it and I thought we would be OK." is a valid argument.

If this is the case, and we are sure it is, how much more does it apply to low turns and scraping down to 300 ft ? Of course it's fun to do beat-ups when there are no pupils about and all the other things that experienced pilots have done at one time or another, but not when everyone is watching.

We suggest that the reason we have more freedom and less official interference in this country, than any that either of us have flown in, is that, on the whole, we have sensible rules and the sport is voluntarily very well administered. The problem is for somebody to make only sensible rules and see that they are carried out. Do remember that if you are told off by a less experienced "fuddy-duddy" pilot for breaking the rules, he is right and you are not, even if it is only (on the face of it) for your own good.
Only a few clubs are big enough to have professional CFIs present at all times, who know each pilot's capabilities and are able to say, as D. W. advocates, "that was all right for him but not for you". It is small wonder that the club instructor who may only be on duty twice a month retreats behind a sensible rule rather than be responsible for a possible incident.

Dave Watt, as well as having 2000 hrs gliding and tugging, is a professional airline pilot. With that sort of experience and training under your belt it should be relatively easy to monitor your own deficiencies, but is it safe and fair to advocate anarchy to the pilot who may only fly (and able to afford) 15 hrs a year?

Incidentally, his comments on Olga Korbut are a load of rubbish. Nobody to our knowledge has suggested that ab-initios be banned from seeing the Nationals!

## Marlow

CHARLES LAGUS
Hilversum RICHARD WADE

## Dear Editor,

Dave Watt's article raises some good points, but they are basically the application to gliding clubs of arguments which are essentially political. Undoubtedly there are clubs which are little banana republics and when another club opens in the vicinity its members leave it in droves. There is often little the BGA can do about it since they may be small clubs run by the only individual who has any experience and, although he only has one eye, he has to be king.
Individuals in authority will naturally tend to make their positıons more powerful and secure for good or bad motives. They may over-legislate out of a misplaced belief that with enough rules nothing would ever go wrong or they may put down someone capable who is a threat to their own sense of importance. I think in this situation the principle that applies is you must never use your public position to settle a private squabble.

One of the questions in the written examination on air law was "what is the maximum length of tow rope which you can use?" When we complained about the stupidity of this question we were told if the candidate has learnt his air law thoroughly he will know the answer. My own view is that an intelligent pilot does not learn rules parrot-fashion but memorises only those facts which he considers important, so in fact anyone who is stupid enough to memorise such a useless fact ought to be failed. There is some knowledge which should be in your head and some which is best left in the textbook.

Yachting runs on an honour code: if you sign a declaration at the end of
a race you are assumed innocent until proven guilty. If you don't sign, no questions asked. We do this in gliding. We assume you did not cloud fly in controlled airspace and if you do you will probably gain a lot of points unfairly and no one will know about it. If a commercial aircraft hits you we will all know about it.

I think this is the crux of the matter; rules or no rules, people in authority must generate an atmosphere where people take these matters very seriously and it is difficult to be strict about one matter and sloppy about another. It is right that pilots should debate the pros and cons of rules, because only in this way can the best consensus be arrived at, but in general we in this country have greater freedom, eg cloud flying, than anywhere else and the only way we can hang onto it is by intelligent self-discipline.
Marlow Common, Bucks.
BRENNIG JAMES

## Dear Editor,

Dave Watt's article was, to say the least, interesting. I have a nagging thought, though, that after a few more hours exposure to the sport an element of humility might creep into his flying, although it might be a bit late for that now. Humility and its close relation self-criticism are nearly obsolete nowadays.
I agree that one should think positively, not negatively and in a restrictive way, about flying discipline (sorry about that word). Dave, don't you think it's just possible that club senior instructors know their local conditions and possibly hazards, well enough to offer advice on them? Don't you also think that some of the rules we are now saddled with are the result of a number of glider pilots demonstrating that they cannot be relied upon to behave in a reasonable manner?

Nobody wants too many rules. In my 20yrs in the sport 1 have never felt over-legislated in the UK or anywhere else, except by ministerial neddies. This is a different argument and, in any case, this aspect of our affairs is already being dealt with very competently on our behalf. Neither has it ever occurred to me to fly at someone else's club site without paying them the courtesy of accepting a briefing and, if they wish it, a site check. For the life of me 1 cannot see anything wrong with this concept, 750 km triangulator or not.

One excellent point which came out in the article was the plea for more flexibility in club operations and the comments on the fixed circuit directions for gliders and tugs were timely and valid. The old adage of rules being for the blind obedience of fools and the guidance of wise men surely still applies now as much as it ever did.
Woomera, S. Australia
MIKE VALENTINE

## INSTRUCTION NOT INSTRUCTORS AT FAULT

## Dear Editor,

I was most interested to read "Instructors - A Worm's Eye View" (S\&G February, 1977. p9) and its product "The Rule Makers". I agreed with both these but almost even more so with the letter by M. Wells - "Are Gliding Courses Good Value for Money?" (S\&G December, 1977, p276). "That's Gliding" is too ready an excuse for inefficiency and I agree that the advertisements for some courses really infringe the Trade Description Act. However, instructors are all human like the rest of us and it would be unkind and unfair not to emphasise that nearly all of us owe our lives as well as the pleasure we have had gliding to an instructor at some time or other.
It seems to me, really, it is instruction more than instructors that is at fault and I would suggest that all logbooks have a front page listing the sequence of information to be imparted, and at least three columns for instructor's initials so that any one step is ticked off by three independent instructors. It might even be worthwhile putting in a column or two in the comments page wide enough for a tick and indicating that a spin and a cable-break exercise had been undertaken during that flight. Basic information seems to me to be lacking at times and even CBSITCB needs overhauling. The first CB should be undertaken outside the aircraft although it seldom is. That was the point of the SIT but sit which has been rather lost by the conversion to SIFT.
An excellent exercise, which I think is original, is for anyone when doing instrument checks to shut their eyes, put their finger on the tip of their nose and then on the command "variometer" or "ASI" put the finger directly to the instrument commanded without opening the eyes. Unless you can do this unfailingly you will be searching for the instrument when in the greatest possible hurry and need.

The really tedious thing about gliding for the ordinary club member is the waiting about which is most frustrating on nice days and very

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unpleasant in the winter. I would suggest that not less than three people. whatever their flying stage, should be allotted to the winch, one an experienced driver we hope, one under tuition and one learning his way around the general winch duties and the winch itself. The same might apply to the retrieve vehicle although it makes a crowd on a tractor, while one member of each retrieve party should be sufficiently advanced to give detailed instruction on a plane and parking it and the niceties and details of the DI. I wonder how many DI's are made by opening the inspection covers and gazing vaguely inside without any specific targets to look for. One could, I think, carry on like this all over the page but my message is that it is no good asking a member "Are you checked out for so and so" if the checking out system is not being progressed by experienced tutors. Boylestone, Derbyshire

RANDLE LUNT

## GLIDING COURSE ADVERTISING

## Dear Editor.

Prompted by Bill Scull's remarks in the last issue (p36) I would like to comment on M. Wells' letter. I share his view entirely, I have been approached twice in the last couple of months by complete strangers at social functions who. on hearing gliding being discussed, have joined in the conversation and then confessed to being disappointed at the treatment they received on courses. They had both been customers at well known gliding clubs and the complaints were similar to those mentioned by Wells with the addition of an occasion when there was only one instructor present who went soaring in a single-seater!
Several years ago I did one or two courses and am a great believer in them as they are by far the best way to learn about gliding. As an adventure holiday, however, they can be a disaster - witness the complaints - and this is where I think we are wrong. We should not be advertising courses, except to budding pundits, and if seekers of adventure holidays come along to sign up we should do our best to dissuade them. Tell them all the dreadful things that go wrong, like bad weather, winch failures and cable fumbles, and if they still persist then they must be pretty keen and surely it is only the keen ones we want.
I often wonder what the "wastage rate" is on courses, people that never come back again. and I suspect that it could be $90 \%$ or so. If this is the case, can we justify all the work and effort involved, especially if at the end of the day all we have is a handful of disgruntled customers?
Robertsbridge, Sussex
P. L. CYSTER

## THE GREAT NEED FOR CROSS-COUNTRY TRAINING

## Dear Editor,

The article "Cross-Country Training" by J. D. Spottiswood (S\&G December, 1977. p242) was most welcome and encouraging. This type of training is needed so badly that 1 feel 1 mus: write to encourage Mr Spottiswood to develop his plans further and to keep his enthusiasm high.

I started gliding in July, 1976 and since then have logged about 100 hrs . 180 launches and gained a Silver C and Diamond height. Whilst this progress has been good. the path ahead is somewhat daunting. Everything in front of me requires me to be a competent cross-country pilot $300 / 500 \mathrm{~km}$.

Frankly, for the past few months I have been puzzling how to cross this barrier - your article indicates help is on its way. Not too long I hope! I had suspected that the lack of cross-country training was particular to the club at which I fly, but judging from your article this is not the case. A common attitude when I raise the problem is "you can stay up - so go". This does not get over the hang-ups which I have:
a) Landing out and the risks involved - I lack experience having landed out only twice. Somehow the Motor Falke and an instructor as insurance policy is not the same.
b) When 20 km out staying up seems twice as difficult. The familiar thermal sources surrounding the home field are left behind without any replacements having appeared.
c) Whilst navigation might be easy with an engine, in a glider you don't have a chance to look at the maps for fear of bumping into the ground. My home airfield hides in cloud shadow if I venture away so how will If find a strange turning point or my way home?
Yes with this sort of training gliding will be twice as much fun. I hope my response is encouraging and that the BGA can implement Mr Spottiswood's ideas early this coming season.
PS: Save me a place on the first course!
Heyshaw, Yorks.
STEPHEN SAMPSON

## COMMENTS ON KEEPING THE STRING STRAIGHT

Dear Editor.
The arguments in Harry Cook's piece (S\&G February, p18) about keeping the string in the middle when circling could do with some amplification.


At 43 kt and $40^{\circ}$ of bank the radius of turn is 195 ft . If we assume the yaw string is mounted 10 ft forward of the GC and the rudder is 15 ft aft. Fig I shows the situation when circling with the fuselage centre-line tangential to the circle at the CG. Under these circumstances the fuselage is yawed $3^{\circ}$ at the yaw string and $4 \frac{1}{2}^{\circ}$ at the rudder: these values are of course out of plane with the yaw string and rudder so, as far as the latter are concerned, the yaw angles must be multiplied by $\operatorname{Cos} 40^{\circ}(0.77)$.
Fig 2 shows the same glider being flown with the fuselage tangential to the circle at the yaw string, ie the string central. In this case there is an increasing yaw angle along the fuselage amounting to about $2 \frac{1}{}^{\circ}$ at the wings and $5 \frac{3}{3}^{\circ}$ at the fin and rudder. This is clearly unsatisfactory since the wings will produce a rolling moment into the turn which will require even more "holding off" aileron than that necessary to overcome the speed difference between the inner and outer wings.

Since the fin and rudder already have $53^{\circ}$ incidence with the rudder central it seems unlikely that top rudder will be required: is it perhaps that the need for a foot load to hold the rudder straight is mistaken for the application of top rudder. I have watched many gliders in thermals and they actually all carry some bottom rudder, though possibly still with a top foot load.
Thus, leaving aside the question raised by Harry Cook whether it is best to use some sideslip to overcome the drag difference due to "holding off" with aileron, there is a clear case for not having the string in the middle. How much off centre is a good question since we do not know how much yaw strings situated on what is substantially a body of revolution will amplify the true yaw angle. It is also worth noting that in a turn the ball and the yaw string do not read the same thing and should not be expected to coincide. Even if both were situated at the CG this would still be true.
Newbury, Berks.
H. C. N. GOODHART

## NOT CONSIDERED A FAIR COMPARISON

## Dear Editor,

Bill Scull at the start of his article on current two-seater gliders ("First Impressions", S\&G, February 1978, p14) says his comparisons may seem presumptious but are justified by the interest shown. The comparisons he draws come down basically to the Calif, the Janus and the Twin Astir, two other gliders, the Globetrotter and the ASK-21, do not exist yet and finally the IS-28B2 has a "lack of information"!
Comparisons I have always believed should be "like with like": how do you compare, then, existing gliders with those which exist only in the mind of the designer? Another point on comparisons - the prices are quoted variously as $£ 18000$, DM57750 etc, and $£ 9311+$ VAT for the IS-28B2; no mention is made of the fact that VAT is payable on all: no mention is made as to whether prices are ex works Germany, Italy, etc, the IS-28日2 is definitely ex works Kirkbymoorside and no mention is made of delivery, the IS-2882 being ex stock.
Finally - "we are surprised at the lack of information on the IS-2882!" Information who from? Bill Scull has not written to us for any information. In our "standard package" of information to customer enquiries we supply - (1) an abbreviated specification: the full specification is available for inspection at the works but is in the form of a book. (2) A copy of an article
which appeared in Flight, May 1975: this includes a polar diagram. Before making a statement like this one would have thought that Bill would have had the courtesy to write to us and check that the information he had to hand was accurate. The article comes over as a thinly disguised piece of advertising for the Twin Astir and should be labelled as such.
G. E. BURTON

Managing Director, Vickers-Slingsby
Bill Scull replies:
Im sorry to have upset Mr Burton: I can understand his dissatisfaction up to a point but at least 1 did say that the glider was worth considering. If we were wrong in our assessment of the glider - which is only to say that it wasn't quite what we wanted for the coaching operation (a consensus of opinion 1 would add) this is no reflection on the glider itself. Perhaps we could have an IS-28 to evaluate at either a type conversion course or a task week.

George has told us that they do have gliders available for test flights so perhaps Bill will fly the IS-28 and give us his views in a later issue? ED.

## WHY DON'T WE BUILD OUR OWN TUGS?

## Dear Editor,

I refer to the report by Dick Stratton in the December issue (p270) of the increasing number of write-off accidents and shortage of spares which could result in an acute shortage of suitable tug aircraft. This will come as no surprise to experienced people in the gliding movement. It is very worrying to consider that should a forecast be made based on the wastage figures of 1977 it is possible that we can run out of tugs in less than five years! The mind boggles to think of all this highly expensive GRP sat on the ground without launching facilities available.

In my humble view all is not lost by a very long way, especially with the experience the BGA has available. May I suggest to the BGA that the immediate and long term answer to the problem is for gliding clubs to build their own tug aircraft from drawings and specifications supplied by the BGA? After all. the PFA have been doing this for years. I think we could be making real progress if the BGA Technical Committee and a few aviation friends could find the time to put their heads together with a view to getting the self-built BGA tug off the ground in the shortest possible time.
To take the matter a stage further, I have been so bold as to list the requirements that come immediately to mind for consideration by the Technical Committee:

1. It must be a very basic, simple and strong airframe which is easily built with DIY tools. It must be simple. There must be no complicated jigging required.
2. Construct mainly of light alloy or at least an all-metal fuselage and centre-section which could be flat with dihedral in outer panels (Jodel style) providing a firm attachment for a wide track undercarriage. Outer panels of foam ply sandwich or glass-fibre.
3. Constant chord wing for ease of construction.
4. Good flaps to give good take-off and short landing facilities (plus airbrakes or spoilers).
5. Low wing configuration for good visibility.
6. Wide, strong undercarriage with largest available low pressure balloon tyres with modern non-fade differential brakes.
7. Single-seater aircraft preferable.
8. I80hp engine with cowling shutters to prevent engine cooling too quickly on descent.
9. Possible use of three blade propeller to reduce noise.
10. 30 to 40 gall fuel tank.
11. No expensive blown bubble type canopy, ie flat sides with minimum of framework.
12. Spare some thought to the position of the controls in the cockpit, ie come easily to hand, do not graze your knuckles each time the trim is adjusted.
13. Allow for installation of radio.
14. The overall design must be strong, simple and rugged and must not get bogged down with any sophisticated systems which cause a lot of problems, such as a tow rope reeling in system.
As a possible alternative to a special design it may be possible for the BGA to look at the feasibility of using standard components or designs currently available on the market, ie up-date the Condor with a single-seater fuselage or fit Piper Pawnee wings to a redesigned fuselage.

With the increasing popularity of gliding it would seem that a production run of about 60 tugs plus spares would not be unrealistic. Should this pipe dream come to a further stage of development let us keep three words in our minds the whole time, "Keep It Simple". No Sigma
type of fiascos please! type of fiascos please!
Gillingham, Kent
D. J. CLARK

## A PLAN FOR MORE FLYING

## Dear Editor.

As you know there are a number of gliding clubs that have weekend flying only, mainly due to Service use, ie operational RAF airfields. I for one would like more flying and have thought of the following method to achieve it.

Usually our club at Dishforth has an expedition to somewhere in the south such as Nympsfield or Inkpen. My idea would be for two gliders. each with a three or four man crew complete with a trailer, caravan and radio, to leave the site on a Sunday. The gliders would fly to the nearest full time gliding site, with the crews following by road. The next day another pilot would fly to another site selected en route working to the south, and so on through the week. ending back at Dishforth on the Friday evening. One pilot in the party would have to be experienced enough to set the task and take into account the weather, airspace hazards etc. Of course. full time clubs would have to agree on fees, launching the next day and
caravan parking. caravan parking.

## SWALES SD3-I5T

15m Metal \& G.R.P.

If the pilot does not reach his goal airfield, then the erew retrieve him and drive to the selected airfield. Telephone arrangements would also This be made in case of radio malfunction.
This method would give pilots of varying experience the opportunity to the weather is not good enough for a cross-country, perhaps local soaring would be possible or a drive to the next site en route.
Perhaps full time site CFI/Managers would give their views on this idea to me at the Clevelands GC, RAF Dishforth. Thirsk, N. Yorks

TONY SIMMS

## WHAT REALLY DOES HAPPEN ON THOSE COURSES!

Dear Editor,
Having read Crispin Masterman's account of his instructors' course (S\&G December, 1977. p251) I thought the Watergate cover-up had nothing on this! So here is the true unexpurgated happenings of the Instructors' Course.
My course was at Lasham last May with that untouchable god, that giant among men, Bill Scull. When I agreed to go along with fellow club member Geoff Harris, it was about November 1976 and May seemed years away. However, as the months went by and the dreaded week came, we both wondered what we had let ourselves in for.
There were four on our course and as we hid in the corner of the bar on the first evening it happened. Head and shoulders above everyone else, he appeared, looked around and obviously recognised us by the terror instilled in us. Having introduced ourselves, we had a friendly chat and he did actually seem to be human.
On the Saturday morning, after a chat about the course and the Falke, we had our first flight and came back into the briefing room feeling quite confident. That confidence was soon shattered. It appeared we hadn't done the elementary things. "Gentlemen I am appalled!" were his comments.
Our schedule was DI the Falke, have breakfast and into the briefing room. Do some flying exercises, de-briefing, take down more patter notes, more flying exercises and so the punishment went on and on. One night I actually fell asleep learning my patter notes. By Tuesday I thought suicide was the only answer. Bill did some nasty things to us. We spent hours learning one set of notes for an exercise, putting everything else out of our minds. If we were doing the aileron exercise for example, he would say "let's do the rudder first". This has two effects. First it made us forget the aileron patter and second it proved we didn't know the rudder drill.

Wednesday was certainly my worst day and if I had had my car with me I would have driven home. It was circuit planning and I spent the morning pacing up and down the airfield reciting my notes. I was so tense I made the most disastrous flight of my life. Bill's comment was "That was a pathetic attempt to allow the aircraft to arrive somewhere on the airfield."
After Wednesday things did improve, the pressure was reduced and some emphasis was put on soaring. At this point Brian Spreckley took over as Bill was going to Germany. To sum up it was the most trying, soul destroying, exhausting week's flying I've ever had and also the most valuable, informative and worthwhile. I couldn't have taken in as much information unless I had been put under such pressure so I can't thank Brian Spreckley and especially Bill Scull enough. If anyone has the opportunity to go on an instructors' course, under no circumstances should it be refused.

## Leeds

BARRY LUMB


CORRECTION In the toble included in the article in the last issue by Richard Fortescue, Ught Gliders p2, Min speed was given in $\mathrm{km} / \mathrm{h}$ instead of kt


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Borders GC say they don't wish to be outdone by the Concorde heading picture in the December issue and have sent us this shot of the Air Anglia Fokker Friendship photographed alongside their club gliderx

Copy and photographs for the June-July issue should be sent to the Editor, S\&G, 281 Queen Edith's Way, Cambridge CB1 4NH, tel Cambridge 47725, to arrive not later than April 11 and for the August-September issue to arrive not later than June 13.
February 15, 1978
GILLIAN BRYCE-SMITH

## ALBATROSS

As it is nine years since we last appeared in this section of S\&G, here is a brief resumé. We moved from the Salcombe site in South Devon to Burnford Moor near Tavistock, then to Davidstow airfield where roots have been steadily growing since October 1972. We have altered various buildings to take rigged aircraft and vehicles.
Since 1969 the club has sold the T-31 and the Bergfalke 2, the latter being stripped and prepared for recovering by members before it was bought by the Chivenor Flying Club. Our club fleet now consists of a T-21. Prefect and K-6, although plans to make changes are being discussed. Our flying statistics have steadily improved, especially since the use of reversepulley launching, Our thanks to the Cotswold Club for allowing us to use their design and to Peter Rasmussen for its construction.

Congratulations to Bill Dyer and Roger Edwards who flew the first Silver distances from Davidstow and to Fred Sloggett for his willingness to test his retrieve crew's ability to navigate 25 miles on several occasions. We plan to run courses for club members again this summer and visiting pilots and anyone in the area are welcome at any time, though not powered aircraft.

Our thanks to Arthur Webb, our CFI, and to everyone else who makes a contribution and helps to add to the growing feeling of optimism about our future.
M.S.

## BLACKPOOL \& FYLDE

We are very grateful to the Sports Council for the offer of a grant towards a new solo glider. Our aim is to raise the level of performance offered to members unable to afford private ownership, with a robust machine, docile to fly. and very good value for money. Most new
gliders were ruled out on cost, while good secondhand machines are not cheap either, so we settled for the Swales SD3 with enlarged T-tail and 15 m wings, delighted to find that the best buy was British.

Fortunately Swales had just completed one, which we test flew and ordered for delivery as a complete outfit with radio, oxygen and trailer at just beyond $£ 6000$.
K.E.

## BOOKER

Our Twin Astir has at last arrived and the club fleet is now the best it has ever been with two $\mathrm{K}-13 \mathrm{~s}$, two single-seater Astirs, the Twin, 19 m Jantar, two K-6es, Pilatus B-4 and two K-8s plus two Super Cubs and an Auster.

A few good NW winds have been blowing lately and many members had some good ridge soaring. An expedition to Sutton Bank over Christmas was most successful and Tony Crowden gained his five hours on their ridge.

Planning has already started for our Regionals and we will be moving shortly from the "blue hut" into permanent accommodation.
P.J.M.

## BORDERS

We regret that our CFI, Charles Donaldson, has had to give up the post due to family and other commitments. Colin Golding has agreed to fill the post again on a temporary basis. His last "temporary" appointment lasted seven years so we expect to see him around for some time yet! The AGM in late February will see some further changes in the Management Committee,

The annual dinner-dance in February was attended by 80 members and guests who enjoyed an excellent evening. Chairman. Alan Urwin, reviewed the year's progress and the plans for the future. We are looking forward to a visit soon from Brian Spreckley and in March a
club expedition is going to Portmoak. We will also welcome the RAFGSA members from Four Counties in March. Some good wave flying has taken place since January, the most unlucky pilot being Andrew Bardgett who took off for a quick circuit in the Skylark and climbed to 12500 ft over Holy Island and the Farnes before returning . . . without a barograph, of course.

## BRISTOL \& GLOUCESTERSHIRE

Work is progressing rapidly on the upgrading of the bunkhouse accommodation, capably supervised by Dave Wales. New toilets and a shower block are also on the cards for early building and should make Nympsfield a much more pleasant place to spend a weekend. Our financial position is much improved over the last year or two and so we can look to the future with confidence.

Flying hasn't been very exciting recently but weak wave made several appearances over Christmas. We have had several film shows and lectures including one of particular interest on airspace by Rex Pilcher, Chairman of the BGA Airspace Committee. The new zone around Kemble is going to cause a few problems this summer but we are keeping our fingers crossed as to the long term effect.
R.A.R.

## BURTON \& DERBY



Ian Dale after going solo on his 16th birthday.
Negotiations for a more permanent home have become rather protracted so our stay at Ashbourne airfield is going to be longer than we at first thought. Now that we have use of part of the big hangar, club gliders can stay rigged and we have space to store equipment. We are also grateful to Mr Mooney who has offered space on his adjacent factory site for the safe parking of trailers and equipment.

Congratulations to Ian Dale who went solo on his 16 th birthday, the fourth to do so in our club. and flew three circuits to claim his A and B certificate,

The annual dinner-dance and the bonfire party in November were both enjoyed by members and friends. The usual winter maintenance is now underway.

## CAMBRIDGE UNIVERSITY

There were more than 165 members and guests at our annual dinner in St Catharine's College on February 11 when trophies for various achievements were presented to Richard Baker. David Guest. Hugh Joyce, Stephen Longland, Richard Walker and Sigfrid Neumann, Sigfrid collecting two.
A.N.

## CORNISH

Late last year we had a spot landing competition won by Bill Hosie Snr, one of our private owners. Work on our twin drum, self-laying, V8 diesel winch is progressing and the main platform is now being fitted.

Congratulations to Bill Lewis on gaining his Diamond height at Aboyne last year and to Colin McKenzie who flew to Land's End airfield - the first time it's been done in ten years. We have an Italian evening on March 11; arranged by Clive and Jackie Stainer.
A.L.J.

## DEESIDE

We had a very successful New Year week with wave soaring for six days. Many achieved Bronze legs, including Ronnie Allan and Janet Simpson who both had barograph faults causing them to miss Silver height claims. Malcolm Laing and Ian Brass (Aberdeen University) completed their Bronze C, Ian reaching 15000 ft before breaking off his climb due to lack of oxygen. His Gold height was a compensation. The lift in the 3-6000ft band was fantastic, but it generally petered out at $10-11000 \mathrm{ft}$. One timed by the CFI gave a vertical speed of 20 kt , while another flight reached 6000 ft and then landed for a total duration of 17 min .

The Bob Kerr memorial trophy, awarded annually to a member of Deeside, Highland, Cairngorm or Angus GCs, was won by Peter

Whitehead with a declared 134 km triangle. He received the trophy from last year's winner, Jim Jaffray, at a discotheque in the Skean Dhu Hotel.
D.I.N.S.

## DEVON \& SOMERSET

The soaring season is already upon us at North Hill. Several club pilots enjoyed 5 kt thermals on the first Saturday in February, in conditions lasting nearly four hours.

Our AGM saw Chris Slade installed as Vice-Chairman in place of Rodney Hobbis who has left us to work in London. Kevin Jenkins and Simon Minson were jointly awarded the title of most promising new pilots. Both had achieved their Bronze Cs within their first year of going solo. Other awards were, Tim Gardner (best cross-country); Dave Minson and Dave Reilly (for winning the task week): Brian Weare and Terry Jenvey (best placed in Competition Enterprise) and Eric Shore (top of the club ladder and best recorded height gain - 12000 ft ).

Peter Cooper and David Silverlock claimed the last cross-country of the year in early December only to be outdone by Julian Hine who landed out, 8 km away, on December 31.

Competition Enterprise will be from June 17-25 and our task week will start on July 3. Peter Cooper, an instructor, has organised a "mini" task week beginning on August 7.

The club dinner on March 3 is the first event organised by the newly formed Clubhouse and Amenities Committee chaired by Kitty Cooper. M.G.P.

## DORSET

Tony Brett arrived home from Canada in the New Year, after being in the Dart syndicate for three years, and actually flew it for the first time! Simon Rowbrey went solo at 16 with the attendant coverage from the local news media. Congratulations also to Jack Williams on completing his A and B certificate.

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Simon Rowbrey, another 16-year-old who went solo as soon as he was old enough.

Our newly formed Competition Committee wishes good luck to the Easter expeditions to Portmoak and Aboyne and would like everyone to note the task weeks are May 28-June 3 and August 27-September 2.
B.Mc.

## EAST SUSSEX

Peter Gresham recently returned from Germany with our latest acquisition, a new K-2 which now gives us two two-seaters. We remained operational throughout the winter and didn't lose many flying days. Many thanks to Joyce Head and friends for the provision of hot meals at the end of each day.

Another valuable asset during the colder months has been our new hangar. Without it we'd all have been a little less eager to get on with so much trailer maintenance and C of A work.
D.E.C.

## ENSTONE

Due to inclement weather there has not been much gliding recently but work on the club fleet and facilities has continued. Our K-7 is about to take to the air again after a complete overhaul and our tug is having a C of A as well as one wing and its fuselage refabricated.

Our new hangar will be erected shortly and we are hoping to buy a motor glider with the help of a Sports Council Grant. Thanks to profit from the tea wagon, a shower is to be installed in the clubhouse.

Yet more gliders are joining the private owners' fleet, Paul Lees having bought a Std Libelle and Martyn Wells a Mosquito.

## ESSEX

Derek Adlam has taken over as Secretary from Peter Johnson Snr. Our thanks to Peter and we wish him many happy hours flying the SHK which he now shares with his son Peter and CFI, John Wilson.
It was reported at our AGM that launches last year were well up and our financial state is reasonably happy. The Committee is seriously considering improvements to our club fleet and launching equipment. Good news, too, regarding our airfield at North Weald. Indications are that the local council may soon take it over and
our future tenancy prospects are beginning to look brighter for the first time in $15 y r s$.
We have been experimenting with 11 gauge piano wire on our reverse pulley launching system, having used 13 gauge previously. We would be pleased to hear comments from anyone else who has experience in this area. Our launch master is Tony Manwaring.
The second week of our Aboyne trip was a great success with Diamond climbs by Mike Jefferyes, Guy Corbett and Bill Medcalf. There were Gold heights by lan Barnes, Eddie Lipsky and Peter Perry.

Our annual dinner-dance was an enormous success - once again organised so well by Mike Audritt. Dave Appleby won the trophies for the longest flight of the year with his 320 km and for the highest ladder points. Mark Conrad received the novices trophy for progress and excellent work as a club member.

Our summer courses start in April and Tony Vincent is organising his usual flying week in May. Dave Appleby (Cirrus) and Pete Bartle (SHK) are in the Booker Regionals and Mike Jefferyes (Astir) is going to Saltby and Sutton Bank.

## ESSEX \& SUFFOLK

Tim Lewis, one of our American Air Force members, and Marion Doran went solo at the start of the year, Marion re-soloing after a gap of $15 y r s$. Our new K-13 has been flying for several months and is extremely popular.

John Wallis, who left to go south, visited us our loss is Lasham's gain where he is instructing on gliders and the Motor Falke. The Swallow, a syndicate glider for several years, has gone to Tibenham and been replaced by a Pirat. A BG-135 syndicate, should also soon be flying.

Several of our members are going on instructors' courses this season and are greatly needed to relieve the work load. March brings a din-ner-disco and our AGM.
C.C.S.

## HEREFORDSHIRE

There have been many successful wave flights this winter and we look forward to a crop of first solos early in the year. We have two Blaniks and a Motor Falke with arrangements made to buy a single-seater.

A recent beer and skittles evening, when we challenged the power pilots and the parachute club, was a resounding success. Our annual dinner is planned for early in the soaring season.
J.C.

## HIGHLAND

We managed to get our hangar finished before the winter storms set in and are appreciating the luxury of not having to rig and de-rig on these short winter days.
We have been able to contact wave quite often this season off the winch. though we frequently find that we are lying at the downwind edge of a bar, in all the sink, when the really big stuff is about! Our best day so far was December 3, when two pilots went to over 6000 ft , and Jeff Howlett took the K-6ck to

18000 f for a new site record. He had to leave the lift in a hurry, owing to the onset of darkness, thereby just missing his Diamond height.
Martin Knight got his Silver height in September and a month later John Macfarlane went to Gold height two days running at Aboyne. Andy Anderson and Mike Flaherty each got a Bronze half-hour in December and Colin Haddow went solo.
We have several new members, who are still with us, despite the gales and rain which have ruined some weekends. The K-6cr is briefly off line getting its C of A and a new coat of paint ready for the competition season.
On January 3, we had a thermal day (no joking) with convection up to 7000 ft , according to a Met report; our pilots had to leave the lift at about 3000 ft because of a 30 kt wind which was rapidly carrying them south into the mountains!
R.E.T.

## IMPERIAL COLLEGE

Over the Christmas/New Year period we had a most successful expedition to Portmoak, taking the club Skylark 4 (296) and Astir (96) and the privately owned Std Libelle (466) and Kestrel (43). Gold heights were achieved by Rob Williams, Ralph Martin and Stewart Bean. Rob's height, in the Astir, completed his Gold C and places him as our leading student pilot. Overall. a good expedition with over 50 hrs flying and 100000 ft of height gained during the two weeks.
Following all this flying the annual C of A season is something of a let down.

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## INKPEN

Everyone is going flat out on the seemingly never ending list of jobs to be done prior to our grand re-opening of full-time operation on April 1. We have recently taken possession of our new clubroom which has become available as a result of the general shift around of the various sporting bodies using the airfield facilities. Beneath the new motor racing grandstand there is now a full time bar and restaurant offering everything from pie and a pint to haute cuisine.

Our two-seater capacity has been increased by the acquisition of another Blanik from the Kent Club. Max Fendt, our Secretary, now owns an Auster complete with hook which he has made available to the club as a back up tug and we also have the use of a similar aircraft from the Western Air Training organisation. Now all we need are lots of visitors, so come and join us, if only for a re-launch.
R.G.W.

## KENT

Despite a rain soaked airfield we have managed to keep flying through the winter on an aerotow only basis. The K-7 has proved a useful addition to the club fleet and been favourably received by both instructors and pupils.

Some of our newer members have acquired a Skylark 4, bringing the number of privately owned machines to 13. Peter Kingsford and his workshop team have been busy working through numerous C's of A .
D.H.

## LAKES

In the roaring gales which swept Walney Island on November 11 Roy Partington's family size caravan made its first solo flight, but failed to gain an A Certificate due to a very damaging landing! However, it's an ill wind etc, and as the gales moderated and veered to the NW. good wave developed south of 2000 ft Black Coombe.
The flight out from the airfield to the "slot" was interesting. since the way was barred by a marker cloud at about 1200 ft and the only way to the Coombe was under the cloud where strong turbulence and sink pushed tug and glider down, and this some six miles from home! The reward came at the north edge of the cloud when the combination was literally flung upwards and CFI, Ron Hawkes, who was flying the tug, reported that the easiest way home was straight up to 5000 ft at a phenomenal rate of climb, and then over the cloud to Walney.
Peter Thomas and Neil Braithwaite gained Silver heights and other members made climbs to 8500 ft . Our Chairman explored the system to the south of Walney Island in his Kestrel and found a fourth wave, about 20 miles from Black Coombe, which took him to 6500 ft .
E.G.A.

## LONDON

The first cross-countries of 1978 were on January 1. Francis Russell (Kestrel) and Richard Brown (Weihe) set off from Dunstable to Little

Staughton, where a couple of club members run an aviation business. Unfortunately Richard had his calculator upside down or something and landed a few fields short (as JJ says, it's all character-building stuff!).

When the east wind wave hit fantastic heights of 8000 ft plus, JJ (IS-28 ), John Cardiff (K-13) and Francis Russell (Kestrel) competed for the highest altitude ( JJ made it by 50 ft ). Certainly from 8000 ft one could see the wave clouds oscillating into the far distance towards Wales. The west wind wave (secondary $\times 5$ from the Welsh mountains) was also explored successfully during January: this, however, had no real cloud indication to show its existence and was only really discovered by flying ( 2500 ft at Ivinghoe, 5000 ft at Aston Clinton, etc). The one similar factor of all these successful wave flights was the time of day they took place $07.00-08.30 \mathrm{hrs}$.

Gliders are changing hands at a rate never known before. We have, fairly naturally as the Schleicher agency is on site, six ASW-20s, two ASW-20xs, and two ASW-19s coming during 1978 and early 1979.

None of the "old" gliders are leaving: they have been bought up by club members, so that when the new gliders arrive there will be an enormous change-round. We expect the arrival of our sixth tug any day to help with the launching.

## MIDLAND

At the AGM, thanks were given to the retiring Committee members, Messrs Kimberley, Scarborough (now CFI) and Spicer, with a welcome extended to Messrs Allsop, Holmes and Woolf. Congratulations to our three new full category instructors, Dent. Ellis and Hawkes, and to lan Berry and Roy Guest on achieving Silver height in wave.
Jack Minshall has been extremely busy completing C's of A on our $\mathrm{K}-13 \mathrm{~s}$ and replacing the Roder winch engine. A K-6cr has been added to our existing fleet of three $\mathrm{K}-13 \mathrm{~s}$, two $\mathrm{K}-8 \mathrm{~s}$ and a Dart 17R.

True Christmas spirit was shown by our Chairman, Keith Mansell, and Vic Teague on Christmas Eve when they risked life and limb repairing our damaged hangar roof.
Our winter programme of lectures and films was well attended and of benefit to all. Our thanks to those who have taken part, especially those who just happened to be visiting at the right time (Vic Carr). We are organising a task week from August 5-13 under the supervision of Chris Day and all visitors are welcome.
N. and S. H.

## NEWCASTLE \& TEESSIDE

We have a new club fleet. The Olympia has been replaced by a K-7 to give early solo pilots more scope while supplementing dual training in the K-13 with the K-6e, bought with the generous help of the Sports Council, for the more experienced.

Congratulations to Alan Henderson and Andy Hardie for Gold height gains in their Cobra and to Alan Spellman on completing his Silver C.
G.M.T.

# ALBERT AND THE SEDBERGH 

## (with apologies to Stanley Holloway)

There's a famous gliding site called Tibenham
That's noted for fresh air and fun,
And Mr and Mrs Ramsbottom
Went there with young Albert, their son.
A grand little lad were young Albert, All dressed in his best, quite a swell, With a stick with a Skylark-type handle, The finest that Slingsby's could sell.

They didn't think much to the thermals, The bubbles were fiddlin' and small,
There was no cumulus and nobody soaring, Foct, nothin' to look at, at all.

So seeking for further amusement,
They set off without more ado
To see Falke and Oly and Skylarks,
And T-21 and K-13 too.

There were one great big glider called Sedbergh, Its nose was all covered with scars, It lay in a somnolent posture
With the end of its tail on t'grass.
Now Albert had heard about Sedberghs
How they was ferocious and wild,
But to see this one lying so peaceful,
Well - it didn't seem right to the child.


So straightway the brave little fellow,
Not showing a morsel of fear,
Took is stick with the Skylark-type handle, And poked it . . . at 21 's rear.

Now you could see that the Sedbergh didn't like it, For giving a kind of slow roll, It pulled Albert up close to the front end, And swallowed the little lad . . . whole!


Then Mr and Mrs Ramsbottom,
Quite rightly when all said and done,
Complained to the Duty Instructor,
That the glider had eaten their son.


The Instructor was quite nice about it, He said, "What a nosty mishap, Are you sure that it's your boy he's eaten?" Po said, "Am I sure - there's is cap."

The CFI had to be sent for, He came and said, What's to do? Po said, Yon glider's ate Albert, And 'im in 'is Sunday clothes, tool'

Then Mother said, "Right's right, young feller, I think it's a shame and a sin,
For a glider to go and eat Albert And after we'd asked to come in.

The CFI wanted no trouble,
He took out his purse right away,
Saying, "ow much to settle the matter?"
Pa soid, "What do you usually pay?"
But Mother had furned a bit awkward
When she thought where her Albert had gone,
She said, "Someone's got to be summonsed,"
So that was decided upon.
Then off they went to the police station, In front of the mogistrate chap,
They told him what hoppened to Albert, And proved it by showing his cap.

The Mogistrate gave his opinion, That no one was really to blame, And he soid that he hoped the Ramsbottoms Would have further sons to their name.

At that Mother got proper blazing,
"And thank you, Sir, kindly," said she,
"What? Spend all our lives raising children, To feed ruddy GLIDERS . . . NOT MEI.

FOOTNOTE:
Shortly after this outrageous incident the T-21 frightened a perspiring Condor tug, almost to the point of heart-failure.

As a result, the old girl was banished from the airfield and imprisoned in a wooden cage. If a suitable rehabilitation centre can be found, equipped with a healthy winch, she may well come out of "retirement" later this year.

CHARLES HALL
OXFORD

At the AGM in November, members voted overwhelmingly for a larger increase in the annual subscription than had been proposed by the Committee, proving that democracy is not dead. Ray Huntley became our new Treasurer. and about half the loan fund to which members had contributed for the Astir was repaid by balloL. We welcome Colin White as CFI, replacing Peter Brooks who has given the club three jears of valuable service.

Some unusual flights were made on December 4 when wave appeared above our flat
site in a south-east wind, with the ascending part conveniently located near the winch. Heights of up to 4700 f were available from about 1.00 pm until sunset.

The workshop has been booked solid with club gliders on C of A. For the first time we have five to get through. The fusclage of one K-13 was completety 3tipped and re-covered.

The Portmoak expedition was generally agreed a success although no badge claims followed. At home, recent first solos include Trevor Dodds.

RSRE (Royal Signals and Radar Establishment)
Who? Our founding fathers were a group of power pilots operating from the former Radar Establishment airfield at Defford. When the Establishment aircraft moved from Defford to Pershore, the club moved too but retained its company registration of Defford Aero Club Lid. Because of this the BGA still lists our statistics under Defford but please do not be misled into landing there: the place still looks lit.e an airfield from above but is stuffed with dangerous obstacles.

Unfortunately Pershore too will soon abound with traps for the unwary, as it closed as an airfield during 1977 and is now being converted to a general purpose trials area. Our tenancy is reasonably secure for the foreseeable future, but due to other activities on the site (plus the security aspects) we regret we can't encourage visiting aircraft to drop in. However, the club is active most weekends and public holidays and anyone can be accepted in an emergency, but please try to study our approach pattern and do likewise in case we are dodging round a temporary 50 ft aerial mast or something equally nasty.

The gliding section of the club started in the early 1970 s with the purchase at scrap value of an ex-ATC T-31 and Tutor. As we are unsubsidised and unable to seek Sports Council assistance due to MoD restrictions on membership. progress has been painfully slow and often frustrating. For example, during the glorious summer of 1976 we operated with a lone T-2I and were forced to impose a 30 -minute soaring limit, which at least gave us Bronze C legs all round.

Towards the end of 1977 we entered into a working relationship with the Birmingham University GC under which we now operate as a single club with a T-21, K-7 and Oly 463. Hardly Booker standard but we take a modest pride in at long last acquiring a fleet with which we can offer training from ab-initio to Silver C. With our first trailer due on site, we trust 1978 will be the year when we finally break out of the circuit and (literally) begin to go places.
C.A.B.

SCOTTISH GLIDING UNION
Although the year began well with a few weeks of good wave, the southern fringe of the heavy snow has prevented flying recently. The advantage of this has been to make more people available for construction work.

The Clubhouse Committee was reconstituted at the end of last year and immediately decided that top of the list of new projects was the bar
reconstruction, which has proceeded at an incredible pace. The old TV room and adjoining storeroom has been replaced by the new bar, resplendent with a stone fireplace.

Our calendar looks busy. Already scheduled are the CFI's seminar at the end of February, a BGA instructors' course at the end of March. the open day in May and a Vintage Glider Rally and the Regionals in June.

SOUTHDOWN
After 3 yrs on our new site we are still learning on January 7 in what appeared to be hopeless conditions we found that our ridge was once again producing a weak lee wave and a large but mild rotor. Pilots lucky enough to be around at the right time were launched into a low level wave with up to 4 kt lift.

Towards the end of January we took delivery of our K-8 which instantly became a firm favourite with the early solo pilots. The excellent wire launching capabilities of this machine indicate that 1200 ft launches can be expected and indeed a new site wire launching record of 1700 ft has been set by Alan Curry - all this from a field length of only 850 yds .

The mud which had been getting deeper and deeper by our transport hangar was dealt a blow when some 20 or so members spent Sunday morning hand laying a red brick road.

Our faithful old winch is getting longer in the tooth and a small group of winch builders have started to design a replacement unit. They would be pleased to hear from anyone who has built a winch in recent times, regarding availability of components, design parameters. etc.
B.A.B.

SOUTH WALES

Peter France has taken over as CFI from Danny Roberts who has completed his second stint. Phil Gould is in charge of relaying the drains to increase their efficiency while Lyn Ballard is busy building the fuel store.

We are glad to have our Rallye tug back with its engine hours extended and to welcome our wave which has given many climbs to 10000 ft plus. John Philips oscillated to over 10000 ft three times in the K-13 introducing newcomers to wave, the last time going up and down in 25 minutes.

Our new mountain soaring task week will start on July 22 when ridge, wave and thermal soaring conditions have been ordered.

SURREY \& HANTS

The excess rainfall has made much of the grassed area of the airfield unusable and our $600 f$ plateau has also had its fair share of snow. If the weather hasn't let us fly much, many plans are coming to fruit. The top four gliders now have TM6 radios installed including the new Astir collected from South Germany on a three day continuous out and back drive.

Secing the seagulls circling meaningfully over the office blocks in London there now seems to be more point in Charlie Kovac's advanced
course each Sunday morning. Several Bronze C plus pilots started further training in the late autumn and now practice at towcar driving at dawn on snowbound rumways and flying under the hooded K-13 not knowing that they were in cloud anyway is paying off! We await the first 300 day with interest and refurbished trailers .
C. $L$.

## TRENT

Automatic cutting gear has been installed on one winch and following successful trials we have ordered another set for the second winch.
Our social season is doing well with film shows and parties and the annual dinner-dance arranged for February 24.
D.P.H.

## ULSTER

When this is read, the club should have moved. at least for the season through to October, to its new site at Bellarena, under the famous Binevenagh ridge at Magilligan. We've made interim arrangements for the use of an ideal field, though we retain our 42 -year-old rights to operate from Benone Strand, three miles away We hope, ultimately, to have the field on a secure tenancy or outright ownership and are already thinking in terms of a hangar and conversion of an adjacent cottage into a residential clubhouse. The move to Bellarena is intended to arrest and reverse a decline which set in more than six years ago when we lost Long Kesh.

Last year's operations ended unhappily on November 20 with the loss of our Super Cub in a forced landing on the mudflats at Newtownards after engine failure during a launch. The pilot, Jim Wallace, has now recovered from his injuries and Lawrence McKelvie, in the back seat, walked away unscathed. Robin Snow, on tow in the SHK, released and landed back normally on the airfield.

The Cub has been replaced by an ex-Booker

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Citabria and operations resumed on February 5. During the hiatus some flying was done, using Parafil autotows, from Benone Strand and the newly arrived Pik-20 Esampled for the first time the Co Londonderry air. A major refurbishing of the Skylark 2 was begun and it should emerge in March in a wholly new scheme. Delivery of the Twir Astir is imminent and then we get dows to tie delayed task of building its trailer. R.R.R.

## wOLDS

A series of lectures have been arranged for Bronze C pilots. We hope to increase our cross-country kilometres with the arrival of two new syndicate gliders, a K-6 and an Oly, and expect that all gliders in the club will be entered in our task week organised by CFI, Bob Fox, starting on May 29.

Hopefully, there will be four Wolds gliders, including a $\mathrm{K}-7$ flown by an instructor with solo pilots as P2, competing in the Northern Regionals.

Congratulations to Steve Bennett on completing his Bronze C and to Mick McMurray. Graham Cartwright and Dave Whitwell on going solo.

A further development for the club was our becoming a limited company over the winter.
A.J.B.

## WYVERN (Upavon)

After years of discussion and disagreement, we of the South West District GC have finally decided on a more personalised name for ourselves. Henceforth we shall be known as the Wyvern GC after a mythical flying beast (two legged dragon) which has strong connections with the South West and is used by the local Army HQ as their emblem.

As it has been such a long time since our last entry in this magazine, the summary of achievements has had to be condensed into the major categories.

Last year we gained four new assistant rated instructors from the ranks of our hard core Alan Millson, Graham Sharpe, Bev Cook and Paul Lutley. This has eased the burden on our full Cats who are fewer since the depature of Chris Marren to Air Anglia and George Brindle (DCFI) to Civvie Street. Our thanks and best wishes to them both.

We had a successful expedition to Aboyne in October, with two of our members, Alan Millson and Brian Roberts, completing their Gold badges. Brian also got to Diamond height as did our Chairman. Major Sid Falla, and Major Maurice Pack-Davison, who organised the expedition. Gold heights were gained by Gerry Sturgess and Colin Brock.

Silver Cs were obtained last year by Bev Cook and Dave Shephard with Silver distances by Alan Edwards, Anne Roberts and Graham Keates. Bronze badges were achieved by Anne Roberts, Graham Keates, Dan Archer, Mike King and Ken Mackley. We also had numerous first solo flights, including those of Teresa and Steven Welsh, daughter and son of the Army Gliding Association Chairman. More recently Alan Burch and Nigel Cemm got their A and B.

The arrival of a syndicate owned Bocian has taken the job of passenger and scout carrying
away from our two busy K-13s. C's of A are near completion and our "new" retrieve vehicle, which has already had its maiden run on the airfield, should soon be in full time operation.

## YORKSHIRE

At the time of writing Sutton Bank sits under a foot of snow, giving us time to reflect on the sad demise of our Falke over the Christmas holidays. We have sold one of the club Pirats and are awaiting delivery of a Club Astir, which is replacing it.

The club dinner-dance is at the beginning of April and Brian Spreckley, a National Coach, is our guest.
G.B.

Correction: Tyne-Wear were deprived of some of the support for their Introduction to Gliding weekend by a printing mistake in the last issue they had over 600, not 60 , visitors.

## Service News

## BANNERDOWN (RAFGSA)

After a long struggle. Bannerdown has lost its tenuous hold on Colerne airfield and from April I our flying operations are to be limited. Our clubhouse is to be closed, prior to demolition. and the fleet will be housed in a small building. necessitating rigging and derigging every flying day. This crushing bad news has been offset by the marvellous offer from the RAF of a new home at Hullavington. Obviously, the wheels grind slowly, and there are many negotiations in hand and obstacles to be overcome before the offer is confirmed, but we are very grateful to the powers that be, and the club is really looking forward to its new lease of life.

December was a busy month, during which our Astir ' 77 was fitted out. Barry Simms went solo on the last day of 1977, and our increasing pupils' list is showing a healthy trend.

Our lively AGM on December 10 was well attended and we are proud to have been presented with the RAFGSA Founders' trophy for the club with the best 11 pilots. Other awards were presented to Keith Darby (Pete Dawson memorial cup for the most work done by a club member): Bob Brown (Colerne cup for the most meritorious flight): Mick Alexander (best abinitio and hog of the year) and Terry Joint (Britton trophy for the most cross-country kilometres). The male chauvinist pig award was traditionally given to our CFI, Tony Clarke.
The ranks of instructors are to be increased soon with Terry Joint taking his full Cat rating, and Keith Darby and Jim Paull are going to Bicester for their instructors' course in March.
J.J.H.

## BICESTER (RAFGSA Centre)

Well done Pam Newall, who at the Royal Aero Club's annual prizegiving was awarded the OP Jones cup for meritorious service to gliding (See S\&G. February 1977. p30). Pam has been gliding for $15 y r$ and gives up most of her time to the Centre as a full Cat and tug pilot.
Recipients of three other trophies, this time awarded at our AGM in January, were Nick Murphy (Daniels cup for the most hard working club member): Whitson Bush (Novices cup for the pupil making the best progress) and Rick Horst (Delafield cup for the fastest 100 km triangle).
Giving his report at the AGM, the CFI said that despite poor weather the Centre had achieved almost 17000 launches, 6000 hrs and some 47000 cross-country kilometres. We said farewell to our Chairman. Jack Alcock, who leaves with his wife and daughter for $2 \frac{1}{2} \mathrm{yrs}$ in California - thanks for all your hard work and our best wishes.

The New Year started well with $4-6 \mathrm{kt}$ thermals on February 10. On the Centre's first course, seven As and Bs and two Bronze legs were obtained. Dave Sames was the most successful, gaining his A and B on February 6 and his first Bronze leg on the 10 th. This was also the club's first soaring flight of the year of over one hour. However, Dave had some previous flying experience - an ex-Nimrod captain with 4500 hrs !

Finally, we welcome our new Chairman, Grp Capt Max Bacon, and an additional staff member, Colin Towle.
C.M.T.

## CLEVELANDS/HAMBLETONS (RAF Dishforth)

Our new Astir has been put to good use and newly converted pilots find it a delight to fly. We eagerly await the arrival of the new Twin Astir for advanced training. We welcome Steve Dennis on his return from an overseas posting at Laarbruch.

The following members were presented with trophies at the AGM: Bill Ward (best ab-initio): "Noddy" Aherne and Dave Pickles (hardest working members) and Tony Simms (best wave flight).

Any RAFGSA member from nearby clubs wanting to take advantage of our Bronze C landing training in the Motor Falke at Easter should contact our CFI, Roger Crouch, on 09012 (Borobridge) 2147.

> J.A.S.

## CRANWELL

The winter has been busy with majors for the $\mathrm{K}-8, \mathrm{~K}-4$ and Blanik and a C of A for the syndicate Tutor. The club's Astir is in supreme condition and we now have two serviceable tractors and two winches with a third under construction.

Our CFI gained his Diamond height with a 22000 ft climb at Aboyne in October and the Astir is off to Aboyne again in March, being taken by Messrs Gibson and Steiner on the hunt for Diamonds.
N.J.H.

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## CRUSADERS (Cyprus)

Despite a very difficult summer when we were limited to two aircraft and two instructors, things have started to pick up and we are expanding in all directions. August saw Lynne Willbourn, Warwick Creighton and "Rocky" Sutherland, back from Bicester after their instructors' course. Jeremy Beringer, another instructor, joined us from Bicester for six months and in September our new CFI, Ray Brownrigg, arrived. Ray quickly got into the swing of things and we soon had the Blanik and $\mathrm{K}-13$ back on line after a major and C of A , the latter being revamped and resprayed in blue and white. A special mention to Lynne Willbourn and Barbara, Dave and Andrew Redding for all their work.

Our full fleet now is: T-218, Blanik, K-13, Swallow, and Oly 2 B with hopes of the Astir arriving in February. Unfortunately the Swallow has returned to the UK to be repaired after a minor launching accident and our Oly is sitting in a jig with a broken back. We should start the season with three winches and a tug.

Last year was not good for soaring but we had ten A and Bs, 15 Bronze $C$ legs and six Silver heights. Our hope for this season is for someone to fly to Akrotiri $(84 \mathrm{~km})$. The political situation has limited cross-countries but we are eagerly awaiting the day someone will get there.

Two of our instructors, Warwick Creighton and "Rocky" Sutherland, recently left us for the UK and Jeremy Beringer went at the beginning of February. They will all be sorely missed and our best wishes and thanks go to them.
J.F.B.

## EAGLE (Detmold)

Martin Hardy took delivery of his Astir CS but, not to be outdone, the club also purchased one and it doesn't seem to have been on the ground since. The K-6E has been sold to a syndicate at RAF Gutersloh and our Oly 463 is being completely refurbished in our new workshop prior to it being sold. The Motor Falke worked hard and with its hours included we managed to fly more hours than in 1976 - not a bad achievement considering the poor weather.

The RAFGSA AGM was at Laarbruch in November and Alan Somerville was presented with the Pete Lane trophy for fastest closed circuit. Howard Jarvis won the Pete Dawson trophy for the longest flight and the club won
the NATO cup for badge flights - a clean sweep for the Eagle Club.
Our own AGM was in early December where we welcomed our new Chairman. Terry Colvert, who takes over from Bill Price. Terry is doubling as Treasurer for a while as Joce Oswald has been posted. Hugh Brookes takes over as Secretary from Andy Harkins (who is heading for Upavon) and John Harrison takes on the vital job of bar member from John McGovern (who is Dishforth bound). Leigh and Maralyn Hood have also departed and Howard and Rose Jarvis will shortly be on their way to new pastures. The club will be a poorer place without them and we all wish them and their families every success at their future locations.
Several autumn weekends were spent at Vennebeck flying on the ridge where we collected a few Bronze Cs and Ken Marsden gained his Silver duration. During the summer a number of Bronze Cs were obtained at Detmold and Ian Benzie, Ray Pye and Hugh Brookes completed their Silver Cs.
H.B.

## FOUR COUNTIES (RAF Syerston)

The AGM in January was preceded by two Diamond heights, both flights in wave and away from home. Dickie Feakes (PIK 20) gained an altitude of 20000 ft at Aboyne and Steve Hymers (Oly 460) climbed to 21000 ft at Dishforth, also completing his Gold C .

Our thanks to the retiring Committee. Andy Miller, retiring as Secretary, was elected Air Member of the RAFGSA Council: Dave Cockburn, DCFI, is soon taking on new responsibilities at Lindholme and is replaced by Trevor Allsop, former Entertainments Member, and Hamish Brown. Trevor will look after $a b$-initio training and Hamish advanced training. Mike Throssel is the new Secretary and Peter Clay the Entertainments Member. Our thanks and good wishes to our Chairman. Grp Cpt Ferguson, and his wife who are leaving us.

We welcome five new instructors - Tim Brailsford, Chris Curtis, Chris Terry, Dave Malkinson and Ben Beniston. Congratulations also to our new full Cat instructor. Malcolm Norris.

Finaily, support for the British World Team would be appreciated by members wearing the British Team T-shirts and displaying car stickers.
L.B.

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## FULMAR

As we settle down to our wave season we regret the loss of the Pilatus B-4, but we have already had a Gold height climb of 15000 ft by John Morrice while doing his first Bronze leg as well as several Silver height climbs, including 6500 ft by Peter O'Fee.
Our AGM on January 28 was later than usual due to our rebuilding the clubhouse. Unfortunately we say goodbye to our CFI. Harry Orme. who has been a driving force over the years. He was aircraft member as well as CFI and did a Tost conversion to our winch. We wish him luck at St Athan. Our deputy Chairman, Bob Lloyd, takes over as CFI with Gordon Hunter as deputy.
The Henry Dyce trophy went to Pip Barley who held the site record with a climb of $10300 f \mathrm{f}$ off the winch (now broken by John Morrice), and the annual prize of an inscribed, hard bound logbook went to Tony Smith in appreciation of his stalwart efforts as MT member.
G.E.H. and R.G.H.

## HUMBER (RAF Lindholme)

The weather, apart from New Year weekend. has been atrocious with very little flying. However, we have been putting our time to good use by fettling the ground equipment.

Keith Taylor gained his. Gold height on a quick visit to Dishforth in November. Brian Lumby bought himself and Graham a yellow T-31 which has appropriately been nicknamed "The Yellow Peril" as anyone who has flown a T-31 will know to his cost! The Wilson family have joined us once again. this time with an L Spatz which I have on good authority is nicer than the Weihe they previously owned. Kevin Barnes and Keith Sleigh are going on an instructors' course in March.
K.M.G.

## KESTREL (RAF Odiham)

The autumn wave expedition to Aboyne was a success and enjoyed by the members attending. A good deal of flying was achieved, on one occasion Mike Pobjoy was airborne for over nine hours! Our Chairman, Wally Lombard. obtained his Gold height and Jerry Odell his Diamond height. Another visit to Aboyne is planned for late March and early A pril.

Flying at Odiham has been curtailed by the weather but on January 15 at 4 pm the $\mathrm{K}-7$ found lift from somewhere and soared as darkness was falling. Two members have recently soloed, Ian Roberts and Alan Ferguson.
At the AGM the Chairman in his report announced that our total launches were lower in 1977 but that our total hours had increased. What was even more encouraging, we had an accident free year. The Lasham trophy, awarded for the longest closed circuit flight from Odiham, was presented to Pete Charnell. The Alison Farrell memorial trophy was presented to Neil Brown, the trophy is awarded by members' ballot to the ab-initio making the best progress and contribution as a member.

Three members will be representing the Army in the Inter-services Regionals. Wally Lombard and Pete Richie will each fly a Std

Cirrus and Mike Pobjoy a K-6E. Jerry Odell will be flying for the RAF, also in a K-6E.
P.W.A.

## PHOENIX (RAF Brüggen)

The New Year brought us two new gliders - Bill and Micheie Tovtcll's K-6e and the club's K-6cr replacement, an Astir CS. The K-13 bought just before Christmas is proving very popular. We warmly welcome several new members, in particular Norman Adam and his Motor Falke, and also several members of the RAF German Band - we now have two French horns, another wind instrument and a clarinet. The latter, Andy Jenkins, has gone solo since joining, as have Alan Stacey, shortly after his 16 th birthday, Glenn Connor and Chris Brooks. Our first soaring day was January 21 and Steve Bunting gained a Bronze leg half hour in early February. We have also had a visit from Detmold's tug, giving us valuable experience in aerotows. Thank you Detmold.

We are sad to say goodbye to several staunch supporters - Joan Moffat, one of our too few Army members; the extremely hardworking John Marriot; Peter Fincham, our Secretary and Angie and Dick Murray, without whom our airfield bus/canteen would have been nonoperational these last 18 months and our trailers undocumented. Thank you all for your help.

At the AGM the CFI's trophy for the most meritorious flight went to Roy Wardle (8hrs 9 min in a K -8 at the Detmold Comps); the Tony North-Graves navigation trophy to Pete Spivack; the Gordon Massey young pilot of the year award to John Marriot; the hog of the year award again to Barry Elliot, whom we congratulate on his recent marriage to Marie, a Dutch glider pilot: and the Tom Jones trophy for club support work went jointly to Ian Smith. Barry Elliot and Harry Worth. Our congratulations also to Liz Keily on being the first lady in Phoenix to hold a Gold C with two Diamonds.

There is an expedition this month to Sisteron in search of wave.
M.T

## PORTSMOUTH NAVAL

Our Christmas dance was a great success due mainly to the efforts of the organisers, Jean Groves and Joan Adams.

After our AGM there are some new faces on the Committee. Edna Clark takes over as Ordinary Members' representative, Les Groves Snr for Special Members and Ken Adams as MTO. The trophies were presented by Mrs Dimock, the Goodhart trophy going to Charles Miles; the Corner cup for the best junior pilot to Nigel Clark; the Instructors' and Tug Pilots' trophy, being presented for the first time, went to John Limb and a special award of an engraved tankard was made to Tom Kneale for all his efforts on behalf of the club over the years. Tom has recently gone to live in the Isle of Man.

Our Pirat is away being repaired after a contretemps with the perimeter fence. Phil Moore (Le Baron Rouge) is planning to run an $a b$-initio course again this Easter with Bob Potgeiter as supervising instructor. Bob has recently celebrated $50 y$ rs of flying - he started flying the mail in South Africa in 1927.

Ron Baker has just returned from a holiday in

Australia where he entered the gliding comps at the Beverley Air Regatta and won first prize for the out-and-return.

Finally congratulations to Jeff Porter on gaining his full category and welcome to Paul Wheatcroft, our new bar supervisor.

> H.C.

## TWO RIVERS (RAF Laarbruch)

The return of the $\mathrm{K}-7$ in superb condition after many months in the workshop was like a fleet addition for new members who had only seen it derigged. The Cirrus still hasn't made it into the air after being slightly damaged with its trailer in an autobahn accident on its return from repair.

The AGM and ensuing party in January were a great success; votes of thanks were numerous and trophies were presented to Pete Lang, Frank Habernicht and Steve Dennis, the latter gaining the award for the longest cross-country flight of the year.

Congratulations to Tom Habernicht on advancing from greenhorn to solo pilot in three weekends while visiting his father from the States at Christmas.

An Easter expedition to Aosta is being planned by Leigh Hood. The competition for aircraft to be allocated for the Detmold Comps is expected to be high.

## WREKIN (RAF Cosford)

Our congratulations to Dave Cottle and "Polly" Parrott on gaining their full instructor rating, and to Gary Feeley and Robbic Robinson on going solo. Gary celebrated immediately by investing in a share of the syndicate K-8 in addition to his share in the Blanik. We congratulate also Ron Jackson and Gerry Frew on gaining their Bronze Cs - both make a valuable contribution in time and effort to club activities. On a similar though sadder note we say farewell to Judy Rowland, who has done sterling work as our Treasurer for nearly a year.
I.D.M.

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