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**SAILPLANE
& GLIDING**



Cover: Steve Parker, winner of the Western Regionals' Class A at Nympsfield crossing the finishing line in his LS-4 on the first day. Photo: Steve Bicknell.

SAILPLANE & GLIDING

231	YOUR LETTERS G. Bennett, C. Hughes, C. Batty, P. A. Taylor, I. H. Shattock	252	STANDARD CLASS NATIONALS E. R. Lysakowski
235	BOOK REVIEW S. N. Longland	254	THE GEC 15 METRE CLASS NATIONALS T. Joint
236	WORLD GLIDING CHAMPIONSHIPS Angela Sheard	257	FINAL RESULTS
238	FINAL RESULTS	259	TRAVELLER'S TALE N. MacLean FIRST EUROPEAN JUNIOR CHAMPIONSHIPS
240	TAIL FEATHERS Platypus	260	ANNO DOMINI R. H. Prestwich
242	COMPETITION ENTERPRISE L. E. N. Tanner	261	MORE ON SEA-GLIDERS C. Pikros
244	THE PARIS AIR SHOW R. R. Rodwell	262	BGA & GENERAL NEWS OBITUARY P. M. H. Treadaway by P. C. T. Whitmore
245	FLYING THE STEMME S-10 A. D. Piggott	263	GLIDING CERTIFICATES BGA ACCIDENT SUMMARY J. Shipley, D. A. Wright
246	WIND SHEAR AND WAVES PART 2 T. A. M. Bradbury	268	CLUB NEWS
250	GETTING MOTIVATED Liz Veysey	280	WAY OFF TRACK Penguin
251	A RETURN TO GLIDING H. W. Whelan		



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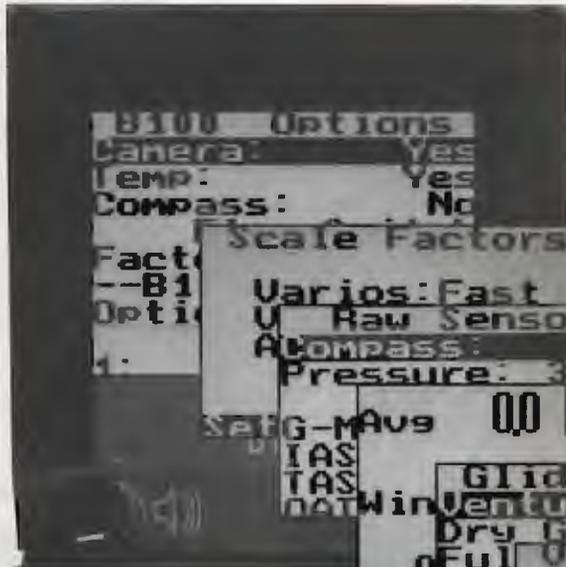
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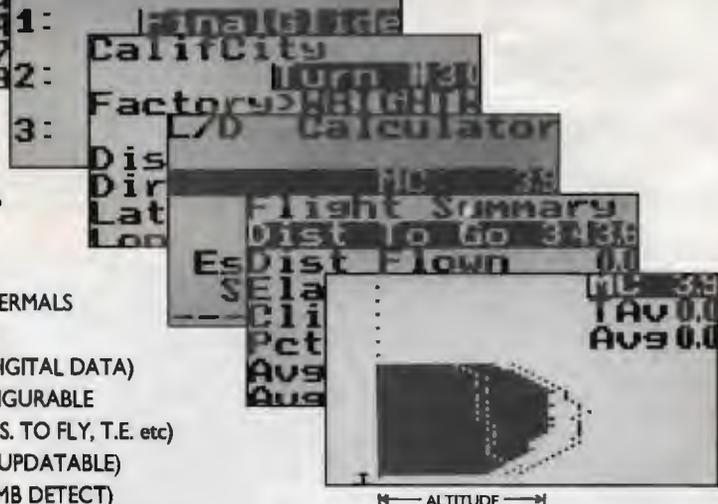
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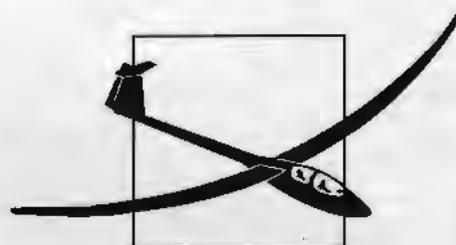
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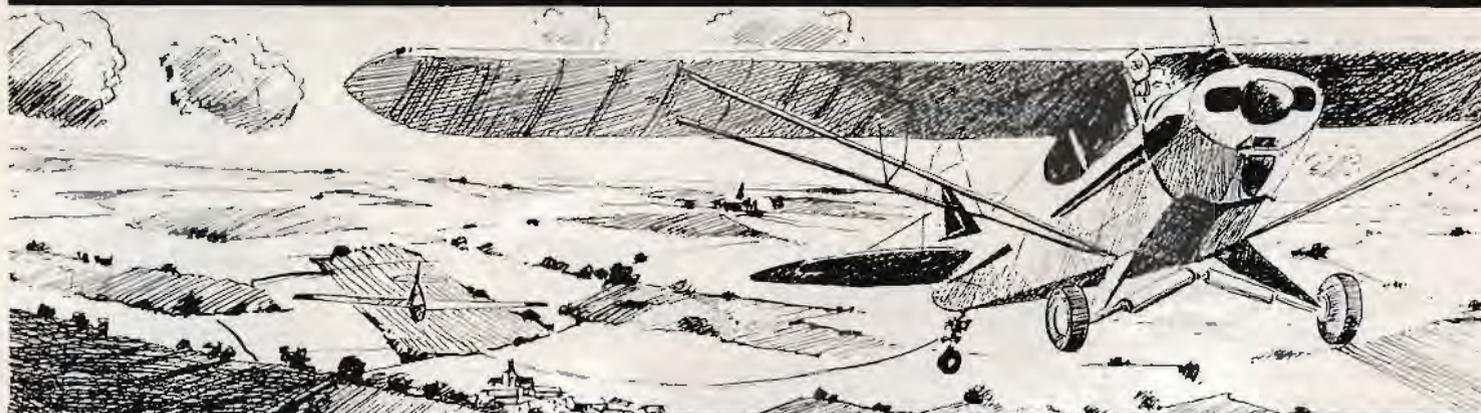


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YOUR LETTERS

DISABLED PILOTS

Gary Bennett wrote this letter before reading wheelchair bound Steve Veness's article in the last issue, p186

Dear Editor,

I think all gliding clubs should be fully aware that they are missing out on a vast market of potential members. Disabled people have been flying for about six years and I ought to know because I'm confined to a wheelchair.

I am just as dedicated as any other member and perform just the same jobs, ie tractor and winch driving, paperwork, rigging etc. Please don't fall into the trap of thinking the disabled would be a burden on your club - you will find they are an advantage because everyone else redoubles their efforts being inspired by someone less fortunate than themselves.

Quite a few clubs, and not just the big ones, have modified a two-seater so that it can be flown by hand controls. The disabled are as able as anyone else while they are airborne. They can fly cross-country and land in a field, communicating by using a Cellnet telephone, a 720 radio and a CB radio for backup. High altitudes aren't a problem as long as they are wrapped up well. As yet there are no disabled instructors but it's only a matter of time.

Club evenings could be arranged for the disabled. Think about it:- gliding takes place on a flat site, which is good for wheelchairs; there are a lot of people around if anyone needs help; most clubs have reasonable facilities and, most important of all, the disabled can fly on equal terms.

Equality is such an important point because at almost no other time are we equal. So with the freedom of the sky and a little help from members, you could have more *ab-initios* and a fully integrated community pulling as one like never before.

If you are disabled, then ring the BGA and ask for your nearest club. If you have any problems with controls or finding a club, then ring me on 0603 72002. I will be sure to help.

As it isn't easy or practical to modify single-seaters, we are trying to raise enough to buy a glider for the disabled to use throughout the UK for more advanced flying. If you would like to help, please send cheques payable to



Gary, paralysed from the waist down since a hang gliding accident in 1979, has been flying for six years. He has 250hrs, wants 300km to complete his Gold badge and hopes to be an instructor by the end of the season. He also has 75hrs power with the only unrestricted PPL (he can fly on his own unlike other disabled who have to have a safety pilot) in the UK. He says he has been considerably helped by a grant from Norwich City Council to help research and broaden his flying skills and also a sponsorship by Cellnet with a phone for out landings.

Sportability Glider Appeal (a registered charity), c/o A.D.Musk, Sheenash, Ashwell Thorpe, Norwich.

GARY BENNETT, Norwich

MORE DESERVING GROUPS THAN WOMEN

Dear Editor,

I was appalled to read in the June issue, p132, that precious BGA funds have been directed to the WWG (Women's Working Group). Surely, there are many much more deserving groups that suffer discrimination within the gliding movement? Take, for example, the BEGA (Balding Elderly Glider-pilots' Association). Such items as research into PPP (Puce Pate Problems), and SCH (Skylark Centre-section Hernia) urgently need

cash. When a BEGA member appears in very short shorts, do all the club hunks rush to help him rig? If not, why not?

There is the terrible tale of the all three Diamond BEGA member, who had managed to persuade his (slightly) younger wife to take up gliding. When they were on a visit to another club, the local young and dashing duty instructor immediately offered to give her a check, asking at the same time whether her grandfather would like a passenger flight. One member has even had to resort to taking his parrot with him to do the navigation. There are BGA competitions for Juniors, Women, but not for BEGA members. Occasionally, members let the Association down, like the one who regularly goes to Oz for Christmas, does 575km "in a Garblamince" and then insists on writing about it!

Actually, last January I managed to persuade

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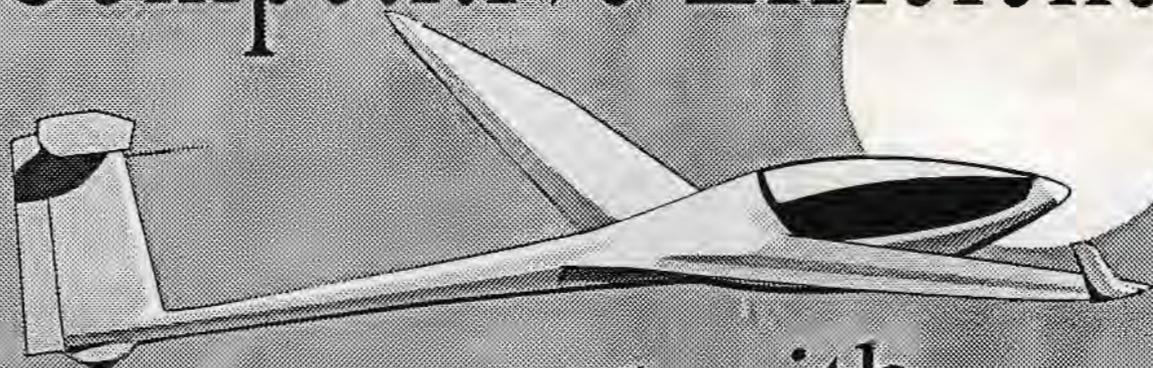


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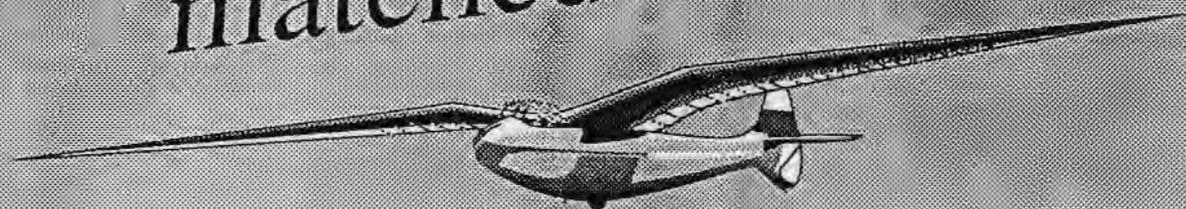
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a young lady to help me retrieve my Cirrus from a field at the bottom in the mud, rain and snow, so perhaps I might not, for the moment anyway, be eligible for membership.

CHRIS HUGHES, *Nympsfield*

IT'S OUR ATTITUDE TO THE SPORT

Dear Editor,

I agree in every way with Bill Scull's article on connecting all the controls before every flight. (See the April issue, p71.)

I offer a further observation. A few years ago I made a second brake paddle installation for my glider. While ground checking the system I noticed to my horror that every time the over-centre lock snapped shut in each wing it shot the nicely lubricated wedge of the hotelier connection right open.

The connector always shut again and remained connected, but it gave me such a fright that I now always pin the brakes as well as the elevator. As for pinning the other controls, it is definitely worthwhile if you cannot trust yourself to verify that the check hole is visible. I don't like the "hold the surface" checks because this will work with the ball *on* rather than *in* the connector.

However, I feel that the problem of going with the glider partly rigged is one of attitude and philosophy, not of detail design. Gliders are getting easier to put together yet we are seeing an upward trend in these accidents. Some of the older glass gliders and many of the wooden ones have some horrendous control and structural attachment mechanisms. Most of them are still being flown regularly, but they don't feature in these accidents.

I believe it all boils down to attitude to the sport. If we are non-aviation people who drift from fishing, through gliding, on the way to photography then we have little chance of learning the attitude of mind which is needed to keep us safe through the gliding phase.

Years ago only the dedicated people stuck

the cold, the pushing, the waiting, all for a five minute flight at dusk, training system. Now we say "This is a big white glider, how fat is your wallet?"

Somehow we need to get back the pride and professionalism in our airmanship, which of course encompasses screwing the glider together.

CHRIS BATTY, *Blagnac, France*

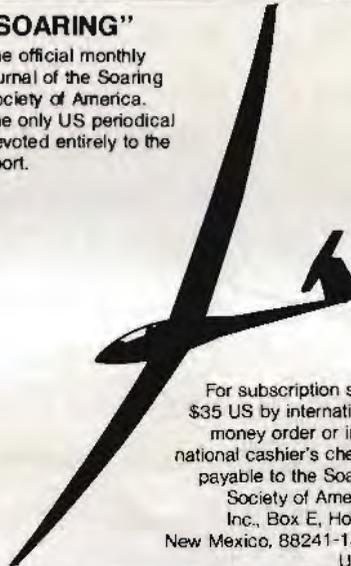
IMBECILIC RADIO CHATTER

Dear Editor,

We all occasionally throw a wobbly within the confines of our plastic cockpits when others choose to whittle on about irrelevances on one thirty decimal one. Many clearly need some tactful advice and guidance, on the ground I

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suggest, not a spate of derogatory remarks over the air waves. I personally find that approach far more irritating than the perpetrators of the primary misuse.

My letter is, however, prompted by the embarrassment I and others at Husbands Bosworth felt on July 29, when two of the German girls got airborne to practise for the European Women's Championships. Yes they did chatter, and in their native tongue! But the reaction of the young (?) male glider guiders that afternoon was frankly disgusting. I was airborne for over four hours listening to the childish drivel about Spitfires, Messerschmitts, questions about who won the war, and other equally inappropriate and, I suggest, offensive remarks.

Those responsible will I trust reflect on their own misuse of the radio? Is it they, not the charming German girls, who need some basic guidance in radio usage. It was they who fouled the channel and caused me to throw another wobbly as I cruised around Lincolnshire at near VNE. It was they who spoil my best afternoon's gliding this year. I'm sorry that most of "they", flying south of Watford Gap, were forced to land out. Could that be the explanation for their unbelievable reactions to foreign ladies having the audacity to use their "personal" frequency? PETER A. TAYLOR, *Daventry, Northants*

A BRITISH INVENTION

Dear Editor,

Seeing the article in the June issue, p137, on an American experiment to improve aerofoil performance I was both pleased and surprised. As it happens I have been pursuing the possibility myself to the extent that I am in touch with the Patent Office and am actively engaged in assembling the first prototype for full scale tests. It is electronic and does not alter the glider's hull or wings so that it can be fitted in minutes.

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performance but refinements and experiments may improve on this.

By the time this appears in print I should have more data as work progresses. At Talgarth I have the facility of long flight times without large expense so that comprehensive tests will be possible.

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IVOR SHATTOCK, *Bedwas, Gwent*

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BOOK REVIEW

Basic Briefings for Glider Pilots by Harold Dale

To look at this "book" is the kind of DTP plastic-strip-back that could make even an overheated erotic novel seem straight out of the fridge. Don't be put off by this initial impression. The book is a goldmine.

The text is clear and straightforward and the best way to describe exactly what it covers is to quote the very first sentence of the author's introduction; "These notes are intended for the absolute beginner and the pre-solo student. They cover those topics that should be included in the briefings for holiday courses. Many points seem so trivial to the initiated that they are omitted from the usual books on gliding, yet a lack of this basic knowledge can lead to silly, and sometimes expensive mistakes". Couldn't have put it better myself.

Just in case you were wondering if this is one of those laborious and boring "and here's another interesting fact" sort of books, it isn't. Some of the author's brief sketches of what happens at most, if not all gliding clubs, are wryly amusing. Comments on ground-handling like "Owners and club members are ... likely to be anxious when you help them move gliders. (But this will not put them off asking for your assistance!)" are probably lost on the really green member – but they'll learn soon enough!

The book is illustrated, though not profusely, and there is a glossary of gliding terms for the newcomer that includes esoteric words like "stonking". There were a few points in the text which I wondered about. The old chestnut about ASI lag, for example. I would have thought any lag in the instrument *itself* would have been completely insignificant in comparison with the time it takes a glider to accelerate to any speed, even vertically. But so what. I enjoyed reading a publication which directly and to my mind successfully addresses areas some other books and far too many instructors fail to reach.

The book, at £6 plus postage, is available from Harold at Applegarth, Leconfield, Beverley, East Yorks HU17 7NQ.

STEVE LONGLAND, *CFI of the Cambridge University GC*

Uvalde may be just a speck on the map of the Lone Star State. It hasn't even got its own gliding club (yet) but its 1991 World Gliding Championships will be remembered for day after perfect flying day, when the cu obligingly moved into place as the grid launched.

Local people turned out in force to enjoy the spectacle, besides offering enthusiastic support and unstinting hospitality in so many ways. An army of non-gliding helpers pitched in and learned fast about soaring and its ways.

On the downside, such strong conditions can overbrow into storms of considerable violence. We had a foretaste during practice and on Day 7. First the airfield was choked by a duststorm and then the entire Open Class was washed out of the sky. Denmark's Stig Øye passed that night, sustained by his little fire, watching his Discus floating on the stock pond which was his touch-down point.

Stig explained in the *Uvalde Leader News*: "I landed in a field but the usable part was too short. I rolled over the embankment and ran into the pond with a splash.

"The glider floated nicely but I could hear the water and then it started running in. I was in the middle of the pond," Øye said. He then swam, pulling the glider along with him. Once on dry land he took the photograph on this page.

The OSTIV plaque with the Klemperer award went to Cedric Vernon for "his outstanding contribution to the technical development of sailplanes through an uninterrupted activity over about 40 years."

Cedric, who is an aeronautical engineer and been a glider test pilot, is on the BGA Technical Committee, the OSTIV Board for 23 years and since 1966 has edited the congress papers. He has also been on the OSTIV Sailplane Development panel since the early 1960s.

He plays a major role in setting and writing airworthiness requirements for gliders and motor gliders, giving a decisive contribution to the content and up-dating of the "OSTIV Airworthiness Standards" which some countries have adopted as legal requirements.

Gaggles tended to form at cloudbase and I counted 18 in one!

The Japanese and Finnish teams went stochastically on, despite the tragic midair collision in which the 25 year-old Finnish aeronautic student Anssi Passila lost his life. Atsushi Kodama ejected to safety from his inverted and tailless Discus.

The POST task which pilots love to hate, was set for one Class per day and was, as usual, the subject of much debate.

Crew work was quite trying in the dust and sizzling heat, but only three rattlesnakes came to join in! Clouds of monarch butterflies, dragonflies, soaring buzzards, the crystal rivers and ever changing skies were a bonus.

Launching from two hard runways simultaneously was at a cracking pace. The first day saw 114 gliders airborne in 57min.

Long tasks became commonplace and the

WORLD GLIDING CHAMPIONSHIPS

Uvalde, Texas – July 28-August 1

The following is a brief report from Angela who will be writing a longer one for the next issue. Also on p240 we have some observations from Platypus, our spy in the back seat of the ASH-25 flown into 16th place by Robin May. Sadly, Platypus was called home half-way through the Championships due to family illness



Some members of the British team at briefing. Left to right, Dave Watt, Robin and Michael Bird. Photo: Tony Segal.

weather briefings with hourly satellite updates were very thorough, thanks to the team of energetic and helpful Met men. Daily pilot briefings, however, seemed too short by UK standards. There were no microphones to amplify questions from the floor and no tales, either cautionary or instructional, of how each day in the west was won!

The daily battle of the scales was an irritant. The highly sensitive equipment reacted to each puff of wind to the point where only the quickest eye could follow the needle's swing and decide on a weight.

Charlie Spratt on the finish line gave his verdict on the safest, most stylish finish each day and one morning brought in the armadillo who paused from airfield mining to help him do it.

Glider which attracted attention were the prototype Polish SZD 56 (only 165-172kg it can up-lift its weight in waterballast, despite, as the weatherman noted, having a "drinking straw for a fuselage"), the few sporting winglets and the four Nimbus 4s. Bug-wipers probably didn't rule

the day as my fingernails found fewer than usual bug heaps.

Robin May lost his co-pilot to a family crisis half-way through, but was allowed to fly his ASH-25 solo ballasted à la Platypus. Justin Wills (LS-6) had three day wins.

Regular reports went out on local radio and the *Uvalde Leader News* went so far in its coverage as to print the menus offered by the generous Uvalde citizens who hosted "Nationality Parties", while Marion Barritt from Minden worked through the night to produce the *Uvalde Express* with results and stories of the present and past Championships.

Overall, a competition which involved the whole delighted community and provided the finest flying conditions some pilots will ever experience.

After a nailbiting wait for confirmation due to very close final points, three very popular winners mounted the podium on Sunday, August 11 – three World Champions from Holland, Australia and Poland. Proof that the better supported teams do not necessarily nab all the prizes was very cheering.

Baer Selen (Discus), 1978 World Champion,



Andy Davis photographed by Michael Bird.



Gillian and Justin Wills. Photo: Tony Segal.



Motorola sponsored the British team.
Tony's photograph of Chris Garton.



Above: Ben Watson leading the British team at the opening parade. Below: The British contingent. Photos: Michael Bird.



won the Standard Class 176pts ahead of Janusz Trzeciak (SZD 55-1) of Poland who had only 6pts more than Eric Mozer (Discus A) of the USA.

The 15 Metre Champion is Australian Brad Edwards (LS-6a), 40pts ahead of the highest placed Frenchman, Gilbert Gerbaud (LS-6c). Doug Jacobs (LS-6a) of the USA was in 3rd

place with 51 fewer points than Gilbert. Justin Wills won day 12 (as did Trzeciak) but only made 8th overall.

In the Open Class Janusz Centka of Poland flew to a wafer thin lead of 10pts in an ASW-22a he saw for the first time on arrival here! Holger Back (Nimbus 3) of Germany was 2nd with

Gerard Lherm (Nimbus 4) of France in 3rd place. There was a wonderful fly-by of tugs after the last launch on the last day.

Humour – flags refused to fly. Medals were placed on the wrong necks and had to be swapped round.

Sadness too – memories of Anssi Passila.

FINAL RESULTS Open Class

Pos	Pilot	Country	Day 1 Glider	502.9km	Day 2 POST	Day 3 476.4km	Day 4 634.3km	Day 5 POST	Day 6 679.1km	Day 7 632.8	Day 8 POST	Day 9 POST	Day 10 612.3km	Day 11 579.2km	Day 12 487.9km	Total Points
1	Centka, J.	P	ASW 22a	959	875	953	953	945	939	681	954	973	1000	986	883	11 111
2	Back, H.	D	Nimbus 3	941	1000	977	954	967	937	576	934	968	828	999	1000	11 101
3	Lherm, G.	F	Nimbus 4	964	988	941	945	960	937	581	981	1000	918	890	882	10 987
4	Holignaus, K.	D	Nimbus 4	896	894	988	965	945	979	914	915	986	793	795	895	10 965
5	Lopiaux, J.	F	Nimbus 4	952	965	937	944	972	934	581	983	999	917	868	867	10 959
6	Renner, I.	AUS	Nimbus 3	1000	854	961	915	971	951	635	884	985	984	952	846	10 938
7	Gimney, R.	USA	Nimbus 3	884	934	1000	970	933	986	581	965	929	932	943	880	10 937
8	Kurstjens, G.	NL	Nimbus 3	1000	913	991	934	964	963	615	866	965	753	981	884	10 829
9	Buchanan, J.	AUS	Nimbus 3	860	915	951	1000	916	1000	581	863	957	938	851	878	10 710
10	Wujczak, S.	P	ASH 25	954	875	906	919	880	929	681	863	935	919	931	845	10 637
11	Lynsky, R.	NZ	Nimbus 3	971	927	914	817	913	834	581	823	836	920	963	944	10 543
12	Horvath, L.	H	Nimbus 3	885	882	924	914	866	965	1000	731	825	896	710	841	10 439
13	Pettersson, A.	S	Nimbus 3a	870	917	946	814	882	925	500	915	946	860	925	869	10 369
14	Laur, E.	D	Nimbus 4	945	500	894	927	968	865	541	828	961	918	1000	971	10 318
15	Forssten, J.	FIN	Nimbus 3	849	868	970	892	885	854	581	905	939	906	834	767	10 250
16	May, R.	CB	ASH 25	732	886	760	935	896	921	581	904	889	912	963	827	10 206
17	Bourgard, P.	B	Nimbus 3	798	935	957	846	864	948	508	856	877	911	753	867	10 120
18	Knauft, T.	USA	Nimbus 3	991	455	925	953	1000	940	548	805	905	971	744	777	10 014
19	Haggenmüller, R.	A	Nimbus 3a	710	892	906	866	850	781	581	967	874	750	831	720	9728
20	Blätter, F.	CH	Nimbus 3i	765	846	982	883	892	957	581	767	872	870	393	727	9535
21	Aboulin, L.	F	Nimbus 3a	911	360	928	855	892	803	581	824	840	765	845	835	9465
22	Binder, H.	CH	Nimbus 3i	688	890	942	934	896	963	540	801	885	292	798	802	9431
23	Deiore, T.	NZ	Nimbus 3a	786	861	910	937	888	718	581	772	908	788	339	761	9249
24	Sada Salinas, R.	MX	Nimbus 3a	195	386	679	749	807	639	581	375	863	709	310	762	7055

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15 Metre Class

Pos	Pilot	Country	Glider	Day 1 468.2km	Day 2 POST	Day 3 432.8km	Day 4 POST	Day 5 617.6km	Day 6 616.8km	Day 7 POST	Day 8 POST	Day 9 531.1km	Day 10 586.3km	Day 11 POST	Day 12 428.8km	Total Points
1	Edwards, B.	AUS	LS-6a	800*	892	942	953	968	820	939	890*	997	999	942	908	11 041
2	Gerbaud, G.	F	LS-6c	932	999	998	934	946	926	907*	721	907	842	921	968	11 001
3	Jacobs, D.	USA	LS-6a	960	996	901	901	1000	888	941	753	924	856	944	886	10 950
4	Prat, R.	F	LS-6c	932	1000	998	976	945	918	916	693	899	839	921	902	10 939
5	Ghiorzo, S.	I	Ventus C	1000	930	923	916	852	945	869	743	1000	1000	821	920	10 919
6	Gantenbrink, B.	D	Ventus C	962	782	961	978	946	933	836	907	901	950	884	769	10 809
7	Kuusisto, S.	FIN	Ventus C	877	913	966	954	866	897	865	901	917	620	958	878	10 632
8	Wills, J.	GB	LS-6	871	840	1000	1000	901	905	908	901	924	424	928	1000	10 602
9	Andersen, J.	DK	Ventus	934	805	768	922	729	1000	936	832	840	840	1000	934	10 540
10	Goudriaan, L.	IE	ASW-20a	729	931	948	949	890	879	878	724	939	909	906	782	10 464
11	Hagnander, T.	S	LS-6a	843	636	963	953	873	849	787	947	855	856	851	945	10 358
12	Julin, J.	FIN	LS-6a	862	912	955	931	886	855	872	901	896	620	958	706	10 354
13	Obermayer, H.	D	LS-6c	923	474	928	998	923	832	836	908	882*	933	798	878	10 313
14	Bulukin, B.	N	LS-6	666	863	950*	938	920	815	918	740	907	836	837	908	10 298
15	Hajek, C.	D	Ventus C	946	474	959	942	831	881	849	902	935	766	840	898	10 283
16	Garton, C.	GB	LS-6C	845	825	948	988	904	905	895	865	817	717	798	762	10 269
17	Galetto, G.	I	LS-6	914	892	884	895	892	864	833	675	993	909	972	698	10 241
18	Striedieck, K.	USA	ASW-20a	849	820	959	854	967	926	429	890*	864	820	901	958	10 237
19	Wells, M.	GB	LS-6C	843	328	910	939	898	857	837	822	795	787	740	855	10 211
20	Rubaj, T.	P	Ventus	750	941	824	946	864	921	1000	835	637	677	884	833	10 112
21	Pozniak, M.	P	SZD 56	763	879	944	876	785	914	871	835	680	772	883	905	10 107
22	Ax, G.	S	LS-6a	967	911	969	971	772	792	471	922	844	776	857	784	10 036
23	Jurado, A.	IE	Ventus C	970*	828	890	930	800	864	431	774	887	893	905	790	9962
24	Stephens, L.	NZ	LS-6a	734	826	907	872	861	735	907	790	732	725	838	945	9892
25	Stouffs, P.	B	LS-6a	863	581*	949	843	788	892	876	777	822	818	822	887	9878
26	Masak, P.	CON	Ventus A	805	834	862	865	874	859	921	852	583	827	818	761	9861
27	Jansen, D.	AUS	LS-6a	933	820	742	956	913	871	455	700	903	801*	820	913	9827
28	Cerny, P.	CZ	Ventus B	949	412	978	370	905	921	847	975	905	795	893	870	9820
29	Vermeer, S.	NL	Ventus B	886	427	945	874	901	975	880	890	868	819	855	633	9688
30	Kristiansen, S.	N	LS-6a	733	811	996	894	857	881	452	839	816	611*	830	846	9566
31	Haiasi, G.	H	ASW-20B	847	915	845	902	702	788	707	734	734	833	853	617	9477
32	Andersen, G.	IE	Ventus A	907	401	903	889	855	810	716	780	768	801	850	949	9459
33	Sahberg, J.	FIN	Ventus A	866	809	955	802	859	862	753	722	350	710	827	867	9362
34	Driessen, P.	NZ	ASW-20c	904	824	784	837	763	659	418	817	844	757	832	724	9263
35	Ichikawa, H.	J	LS-6a	745	765	890	913	830	853	604	760	718	318	876	488	9031
36	Bennett, K.	CON	Ventus B	759	796	765	859	777	810	437	794	788	801	674	720	8980
37	Brockhoff, B.	AUS	LS-6a	894	293	874	231	854	913	797	764	715	860	875	797	8867
38	Kassai, B.	H	ASW-20ev	844	812	852	895	696	753	707	709	726*	277	852	596	8819
39	Wienberg, I.	DK	Ventus C	840	470	839	856	810	774	845	432	862	314	879	729	8679
40	Endrerd, J.	N	Ventus B	679	839	897	752	906	953	810	733	653	154	777	749	8561
41	Pare, D.	NL	Ventus A	344	833	897	858	859	814*	869	849	767	314	0	0	6903
42	Poizl, H.	CON	LS-6a	805	372	858	859	754	225	358	689	746	553	728	511	6703
43	Inamori, H.	J	LS-6a	538	265	571	765	754	225	358	689	746	553	728	511	6703
44	Kun, M.	MX	Ventus	519	179	395	632	751	473	665	570	615	107	823	601	6330

Standard Class

Pos	Pilot	Country	Glider	Day 1 POST	Day 2 431km	Day 3 POST	Day 4 560.4km	Day 5 601.3km	Day 6 POST	Day 7 580.9km	Day 8 POST	Day 9 499.6km	Day 10 POST	Day 11 570.9km	Day 12 422km	Total Points
1	Selen, B.	NL	Discus	943	908	877	967	956	1000	996	704	999	938	967	961	11 216
2	Trzeciak, E.	P	SZD 55-1	855	950	941	892	919	940	928	896	960	862	1000	897	11 040
3	Muzer, J.	USA	Discus A	1000	851	929	934	829	931	916	833	946	937	933	995	11 034
4	Ahoulin, J.	F	ASW-24	937	976	999	920	973	930	916	771	910	886	956	844	11 018
5	Badum, T.	CH	ASW-24	918	882	929	964	1000	959	939	695	912	904	963	930	10 995
6	Schroeder, M.	F	ASW-24	943	976	1000	925	857	932	916	771	910	881	949	844	10 904
7	Fischer, P.	D	Discus B	851	890	859	975	943	907	899	722*	866	908	963	1000	10 881
8	Oye, S.	DK	Discus B	843	920	961	912	904	920	913	847	920	908	898	915	10 861
9	Davis, A.	GB	Discus	804	862	862	842	944	964	869	759	950	868	939	994	10 847
10	Trebel, C.	D	LS-7	768	893	961	988	814	913	944	799	952	906	919	918	10 755
11	Kepka, F.	P	SZD 55	843	847	941	838	867	905	928	899	953	861	916	895	10 743
12	Ottosson, C.	S	ASW-24	922	910	978	771	876	912	999	771	788	845	913	936	10 733
13	Pybus, A.	AUS	Discus A	860	1000	923	867	920	941	939	867	884	789	886	782	10 660
14	Hänmerle, U.	A	LS-7	892	797	964	886	929	939	908	808	832	898	894	886	10 633
15	Hansson, U.	S	Discus A	921	924	968	826	905	931	881	805	867	910	956	939	10 633
16	Gapanovitch, I.	GB	ASW-24	889	811	948	994	840	922	1000	827	1000	1000	930	893	10 621
17	Watt, D.	FIN	Discus A	932	824	933	865	940	900	892	697	970	876	911	836	10 576
18	Sorri, J.	CH	LS-7	853	811	914	906	984	958	908	707	833	905	885	878	10 542
19	Obloch, N.	AUS	Discus	862	875	885	967	877	932	922	693	818	915	927	835	10 508
20	Dodora, M.	CZ	Discus B	781	925	780	807	903	919	928	801	863	868	935	827	10 337
21	Kuttinen, M.	FIN	Discus A	885	887	871	987	916	904	942	896	997	924	391	764	10 264
22	Bragliadori, R.	I	Discus	913	976	750*	938	839*	906	928	668	923	888	777	753	10 259
23	Avanzini, L.	I	Discus	911	801	870	947	831	870	922	874	628	933	816	877	10 221
24	Leutenegger, S.	CH	DG-300	882	863	888	899	979	856	566*	718	819	935	883	876	10 164
25	Hansen, K.	DK	Discus B	932	743	865	953	905	918	881	586	801	936	878	857*	10 159
26	Byrd, J.	USA	Discus A	804	812	899	982	728	899	916	698	678	911	931	807	10 064
27	Falkensammer, W.	A	LS-7	887	785	902	894	529	875	918	672*	897	866	884	902	10 011
28	Goudriaan, O.	IE	LS-4a	814	797	891	821	882	863	928	650	847	831	838	810	9992
29	Van Dyk, A.	NZ	Discus B	708	898	871	958	669	855	875	725	955	740	891	713	9858
30	Reimers, J.	N	LS-7	818	717	761	698	820	821	916	880	899	878	827	793	9828
31	Silvanovich, A.	SU	ASW-24	805	755	849	859	890	887	574	708	957	854*	845	816	9799
32	Dyson, B.	USA	Discus B	888	932	891	1000	754	901	909	745	0	938	878	900	9736
33	Davison, C.	MC	LS-7	785	803	903	657	697	725	859	645	863	882	796	781	9396
34	Bradley, R.	IE	Discus B	737	808	873	834	830	852	916	666	360	869	824	801	9370
35	Webb, D.	CON	DG-300	811	660	862	772	866	849	908	607	907	706	781*	624	9353
36	Stieber, J.	CON	LS-4	805	764	877	777	58	858	948	841	783	839*	822*	770	9142
37	Horie, N.	J	Discus B	823	848	983	907	680	858	848	625	93	630	885	817	9035
38	Barwick, J.	D	DG-300	686	730	854	812	753	825	869	688	782	826	354	717	8898
39	Aske, O.	N	LS-7	356	614	753	807	852	862	856	611	821</				

TAIL FEATHERS

TEXAS NOTEBOOK

Platypus wrote these pieces for the Uvalde Express, the World Championships daily newsletter.

Great snakes

The best glider pilots are supposed to make a fresh decision every 30 seconds. This is supposed to illustrate what massive intellectual pressures our Champions are under as they battle with the elements. What it in fact means is that the greatest soaring brains in the world have the attention span of all of 30 seconds on a good day. A grasshopper could concentrate longer.



Killer bees.

This was well demonstrated by the response to the excellent lecture by Dr Cannon (one of the big guns in aviation medicine, as they say) in which he strove, against the collective will of the finest gliding minds in our globe, to get across the simple fact that the greatest danger to pilots flying in this neck of the woods was dehydration. Not snakes, nor alligators, nor the National Rifle Association, but plain lack of water. Dr Cannon's problem was that he addressed himself to the left-handed side, or rational and cogitative, side of the audience's cerebellum (or cerebella, since glider pilots can never be said to be all of one mind).

"So you can see from all these graphs and tables that you must drink lots of wa ..."

"What about cobras ...?"

"There are no cobras. As I was saying, drink lots of ..."

"What about coral snakes?"

"Forget the coral snakes, it's thirst you ..."

A long argument ensues in the audience about whether snakes kill their victims with anti-

coagulant or coagulant ... or by attacking the central nervous system.

"It doesn't matter, you won't die" explains a slightly impatient doctor.

"Not even from a rattlesnake sitting on your parachute?" asks an insistent pilot.

By now Dr Cannon is clearly wishing that his tormentors were sitting on rattlesnakes.

I was tempted to bring up the report I'd heard during three minutes of TV news – mixed in with 57 minutes of advertisements for haemorrhoid cures etc – that there were 200 swarms of killer bees loose in southern Texas. That would have prevented me from raising the key issue: "What happens to people who have had nothing to eat since breakfast and have to wait till past 9pm listening to a load of irrelevant questions?"

But, being neither a pilot (admired and respected for their ability and status) nor crew (cossetted, or at least tolerated, for their sacrifice and selfless labour) but an insignificant in-between, a back-seat-pass-the-pee-bags-and-please-don't-vomit-down-the-great-man's-neck-co-pilot, I kept silent.

Dr Cannon deserves a medal, it's his audience who should be fired.

Not quite praying for rain

The most depressing part of this competition, from a selfish point of view, was watching the solo Nimbus 3s and 4s sliding away from the ASH-25 when conditions were strong (more than 6kt or 3m/sec) and when cruising speeds between thermals went past 108kt (200km/h). I began to pray for a moderate to good English day when cruising speeds would come down to a civilised 80 to 90kt (150-170km/h) or even a max L/D day. It looks from the speeds achieved that rates of climb and cruising speeds must have dropped significantly in the days after the Big Wet Mass Landout on Day 7 that is, after I departed. I'm told that one day people were even dumping water during the race rather than on the spectators at the finish – I hope that was so. No flight is truly memorable unless you can remember the precise breed of chickens looking up at you from the pasture you nearly landed in.

Noted in Uvalde

- The friendliness and courtesy of all the people in Uvalde. They are really pleased to see us, and I do not just mean the shopkeepers.
- A talking pickup truck: as we came out of a restaurant and walked between two parked vehicles, one of them boomed in a Robocop



voice "Get-away-from-this-vee-hicle! You-are-too-close!" It's the only time I've ever wished to vandalise an innocent pickup truck, partly out of curiosity as to what it might have to say on the subject.

- The exceptionally good value for money of Uvalde's restaurants, which are easily half as expensive as the equivalent in Britain.
- The heat. One has to admire the pioneers who built Texas in the days before air conditioning – and wonder what the energy bill is for driving those ever-present machines in cars and houses and offices. As much as New York State uses to keep warm in winter?
- The domination of the automobile. I have seen no pedestrian crossings or "islands" half-way across those wide, wide roads. You just take your life in your hands and dash. Yes, Granny, that means you too. (So that's why the little of ladies all wear Olympic running shoes!)
- The perpetual sunshine. I could hardly believe the statistic that over 95% of days are good for cross-countries, but we are coming up to that ratio already since arriving here and no relief in sight. Nevertheless the yearning for a cool, wet English day is not strong: this last spring and summer in Britain – and I suspect Europe as a whole – has been the worst for 34 years, that is, since I started gliding. I recommend a spell here for Europeans who just yearn for the crowing of happy varrios for a change.



Wouldn't bother with big wings.

- The speeds that little ships are doing are phenomenal. If I lived here I think I wouldn't bother with big wings. If you can do 140km/h in a Discus who needs 25 metres?
- "Andy Pybus flying a Discus from Australia at 138.5km/h ..." announced Mark H. at briefing today. Andy, Sir Charles Kingsford-Smith would be proud of you; his flight in the other direction in a Fokker Tri-motor could not have been much faster.

Progress? Hah!

In 1965 at South Cerney, England, I was the editor of the World Championships' daily newsletter. It was produced on a state-of-the-sixties-art duplicating machine, without benefit of today's technology. I'm now devoted to micro-computers and am trying to teach myself desktop publishing techniques – using manuals which literally weigh more than the computer itself – in any quiet moments during this contest. (There haven't been many quiet moments yet

but you just have to blame the relentless thermal machine that is Texan weather.)

However, I think that in one sense the old technology is less stressful. Inadvertently hitting the carriage-return on a manual typewriter could not send all your laboriously-gathered work to the great databank in the sky, never to be seen again; nor could it dump all your text in a jumbled heap of letters at the bottom of the page.



Any mechanically-adept person.

Duplicating machines could be fixed by any mechanically-adept person, but a modern laser-printer can suddenly refuse to take orders and start giving you stupid messages like "There-is-no-paper-in-the-printer" when it is chock full of paper, or sniffily "The word-processor and printer are not communicating."

Again the urge to vandalise the stupid insolent hardware, like the talking robocop truck, is almost irresistible – though the cause is usually diagnosed as a "software problem." That's technospeak for "I have no idea what's wrong – we'll have to ring the supplier for 24 hour service." Which means, hang on to the phone for 24 hours before discovering you are asking the wrong people the wrong question. Then they either say accusingly "You're the first person to cause this kind of problem" or admiringly "You're the very first person to discover that the Lasergrauncher IIx is not fully compatible with the latest Wordmangler III upgrade. Thanks for finding this bug in our system! We'll let you know in six months ..."

Feats of clay, or anyone here speak cuneiform?

Following the logic of these reactionary thoughts, the next edition of *Uvalde Express* will be produced on clay tablets and left in the Texan sun to turn into hard copy. If you want duplicates from this office, no problem. Just bring your own mud.

Is there a substitute for span?

I read a book of summaries of the OSTIV lectures on the way home, and despite the best efforts of the cleverest brains in the gliding movement to render their papers totally incomprehensible, I actually understood some of it, or I think I did.

By the number of papers, I guess that lots of theoretical work is going into the World Class glider of 13.4 metres, no flaps and a fixed wheel. I look out from my study and shudder at the 13.4 metres. To keep such a device airborne in northern Europe would not just require the combined talents of Heide and Holighaus at the drawing board but a World Class pilot at the controls. For Texas, yes, terrific! But in Texas wings are just ornaments. One of those ten-gallon hats would do the job.



Ten-gallon hats.

A thank you to the minds and hands that make soaring possible

What is remarkable is that the world's glider designers have produced aircraft capable of such a wide range of performance in all conditions, from soggy days in northern Europe to booming days in the desert. To name names would be invidious, but Klaus Holighaus must surely be the most remarkable man in gliding today: nobody else is both a top designer/builder

and top pilot of such stature. All the same, the day I stop wanting to buy my gliders from Gerhard Waibel or Martin Heide will be a sad one –

"I thought you said naming names was invidious?"

"It is; I write a very invidious column. It's the only reason people ever read the papers these days."

Cooling off

Coming home from abroad, you see your own country with new eyes. Texas skies are lovely, but the terrain (says he, now safely out of reach of his generous hosts) is fairly drab. In England it is the other way round. So green and undulating the land; so grey and flat the clouds. The European Women's Championships are currently taking place in the Midlands and they all have my deepest sympathy: the only consolation is it's great for your complexions, ladies! (Thanks for nothing, they all chorus.)

After the rectangular fields, grid-plan towns and arrow-straight roads of America, I was vividly reminded, on the approach to Gatwick, that most fields in England are any shape but rectangular, towns are a disorderly muddle and no British-built road is straight. I once said this to a Canadian airline pilot sitting alongside in the Caproni Calif – this was a year before I sold up and 18 months before the wings fell off, but that is another story. He contradicted me: "There's a straight road, from horizon to horizon." "That" I



Fairly drab.

said "was built by the Romans two thousand years ago, and since then someone has lost the piece of string."

GLIDING POSTCARDS

Two more glider pilots have published sets of postcards featuring their photographs (see also the last issue, p211). The ASH-25 over the Alps is by Jacques Noel of 16 rue Emile Boyoud, 04600 St Auban, France and the Nimbus 2c at rest after a wave climb to 19 000ft is by Steve Bicknell of 16 Lexham Mews, London W8 6JW.





Allan Alstead and Lemmy before a flight in the Puchacz. Photo: Glen Douglas.

COMPETITION ENTERPRISE

Aboyne – June 29-July 6

The weeks before the starting date of June 29 had been wet, with nearly double the normal rainfall. Very little soaring had taken place and the usual westerly wave had been conspicuous by its absence. Those of you who have been to Aboyne will well know that the dreaded wind is the one from the east. The north-east coast often develops a mantle of grey mist (the haar) and this can roll inland and cut off any heating which might cause the odd thermal. Low pressure to the south of Aboyne produces exactly these conditions.

The long-range forecast for Enterprise week was for low pressure to the south and high pressure to the north of Aboyne giving easterly winds, a continuation of our unseasonal and unsoarable summer and the prospect of the cold and clammy haar.

But, Aboyne has that ability to produce soaring days if it is flyable and therein lies its strength. The opening day arrived and the sun was shining. The Competition was declared "open" by Allan Alstead, chief executive of the Scottish Sports Council, and the first task briefing got under way.

Day 1, Saturday, June 29

Met: A weak ridge would cross Scotland followed by a trough giving increasing cloud and rain.

Task: Multi O/R to any of the 28 listed TPs. Each O/R to be shorter than the previous one!

John Bally (Nimbus 3) was first away, taking full advantage of his previous two practice days to get organised. Soon there were no gliders left on site. About three hours went by before the first landing reports indicated that there were as many choices of TPs as there were pilots! John Bally landed at Banff after flying 332km. Good flights also by Ron Davidson (SB-5) and Dave White (Vega 17). Everyone got back in time for the barbecue and the rain stayed away for that too!

Day 2, Sunday, June 30

Met: Scattered showers, some heavy. Light winds.

Task: Distance round any three TPs.

This task caused some anxiety among some pilots who having landed back at Aboyne realised that "distance round" meant precisely that! As it was, substantial showers blocked many of the routes and no one managed more



Tony Smallwood took this photo of his Gull I and John Bally's Nimbus 3. Photo: Glen Douglas.



Lemmy with John Fielden (in the centre) and John Bally. Photo: Tony Smallwood.

than three TPs. John Bally again flew furthest (221km) but was beaten on handicap by Justin Wills (Vega) achieving 219km. Justin was at Aboyne fresh from his success in the Swiss Nationals but flying Mike Pope's Vega for the first time. Tony Smallwood in the Gull 1 departed in a clear patch and returned a few hours later just before a storm produced heavy rain and visibility of half a mile.

Some gliders did not get away and some that did could not be retrieved until the following day.

Monday, July 1

Low cloud, mist and drizzle. A rebrief was planned for 1400hrs. A lot of pilots and crews went turnip picking and came back with a trailer full. When they were shaken out a dishevelled K-6E appeared as well. Chris Nicholas said that as he had had little or nothing to do with the retrieve he could not understand how all those turnips had got in the wheel box! Neep picking seems to develop a thirst and the Lochnagar

distillery was chosen as a TP. Everyone that started got round but no one could remember what the task was, so the day was scrubbed.

Tuesday, July 2

More low cloud but a hint of better things in the afternoon.

Task: A triangle using TPs within a prescribed area. Some gliders managed to soar in the afternoon but did not find the low cloudbase good enough to leave the site.

Wednesday, July 3

Little change, still the easterly gloom. The Enterprise Club Committee met and discussed future venues and possible developments. The day was scrubbed at 1200hrs. A few hopefuls went to Feshiebridge and found some sun but no soaring.

Day 3, Thursday, July 4

Met: Early fog clearing by mid-morning. Wind ESE, light. These conditions often produce usable wave and hopes rose of some good soaring.

Task: Alternative O/R speed to any TP within a prescribed area.

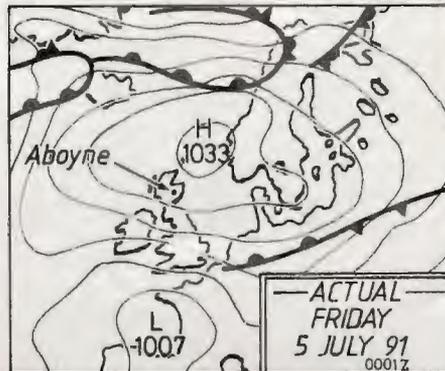
Ron Davidson was launched to see if there was any lift and as soon as he had said there was wave the rest of the field eagerly launched. It was apparent that although there was wave it was difficult to use in the blue conditions and was not going very high. Most of the pilots used the nearer TPs to get speed points but failed to beat Tony Smallwood who, with the Gull's handicap advantage, turned a 29km/h speed into a large number of points. Graham Keates (DG-200) completed the task then told his partner how to do it. Jim Davidson (DG-200) then put up the best speed for the day but did not get enough distance points to do better than 3rd for the day.

John Dransfield, (Deeside CFI), who had spent all day fixing the Kestrel airbrakes, took off at just after 6pm and managed to complete an O/R, landing just before 10pm. While all of this was going on Justin Wills took John Fielden

up in the club Puchacz for some local soaring. Some six hours later they re-appeared to the delight of the crew and the relief of the queue for the two-seaters. They had been to BR at Rannoch, the highest station in the UK, and on handicap beat even the Gull. They got a prize for being "Enterprising". This was a day of memorable flights.

Day 4, Friday, July 5

Met: East winds, some cu, likely wave. (See chart.)



Task: Cat's Cradle.

This was a very hard day. It was difficult to get away easily and the small thermals which developed around the site did not go high enough to contact wave. Only three people scored.

Ron Davidson landed 14km away and retrieved himself. John Bally who had launched second had said nothing all day, but Justin was heard frequently asking Gillian if this or that field was all right. Gillian herded sheep into corners and reassured Justin that rocks in some fields were only cow pats! By this process he slowly crept up the Dee valley using any rock which might produce a flicker on the vario. His long patience was rewarded eventually when the ridge lift at Braemar turned into wave. This enabled him to get round two TPs before he once again got low and had to resort to the ridges. A

tour de force of nearly 8hrs scraping for 151km.

John, meanwhile, had also had a session of difficult ridge soaring before getting well established in wave which, with perseverance, got him eventually to 15 000ft and a distance of 405km. These flights are unlikely to be forgotten either. John had by now built an unassailable lead but the minor placings were still wide open.

Day 5, Saturday, July 6

Met: Similar conditions again.

Task: Multi O/R using any of three TPs.

As briefing finished, the sky to the west displayed beautiful layered lenticulars. Small, ragged cu began to form over the airfield. Dave White (Vega 17) was first off and soon afterwards was followed by a number of others. However, the air was very rough and produced lots of sink. Some were on the ground again very quickly and there were some early landouts.

Ron Davidson, in a valiant attempt to reduce weight, slowly emptied his wallet with numerous aerotows but to no avail. Those who got into the wave were able to get round one or more TPs. The cloud cover, although thin, was making visibility poor and as there was a bonus for landing at Aboyne many opted for that rather than tempt fate. Justin and John arranged a formation fly-past to finish the day and yet another memorable Enterprise at Aboyne.

John Bally had been uncatchable

The prizegiving and barbecue were held in sunshine at almost the scheduled time (for once) and we were delighted to have Val Fielden to present the prizes. Dave White had won the day with just enough points to tie with Justin for 2nd place overall. John Bally had been uncatchable but got 3rd place for the day and the overall winner's trophies.

Aboyne had produced six soaring days, of which five were contest days, some exciting and memorable flying, all in the most unlikely weather. Next year Enterprise will be at Sutton Bank. Book your place!

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Final Results

Pos	Pilot	Glider	1.29.6	2.30.6	3.4.7	4.5.7	5.6.7	Points
1	Bally, J. D.	Nimbus 3	255	195	501	341	236	1528
2=	Wills, T. J./Pope, M. H. B.	Vega 17	56	197	120	166	271	810
2=	White, D.	Vega 17	182	165	189	0	274	810
4	Smallwood, A.	Gull 1	DNF	81	513	DNF	DNF	594
5	Keates, G./Davidson, J.	DG-200/17	63	DNF	469	0	20	552
6	Housden, R. & T.	ASW-20cl	121	40	180	0	149	490
7	Dall, R.	ASW-19	40	48	202	0	148	438
8	Nicholas, C.	K-6E	100	65	233	0	0	398
9	Dansfield, J./Holloway, G.	Kestrel 19	101	39	65	0	153	358
10	Longstaff, W.	Dart 17R	121	63	DNF	0	172	356
11	Gaunt, N./Grainger, J.	LS-7	150	69	128	0	0	347
12	Davidson, R.	SB-5	202	48	81	15	0	346
13	Franks, H.	Libelle	94	45	137	0	14	290
14	Owles, C.	Dart 17	47	76	142	0	0	265
15	Moorhouse, K.	Ventus B	99	50	77	0	0	226
16	Poole, P.	Kestrel 19	43	0	56	0	0	99
17	Feakes, R./Eastwell, B.	ASH-25E	62	33	0	0	DNF	95
18	Harrison, T.	H-301	DNF	0	75	0	DNF	75
19=	Mossman, A.	PIK 30	DNF	DNF	DNF	0	DNF	0
19=	Sesemann, M.	Ventus T	DNF	0	SNF	0	0	0

THE PARIS AIR SHOW

S-10s now wholly built and test flown in unified Berlin

The first Stemme S-10 high performance two-seater motor glider on the British register was displayed at the Paris show in June, following its UK certification under JAR 22 rules. It was about to be delivered to a Guernsey customer – the first of five British sales among more than 50 orders now booked, with some 25 S-10s already built. (See also the last issue, p207 and the February 1989 issue, p10.)

Stemme GmbH was founded in West Berlin in 1984 and began production under special dispensation from what was then the wartime Allies' four-power administration. But it was compelled to install the engines, and test fly aircraft, some 125 miles further west, at Braunschweig in what was West Germany.

Now, after German reunification, all such restrictions have been swept away. Production is still in Berlin's Wedding district but final assembly and test flying is done at the former East

HAVE YOU SEEN OUR YEARBOOK?



A lot of pilots have missed out, despite the publicity given this first issue which is packed with information and articles to form a valuable reference book. It is really a larger version of S&G with great articles and masses of important material. Get your copy now from the BGA at the special autumn price of £2.50 including p&p.



Above: Derek Piggott about to test fly the S-10 with Michael Rose of Stemme as P2. Photo: Mike Jefferyes.



The Flamingo. Photo: Photo Link.

German military field of Strausberg, 25 miles east of the city.

Three of the S-10s already delivered are specially equipped light surveillance versions, carrying in underwing pods sensors for such scientific purposes as pollution monitoring and control and for which their high fuel efficiency, long endurance and low noise level make them particularly suitable.

Sperber dons sombrero

Last on the market as the RF-5B Sperber and built in Germany, the classic French René Fournier two-seater motor glider is now available as the AJ1 Serrania and is built at Seguria, in southern Spain.

Manufacturer Aeronautica de Jaen SA, formed in 1989 and with a number of interests in

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FLYING THE STEMME S-10

Extracts from a test flight by Derek Piggott. See also George Lee's first impressions of this high performance self launching glider in the February 1989 issue, p10

The Stemme S-10 is one of the most elegant soaring machines ever designed, with superb surface finish and attention to detail throughout. Dispel any thought that this is an underpowered, low performance machine. With a best L/D of over 50:1 it is a formidable competitor to the best Open Class gliders. Under power it climbs at well over 5kt and can cruise 500 miles at 90kt.

A steel frame behind the cockpit mounts the engine, undercarriage and three-piece wing. Easily removable panels allow engine servicing without dismantling the wings.

The twin undercarriage is electrically operated with manual back up. Effective hydraulic disc brakes are fitted, and the steerable tail wheel gave easy control taxying in a strong crosswind over uneven ground.

Power Unit

The Limbach L2400 transmits 95hp at 3400rpm via a centrifugal clutch, flexible couplings, prop shaft and five belt reduction gear in the nose. The shaft is enclosed in a Kevlar tunnel between the seats. Certification required a broken shaft to be safely contained at wide-open-throttle about 5000rpm! Vibration is so low it is almost unbelievable that the shaft passes through the cockpit.

Gliding, the folding propeller is cleverly concealed by the nose cone. This moves forward to allow the blades to unfold like a penknife by centrifugal force when starting. At height, the engine is switched off and de-clutches automat-

ically. The windmilling prop is braked, the sprung-loaded blades fold inwards, the assembly is easily aligned and the nose cone closed.

The Cockpit

The canopy is hinged at the front and held open by two gas struts. The rudders and seat backs are adjustable and there is plenty of room. The side-by-side cockpit provides a very large instrument panel.

The minimum cockpit load is a very reasonable 70kg (140lb pilot + parachute). The maximum load is 214kg of which up to 180kg may be cockpit load. Although the cockpit looks complicated, in practice everything is simple and logical to operate.

The nose cone must be locked forward before the engine can be started; this also opens the engine cooling vents. The blades unfold as the starter operates, then the ignition is put on.

The take off is simple; the Flight Manual gives a believable ground run on grass of under 300m. The recommended 62kt gives a healthy climb of 5-6kt at full throttle. I was told that it was very quiet from the ground.

Fuel consumption at 3000rpm (95-100kt) is about 15 litres/hr. Each wing contains a 45 litre tank giving a useful range for Continental touring! Unlike most other high performance motor gliders, the four stroke Limbach will run smoothly at cruising rpm all day. In the cockpit the engine noise seemed very reasonable. I happily flew without the headset until needing the radio.

Gliding

Gliding, the aircraft becomes incredibly quiet,

is remarkably comfortable and the view all round superb.

The elevator is light and the ailerons and rudder become heavier over 80kt. At 55kt the ailerons are light with a pleasant progressive feel. It is easy to roll from 45 to 45° in 5sec, which is excellent for 23m span. Ten degrees of flap enables very steep turns at 50kt.

Performance

At 100kt the glide ratio is 1:30 (2°) and even at 146kt VNE the glide is remarkably flat. Min sink is just over 1kt and the weakest lift can be easily exploited. I was fortunate to fly it on a good spring day – flown dual it climbed well against other gliders.

The stall is a non-event with two pilots. Bringing the nose well up causes a gentle buffet and a gradual lowering of the nose at about 40kt. Large amounts of rudder and slow skidding turns had no real effect with little tendency to drop the wing.

The restart is simplicity itself: master switch on, nose cowl forward and locked, starter pressed and ignition switch on. On every occasion the engine fired up immediately.

Approach and landing

There seems no point restarting the engine for the circuit. The sideslip if ever needed is normal. At 60kt with full brake and full flap it comes down very steeply making spot landings a doddle.

A most attractive feature of the Stemme is the side-by-side seating – the drag of a well designed side-by-side layout should be very little different from the usual tandem.

The Limbach engine, VW derived, is incredibly reliable and the S-10 is never expected to end up landing out. However, should the worst happen, this configuration has the great safety advantage of minimal drag penalty from the engine and propeller – unlike gliders fitted with a fold-out engine.

The S-10 is being produced at two per month, with orders for the next year. The cost? With full instruments, trailer (just in case, but also to save winter hangarage charges) will approach £100 000. Still, what fun you could have with it! ☑

aircraft construction, maintenance and flying training, obtained a licence from Monsieur Fournier to put his elegant 80hp Limbach-powered tandem two-seater back into production.

The first one completed was exhibited at the show and was due for delivery immediately thereafter to the Aeroclub de Madrid. The firm will build another dozen or so this year as the production tempo builds up.

"We have five orders from Spanish customers, one from Egypt and will deliver two in kit form for home completion in Italy. If we get sufficient sales we will produce about 20-22 aircraft next year," Aeronautica de Jaen director-general Juan Garcia was saying at le Bourget.

Price of the Serrania, with standard equipment, was quoted at 7.5 million pesetas ex

works. The maker's UK agent is Soaring Equipment Ltd, of Birmingham.

Flamingo finery

French plastics specialists Rex Composites, of Issoire, displayed the prototype Flamingo ultra-light motor glider only ten days after its unpowered maiden flight.

In an imaginative paint scheme reflecting its name, the Flamingo has a retractable 12cv single-cylinder two-stroke engine delivering enough power for self launching.

With an airframe of Kevlar, carbon and fibreglass reinforced epoxy, the Flamingo spans 11.3m (37ft), with a projected optional extension to 14.8m. It weighs only 98kg (215lb) empty and max AUW is 250kg (550lb). The glide ratio with

the engine retracted is said to be 32:1, reducing to 24:1 with the unit extended. Min sink is 0.67m/sec; VNE is 140km/h (75kt) and stalling – accompanied, say the makers, by *une légère abatée* which is presumably a nice French buffet – occurs at a gentle 56km/h (30kt).

The powered endurance of 2hr 20min gives a potential cruising range of 200km (125mi). Design factors are +4.4 and -2.2g and aerobatics are forbidden.

Production plans are not yet firm but Rex Composites may market the Flamingo as a kit. "The mini motor glider liberates the soaring buff from all the habitual constraints of gliding. It permits pilots of ultra-lights and hang gliders to evolve rapidly into higher performance flying," the company says. ☑

In this part there are some examples of how the wind flows over hills and valleys. The low level flow depends on both the speed of the wind and the stability of the air. At first the waves aloft depend on how well the air follows the contours of the ground but after a time the wave pattern starts to change the low level flow. A small and fairly slow change in one factor may produce a large and rapid change in another.

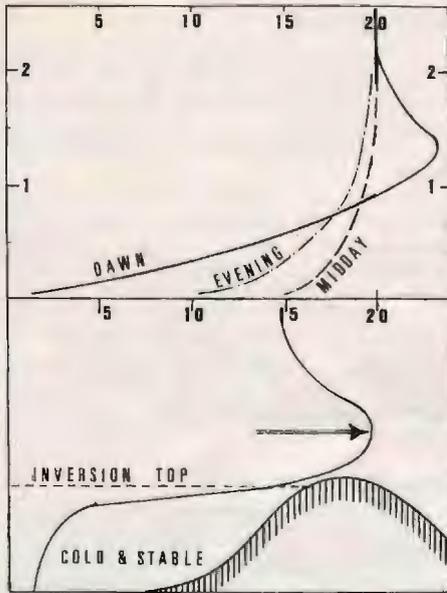


Fig 1
 Fig 1 is a reminder of how the vertical profile of wind (sometimes called the "wind gradient") can vary during the day. Wind speed is shown along the top of each figure, height in thousands of feet is at the side. In the top section there are three profiles. They are all based on a 20kt wind aloft. The full line (marked "dawn") shows very little wind on the surface but a big increase with height leading to a stronger than normal speed at about 1400ft (where the top of the nocturnal inversion happened to be). This excess of speed is quite a common feature. In some circumstances the speed at the top of the inversion is far stronger and then it is called a "nocturnal low level jet." Measurements from the top of very tall TV towers in the USA have shown wind speeds of over 50kt just before dawn. Such nocturnal jets disappear very soon after sunrise.

The pecked line marked "midday" shows the normal change of wind speed with height when the atmosphere is being stirred up by thermals. The dot-dash line marked "evening" shows the decrease in surface wind when the sun has set and the ground cools by radiating heat away into space. The colder the ground becomes the greater is this decrease in wind at the surface.

The lower half shows what happens when the inversion reaches almost up to the hill top. Then the air beneath the inversion is very slow moving and being so cold and stable is unable to clamber up the hill. Cold and stable air behaves in a very lazy fashion; it will never flow up the hill side if it can find a way round by following a valley. In this diagram the hill blocks the low level flow. If the low level air moves at all it will follow the line

WIND SHEAR AND WAVES

Part 2

The first part of Tom's article was in the last issue, p178

of the valley regardless of the winds aloft. At the hill top, just above the inversion, the wind may blow quite briskly but since it has been travelling almost horizontally above the inversion top there is no hill lift.

Fig 2 shows four types of flow across a ridge; the top example (1) is called a subcritical flow. Here there is a stable layer well above the hill top and a strong wind at all levels. The stable layer dips down where the air crosses the hill. It is rather like the aerodynamic flow due to a venturi. There is a fall of pressure and an increase of wind speed over the hill. On the windward side there is a region of higher pressure and a decrease in wind speed. A similar effect occurs on the lee side.

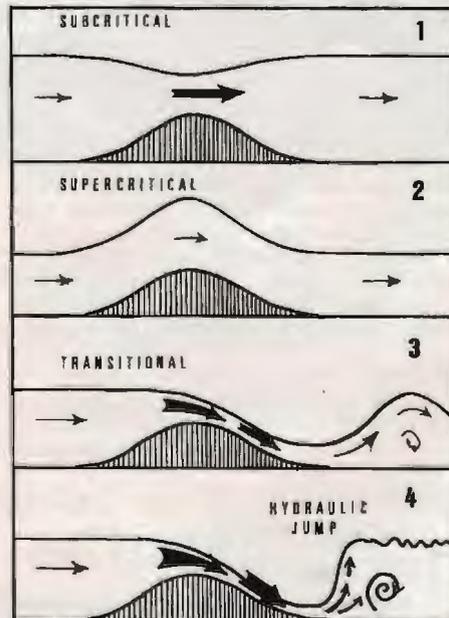


Fig 2
 The flow often breaks away from the ground beyond the ridge leaving turbulent eddies below the surface of separation. (2) This is a type of supercritical flow when the air curves high over the ridge line before dropping down the lee side. In this case the wind speed (at ground level) may actually slow down over the hill crest instead of increasing. On one occasion the Met staff carrying out an investigation at Great Dun Fell on the Pennines found the

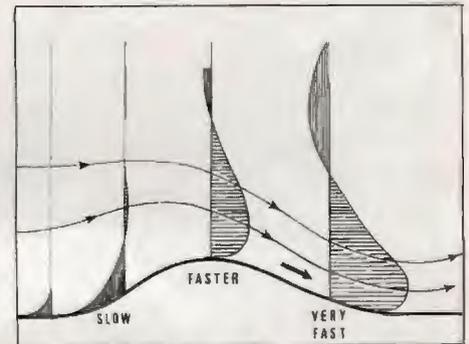


Fig 3
 hill top wind was less than 50% of the upwind speed. (3) is a transitional flow when the air approaches almost horizontally but then dips down over the ridge and sticks close to the lee slope, producing unexpectedly high winds on the lee side. When this happens the flow does not break away beyond the crest line but follows the slope right down to the valley floor. It then swoops up to form the first of a series of lee waves. (4) is a more extreme example. Here the strong flow becomes very shallow and goes shooting down the lee slope like water down a weir. Then it suddenly leaps up to its original depth in a "hydraulic jump".

The hydraulic jump is (as its name suggests) normally seen as a water phenomenon but there are times when the atmosphere behaves very like water in the way it forms eddies, waves and jumps. Fig 3 illustrates how the profile of the wind varies when there is a strong supercritical flow. The series of vertical lines represents the normal wind velocity. Where surface drag or hill effects slows the air down the effect is marked by vertical hatched lines. Where the air speeds up the horizontal hatching emphasises this acceleration. The main slow down takes place where the air starts to ascend the windward face. Here the usual effect of surface drag is increased; kinetic energy is converted to potential energy as the air climbs the hill. Pressure rises at ground level and the stronger flow lifts above the surface. Over the hill top the speed up is quite marked with a much increased flow. Then down the lee slope the streamlines converge to produce a very fast flow at low levels but a reduction higher up.

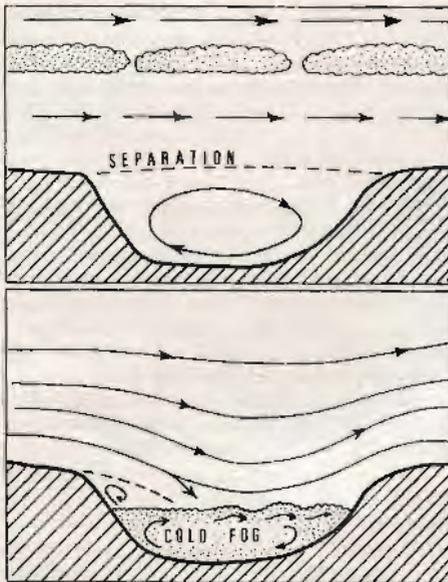


Fig 4

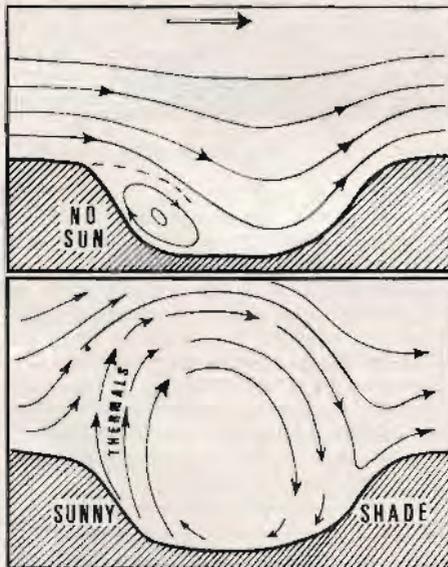


Fig 5

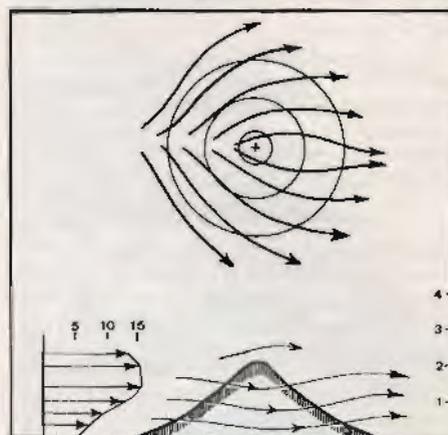


Fig 6

On the downward slope potential energy is being converted into kinetic energy as the air accelerates. There is a drop in surface pressure too.

On strong wave days this fall of pressure on the lee side of mountains is great enough to show up as a marked trough in the isobars. When the Scottish or Pennines waves are active one may find this trough on the lee side. When there is a full strength föhn wind over the Alps the lee trough is a major feature.

Valley flow

Fig 4 (upper part) shows how the flow can separate from the sharp edge of a valley and travel straight across without dipping down at all. A separate slowly rotating eddy fills most of the valley. A layer of broken Sc clouds can blow across without being affected by the valley. If the flow dipped down in to the valley the descent would tend to break up or disperse the Sc layer as it moved across. The lower diagram shows a slightly smoother rim to the valley with the cross valley flow dipping down to produce little wavelets on the top of the valley fog. The air beneath the fog is usually much colder and so stable that it is hardly influenced by the flow above it.

Fig 5 shows a day time flow. In the upper part the lee side eddy is now much smaller and there is a lift on the windward slopes of the valley. In the lower half the lee slope is in sunshine and thermals have been set off from the sunny lee slopes. These disrupt the flow across the valley. The horizontal flow is intermittently deflected over the valley by these thermals. The downflow from thermals may then kill most of the lift on the shaded windward slope of the valley.

Isolated hills

Fig 6 shows a plan and side elevation of an isolated conical hill. The flow was studied by putting up a number of anemometers on the hill side and by releasing a series of constant pressure balloons upwind. These balloons cannot expand so they tend to fly at a set pressure. They respond quite well to the up and down flow. In this first example the air is stable and the wind profile (shown in the lower left hand corner) has a maximum of 15-16kt over the upper part of the hill. The streamlines show the flow separating to go round the sides of the hill. The flow often descends as it goes round the hill side.

Fig 7 shows the same hill when the air was stable above 300ft but the wind was much lighter (only reaching 8kt and dropping off to 5kt above the hill top). Now there is a well marked eddy downwind of the hill and a line of separation going from side to side of the hill just down stream of the summit. This is shown by the pecked line on both plan and cross-section.

Fig 8 shows the flow when the air was unstable and the wind speed a good deal stronger. The plan view streamlines suggest a convergence on the lee side. The side view shows that the constant pressure balloons were caught in many rising eddies, probably mainly thermic in origin, and went high above the hill top. There is the beginnings of a lee eddy where some of the thermals turned into sink on the downwind side.

Fig 9 shows a conical island when the wind flow was very strong. Here the upper (plan) view shows the air converging to produce a sort of

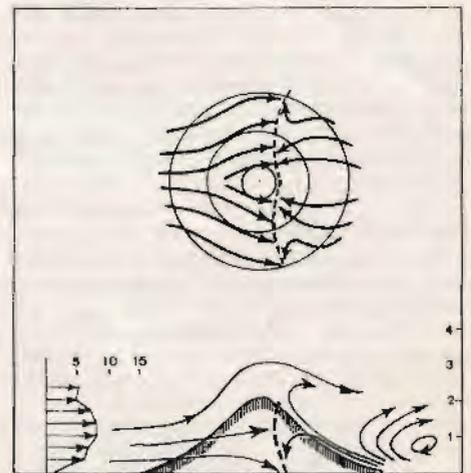


Fig 7

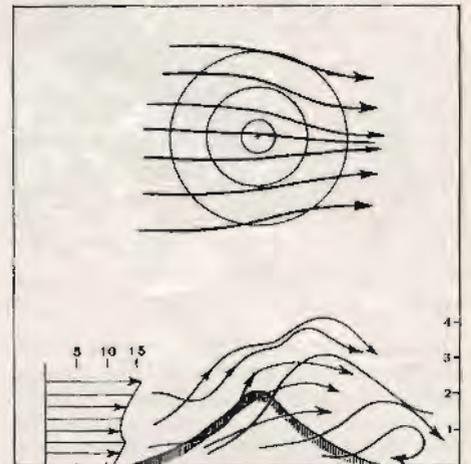


Fig 8

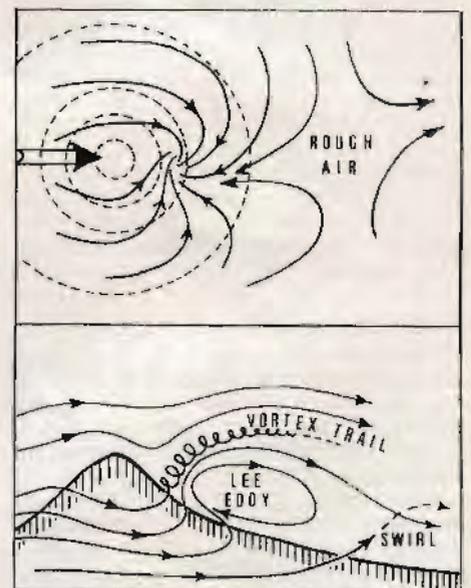


Fig 9

vortex to lee of the summit. At the foot there is another turbulent region where the various streamlines separate. The side view shows a

well developed lee eddy with the probability of some sort of vortex trail spinning away from the convergence zone shown in the plan view. Vortices like these have also been reproduced by laboratory studies of water flow over a similarly shaped obstruction. Aircraft found that in real life the turbulent region trailed far downwind of the island.

Vortex shedding

Much larger vortices are shed by islands several miles wide. A pattern of contra-rotating eddies have been seen when there was an inversion near the peaks of isolated islands. Fig 10 shows a sketch of this vortex shedding pattern to the lee of the arctic island of Jan Mayen



Fig 10

(marked here as JM). On either side are regular cloud streets aligned parallel to the wind but to the lee of the island the streets are broken into swirls which twist first one way and then the other. Similar swirls often occur to the lee of the Canary Islands.

This phenomenon occurs on all scales down to the size of chimneys. Some thin metal smoke stacks are fitted with a spiral strip winding from top to bottom. This spiral breaks up the vortices so that they cannot build up a dangerous resonance and shake the chimney to bits. I have been told that vortex shedding was held responsible for the collapse of a big cooling tower at Ferrybridge. Each time a vortex breaks away there is a pressure jump which switches from one side to the other. This can set up a resonant oscillation which grows large enough to destroy the downstream tower.

Vortex stretching

The air flow may develop horizontal vortex rolls in the strong shear near the ground. If there is an undulating ridge which has promontaries extending out into the wind these vortices may be tilted from the horizontal, lifted off the ground and stretched out. A thermal breaking away may help this process. Stretching a vortex makes it spin faster. The result has sometimes been made visible on a snowy slope. Here the vortex can lift up a swirl of snow like a dust devil. The danger for pilots arises when there is no visible sign of the vortex. It may only give a jolt to a large fast moving aircraft but slow flying ultra-light craft, like hang gliders, which often fly close to the ground could suffer a fatal upset.

Feedback between waves and hill flow

The way air flows over a hill depends very much on the tendency for waves to develop aloft. In part 1 the feedback between low level cumu-

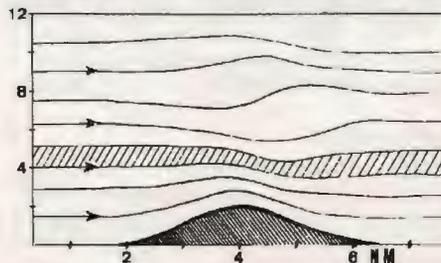


Fig 11

lus and waves aloft was described. This section describes the interaction between waves and hill flow.

Fig 11 shows a smooth ridge with the wind blowing from left to right. Distances are marked along the base line, heights in thousands of feet up the side. The shaded zone between 4000 and 5000ft is a weak inversion. As the flow takes the air across the ridge the inversion dips down on the lee side and then recovers. The streamlines come closer together over the crest showing stronger winds over the hill top and part way down the lee slope. A weak wave pattern grows above the inversion. Notice how the wave front tilts upwind so that the streamline starting out at 9000ft starts to rise ahead of the streamline from 6000ft.

With only a feeble inversion well above the hill top the wave is relatively weak.

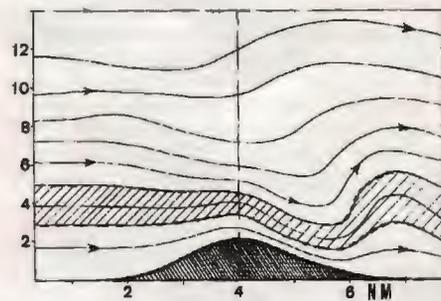


Fig 12

Fig 12 shows what happens when the inversion is both deeper and stronger and the base is lower down. This makes the wave much stronger. In this example the base of the inversion starts out at 3000ft upwind (on the left). It dips down to half this height on the lee slope and in doing so brings the streamlines much closer together, implying a greatly increased wind down the lee slope. The first wave lifts off from the foot of the long slope. The streamline associated with the top of the inversion becomes quite steep two miles downwind of the hill crest.

Once again the wave front slopes into wind with height. The streamline starting out at 12000ft begins its ascent nearly a mile ahead of the crest line while at low levels the lift lies some two miles downwind of the crest.

Fig 13 shows an extreme case when the

upwind side of the ridge is filled with cold stable air so that the low level flow is blocked and never ascends the ridge. This time the upper flow plunges down the lee slope producing very strong winds and then surging up sharply like a hydraulic jump over the downwind valley. This is almost certain to produce a severe rotor and very rough conditions.

In the USA wind speeds have been found to double between the crest of the ridge and the valley floor downwind. The flow is not very stable; the first blast of wind can arrive with a roar bringing speeds of some 100kt. Lulls and further surges may follow. Such exciting events are less common in the UK but many years ago Sheffield, on the lee side of the Pennines, suffered damage to a number of buildings by just such a wind. Further north there were many trees blown down in forests on the lee side of Scotland.

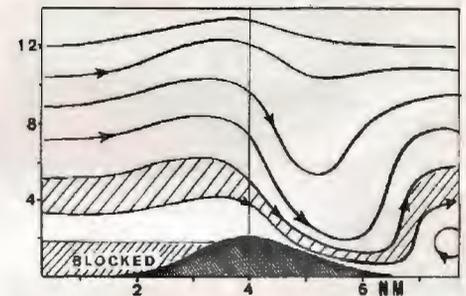


Fig 13

Blocking on the windward side is not essential but seems to encourage this kind of wind storm; blocks may also form on the lee side. Lee side blocks occur when cold and very stable air is trapped to the lee of the main mountain ridge. When this happens the upper air does not penetrate the very stable lower air. Instead it continues more or less horizontally at high level. The effect is to cancel out the mountain almost completely so that lee waves do not develop.

Fig 14 shows five situations which summarise the different flows.

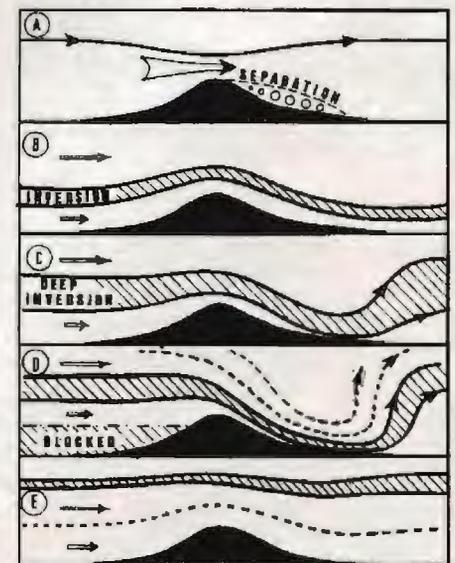


Fig 14

(a) is the subcritical flow when the air makes a dip down over the hill and recovers beyond it. The wind is strongest near the hill crest and the flow often separates downstream leaving eddies on the lee side. Subcritical flow seems more likely when the inversion is more than twice the height of the ridge. At the surface the wind speed is strongest over the ridge top.

(b) is a (just) supercritical flow with the shaded inversion layer rising and falling as it crosses the ridge, ending up rather lower on the lee side. The weak and shallow inversion reduces any wave effects.

(c) shows the difference made by a strong and deep inversion. The air plunges down the lee side and the strongest surface winds may develop down in the valley beyond, accompanied by a powerful wave. This plunge down the lee slope becomes more likely as the inversion becomes deeper and stronger.

(d) occurs when there is cold stable air upwind and the low level flow is blocked. Air from much higher up comes plunging down the lee slope producing a windstorm near the ground and a very steep wave, even a hydraulic jump, over the valley.

(e) shows how everything becomes much quieter when the inversion is weakened and lifted high above the hill. There is only a very weak, wave and the strong winds have died out on the lee side.

The one-bounce wave

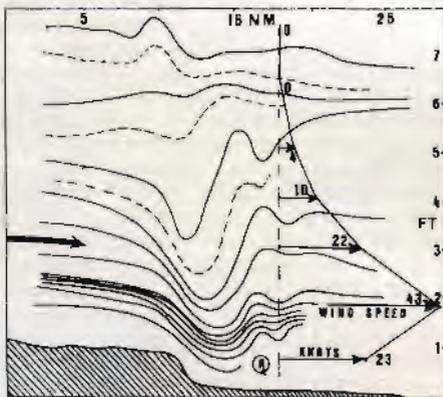


Fig 15

All the best waves seem to occur when the wind speed increases with height (positive wind shear) and there is good inversion just above the ridge top. However, if air blows down off a plateau it gains a good deal of kinetic energy during its descent and sometimes rebounds as a single lee wave. This may happen even when the wind shear is in the wrong direction (speed decreasing with height).

Fig 15 shows a one-bounce wave; it might be termed a hydraulic jump. The lines running across this diagram represent potential temperature. Provided the air is not saturated the potential temperature lines follow the up and down movements of the air. This makes it possible to plot the wave flow by making lots of temperature measurements from aircraft. In Fig 15 the profile of the wind velocity is shown extending from the pecked line just right of centre. The

actual speeds are marked near the end of the arrows. The profile shows the maximum horizontal winds occurred just below 2000ft where the speed rose to 43kt. Above this the wind speed decreased to zero near the 7000ft level. There was just one very steep wave close to the lee slope and it vanished at the zero wind level.

This example was observed in Western Australia but the effect has also been seen in the UK. In this country the air is much moister and such waves are nearly always marked by cloud which shows how steep the wave front becomes. Tony Crowdon drew a sketch of a vertical wave face near Talgarth for the April 1987 issue of S&G, p71. His wave gave a genuine 18kt lift but stopped at 7000ft. Clearly the air was going up almost vertically at this point.

Wave steepening

Lee waves are sometimes drawn as a smooth series of undulations rather like a set of SINE waves. Such waves do exist, especially a long distance downwind of the mountains, but many waves are far from symmetrical. Observations, such as those illustrated in Fig 15 and reported by Tony Crowdon at Talgarth show that the streamlines can become vertical. Indeed there are cases when the wave actually topples over and breaks. Once a wave does break like this it sets an upper limit to the wave flow.

Whatever the wind velocity was upwind of the mountain, the wave steepening will reduce the horizontal speed and may bring it down to zero just before the wave breaks. This makes it hard for anyone measuring the wind speed on the lee side to know whether the change is due to a general decrease of wind speed with height or just a local steepening of the streamlines.

One-bounce waves at cirrus level

On days when the wind speed increases with height up to 30000ft or more one may find a single wave jump occurring at high levels. Fig 16 illustrates this. The low level waves have not been added to this diagram because they are sometimes unsteady and rather mobile. However, at high level (around 30000ft and often extending into the base of the stratosphere) the wave flow steepens abruptly. It may jump several thousand feet and having surged up like this stays high for a long distance downstream. The frequency of this type of flow was not recognised before the era of satellite pictures. Now that Meteosat provides half-hourly infra-red pictures

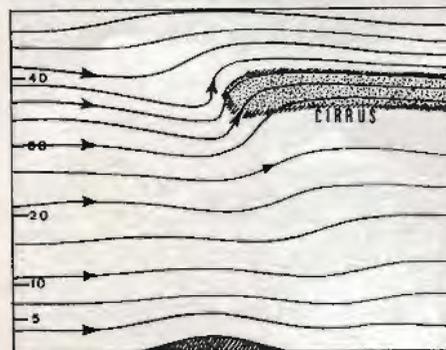


Fig 16

one may often see this kind of wave develop on time lapse loops.

Most of the wide areas of cirrus are due to frontal systems or the blow off from a Cb anvil, but the wave cirrus is different. It suddenly appears as a narrow strip of high cloud over the crest of a mountain range and grows downwind for several hours. The upwind edge of the cirrus remains anchored over the hill crest and usually has a straight leading edge. The tail grows several hundred miles downwind. When the upper wave collapses the cirrus detaches from the mountains and blows away downwind. I have seen Pennine wave cirrus extend to northern Germany before becoming detached and a Scottish cirrus trail reaching the Channel south of Devon. More spectacular wave cirrus extends from the lee side of Greenland when a west to north-west jet crosses the high ice cap. This has been sketched in Fig 17.



Fig 17

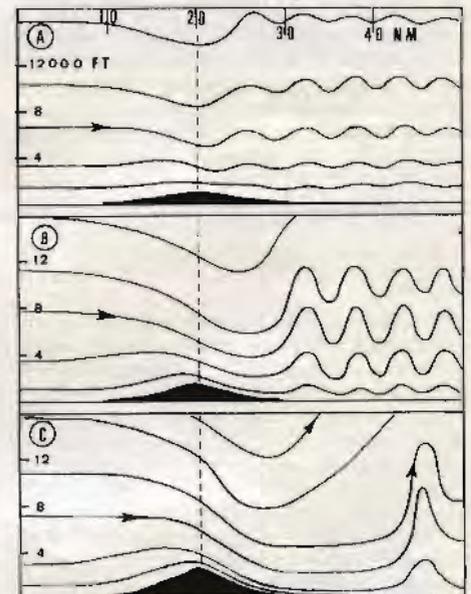


Fig 18

Hill size

Fig 18 shows how bigger hills can dramatically increase the size and character of a lee wave. In each of the three sections there is a very strong inversion with its top at 11 000ft. The width of the hill is constant but its height is increased from 1000ft in (a) to 1600ft in (b) and finally to 2600ft in (c). In the first case the wave

amplitude (half the displacement) is about the same as the hill height. In (b) the amplitude increases to more than 2000ft, in the third case (c) there is a shooting flow down the lee slope and a severe wave resembling a hydraulic jump some 25 miles beyond the crest of the ridge. Notice how the highest hill produces a very strong flow down the lee slope extending out into the plain beyond. These patterns were generated by computer but similar results have been observed in nature; in particular the severe downslope windstorms have been observed to form a ferocious rotor cloud much further from the mountains than normal. These super-rotor clouds seem to be straighter than the average rotor cloud. They do not conform to bends in the ridge line upstream as most wave clouds do.

Summary

Wind shear, the shape and size of hills, the stability of the air and the type of wave flow aloft are all connected. Feedback between the various factors can iron out a promising wave or stimulate it to monstrous proportions. Almost anything seems possible, and given time the atmosphere can change the pattern from smooth waves to jagged breakers, even if the upstream conditions remain the same. A gradual lifting of the inversion can alter the tuning of the atmosphere to produce a particular resonance that stimulates a large amplitude wave; then further lifting may detune it and allow the waves to decline.

As the wave alters so it changes the wind near the surface. One usually expects to find the strongest wind over the hill top with lighter winds near the base of the hill or even a reverse flow on the lee side. Occasionally this may alter producing a decrease of wind over the ridge. On rare occasions when a very large amplitude wave develops the strongest winds occur down the lee slope or even over the plains beyond. ▣

OVERSEAS NEWS

A NEW MOUNTAIN FLYING SCHOOL IN FRANCE

Many readers who have already visited the French Alps will have met Jacques Noel, either at Sisteron or at La Motte de Caire. His latest venture (in partnership with Roger Biagi and Pierre Bonneau) is a new mountain flying school at Gap-Tallard.

The courses, which run from Monday to Friday, include 15hrs flying for 4500 French francs, (about £450), plus aerotows. Instruction is given in a Janus and a motor glider is also available. Each instructor has only two pupils at any given time.

The school operates from March 15, to September 30, but it will also be possible to make special arrangements outside this period.

Details and reservations from: Jacques Noel, 16 rue Emile Boyoud, 04600 Saint Auban, France. Tel: 010 33 92 64 28 63.

William Malpas comments: For a pilot making his first pilgrimage to the Alps, this is the best way to start. Take your own glider by all means, but before flying alone do at least five days with Jacques first. You will never regret it.

GETTING MOTIVATED

Liz Veysey follows on from her article in the April issue, p73, by stressing the value of stretching the abilities of early solo pilots and making their gliding fun

I got stuck in the doldrums two years ago. As a professional instructor that's bad news. I was bored with instructing and I was bored with flying. I rarely had the chance to do my own gliding anyway, and by the time I did I was so tired I couldn't be bothered. Even ironing began to seem more interesting.

Realising that I was no fit person to be an ambassador for the sport I began looking for jobs outside. Suddenly it all began to happen again and, thank goodness, I threw the CVs away and could once again promote gliding with genuine fervour.

Now, anyone who knows me, will I am sure agree that I am a pretty independent lady, a self-starter needing little encouragement. But that season I really needed help, and I found my salvation by attending a BGA soaring course at Booker.

I came to realise that unless you are one of the few really competitive go-getting pilots, we all need something to help us through those times – so that we are not lost to the sport forever.

In the April issue I recommended the practice of goal setting to help individuals through a trough. But don't we, as club instructors, have a responsibility towards nurturing the post solo pilot every bit as much as teaching circuits and spins to the *ab-initio*?

One way instructors can help is by encouraging a pilot whose interest is waning to try the goal setting exercise.

Often just the fact that we take an interest in a pilot's progress is enough to give him enough confidence in his own ability to reach out for the next step forward. Some years ago when I was on my instructor course I told John Williamson, the national coach, that I had yet to fly my Silver distance. He sat down with me and planned the route that I would take the next day, not for 50km, but to beat the women's distance record. No I didn't do it. But the point is, I *believed* I could.

There are all sorts of ways we can find to stretch the abilities of early solo pilots and make their gliding fun. Get them to sample as many thermals as they can in one hour, set a mini-task (within gliding range for the pre-Bronzes), a final glide exercise, a TP photographic exercise, a spot landing competition, simulated field landings, and oh, there must be endless more you can think of. (For any instructor stuck for ideas I have a sheet of fun and games for post solo people I'd be glad to let you have.) If you can get several pilots all doing the same thing you can make a competition out of it!

If you need a dose of motivation, I can think of no better way than getting on one of the BGA's soaring courses (this really isn't meant to be an advertisement for the BGA). No one is allowed to feel stupid however little experience they've got, and it's comforting to discover that others share the same fears as yourself.

All of us on the course were surprised at what we achieved, and to spend a week in the company of like minded people all helping each other and sharing flying experiences is what gliding is all about and one of the best tonics I have found to help rediscover the joy of soaring. And then, go back to your own club, and pass it on – not just your soaring skills, but your enthusiasm! ▣

Gliding's rich pattern. A comment from Francis May of Dartmoor GC: "Thank the Lord we have families in the club. I nursed a baby, looked after a lively two year-old and chattered up nervous temporary members in between my own flights last weekend. I enjoy the sheer variety of experiences. When one throws in the sheer delight of following a buzzard into his thermal (what beautiful birds they are) one is left with the feeling there is a lot more to gliding than just chasing awards. It has turned me and a few other old wartime flyers into OAP teenagers!"

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The commitment to regular attendance which club membership and private ownership requires is very difficult to sustain in retirement when the chance comes to do all those other things work and gliding had prevented. More time for family involvement and recreation and lot of other hobbies to take up, as well as perhaps giving some time to the community, can create the gulf that finally brings an end to the maintenance of the art of co-ordinated flying and the ability to soar.

But you miss it! Whenever the weather is right the eyes reach for the skies and the heart goes sad. A few frustrating (and expensive) attempts to return to club life only serve to emphasise the widening gap. So eventually we (my wife Grace and I) lowered our sights and agreed that by going on a club course, for at least one week in the year, we could sample the life again in some form.

I felt that going anonymously to a strange club would be better than returning to the old ground where people might expect a higher standard than I felt capable of giving. And to choose a site the family could enjoy too would be some recompense for the return to the old ways of demanding a lot of support and tolerance of an obsession.

It worked out better than we hoped. We chose a Buckminster GC course at Saltby Airfield because of the quality of the response to our inquiries. We spoke to and corresponded with a number of members during a fortnight of research and decision making.

At Buckminster everyone knew what they were talking about; we were never referred to someone else to answer our questions and their attitude was completely flexible with a course tailored to suit the time I wanted to spend. I settled for five days and ten aerotows for £250, which included full membership (currently £99 with 2000ft aerotows at £11) until next May and credit held for flights not taken during the course. They even left a message on our answering machine to confirm the booking.

Caravan parked in a meadow fringed with shrubs and trees

We were allowed to park our caravan for free on the reserved part of the site in a meadow fringed with shrubs and trees and had free access to the clubhouse facilities. The gliding was great. The rabbits were numerous and lively, to the delight of our two border terriers. The pubs were many and the food was good.

The site has many attractions, not the least being its location in the middle of a picturesque area within cycling distance of many small villages, hamlets and Grantham, Stamford, the finest Georgian town in England, Oakham and Melton Mowbray.

The airfield is huge; it was a wartime base extended to take gliders and the 82nd Airborne Division went to Arnhem from here. The main runway looks a bit like a Heathrow for gliders.

A RETURN TO GLIDING

“Joe” Whelan, former CFI of Cambridge University GC, found that when he retired he had so much more time for hobbies and family life that gliding was crowded out. But he has discovered a way of keeping in touch



Joe at Duxford. The syndicate Skylark 3 he flew for many years is in the background.

Apart from the many rural and agricultural pursuits absorbed within the original airfield, gliding is the only other activity. Upwards there is pure sky – not a bit of controlled airspace in sight.

Well maintained peritracks lead to a large hardstanding apron housing the hangar, workshops and clubhouse and the kit includes three Falkes, a K-13, two Puchacz two-seaters, a K-8 and a K-6 and a Rallye tug.

The walking was excellent, with a long distance footpath, the Viking Way, crossing the north-eastern boundary of the airfield. Nearby there is the refurbished Grantham canal, the Rutland Steam Railway Museum, Belmont House, Burreigh House, Belvoir Castle, Rutland water, Twyford forest etc. Leicester is about 25 miles off and London two hours down the A1.

We all had a great time. The weather co-operated by being duff enough (so we could enjoy the offerings of the area) but not hopeless. The course instructor, Australian George Brown, and tug pilot Dennis Gliddon, ensured we were always ready for the good or not so bad bits of weather and we got in enough Puchacz flights for me to demonstrate an ability to recall how to be safe enough to go solo. It was really nice to out-soar Dennis during his second attempt in the K-6 at Silver distance.

We had chosen the worst week of the worst June in living memory but my previous gliding experience had taught me never to give up. If

you wait long enough in this country it will change, normally by the hour and almost guaranteed by the day. Anyway I was not at all certain that at the age of 64 and seven years since being in proper current practice I would be either capable or interested enough to bother whether we went to look at historic houses or struggled to make the old skills return.

I had reckoned without George, Dennis and Saltby. Given the opportunity we flew. If it looked marginal we hung on. If it was really duff we agreed to try again tomorrow, in time to go off and do something else.

The bluntness of the Australian training techniques (and the language) resulted in a crash revision course which shocked me into a response I hadn't thought possible. I began to enjoy the role of what is politely called mature pupil.

We progressed from exercise to exercise rapidly and although whilst getting familiar with a new site I had to convert to a new glider type, my errors were so well diagnosed and corrected by young George I went solo after six aerotows.

On this flight I soared for nearly an hour so once more experienced the old thrill of success.

Most BGA clubs run holiday courses and most are good; there can't be many better than Saltby, but freedom of the skies and freedom from the sea are two of its special flying qualities. They owe me three tows – and we'll be back to collect! ☑

At the prizegiving on June 23 Jed Edyvean and Warren Kay – the joint 1991 UK Standard Class Champions – stood beaming at the cameras and holding up high an impressive cup which was their trophy for a year. Irreverent suggestions that the hangar roof (overcome by the torrential downpour outside) sprang a leak at that point and that the cup was their best protection were largely exaggerated.

Rain dominated the competition and the final score was Weather 6, Pilots 3; we had to be content with one "normal" day and two days with mass landouts and highly devalued scores.

Tasks flown

Thursday, June 20
 250.2km polygon
 Swindon East, Bullington, A34/A303 junction, Headington.
 47 starters; 38 finishers

Friday, June 21
 202.9km ▲
 Caxton Gibbet, Kettering.
 47 starters; 0 finishers

Saturday, June 22
 250.2km ▲
 Six Mile Bottom (SE Cambridge), Newport Pagnell.
 47 starters; 0 finishers

The rain won the first two days hands down. On the third day we got to the grid. On the fourth day we got to the grid and it was actually dry until around 3pm. On the fifth day – Wednesday – it brightened up after the task was scrubbed and we could soar locally, with heavy help from the ridge.

The majority took off into a flat grey sky and had "downhill only" trips

Thursday proved to be the best day of the contest. A 250.2km polygon to the SW was set, but the cloudbase remained below 2000ft for too long and when launching started at 1pm the cumulus began to drift rapidly away, also to the SW. Some of those who launched early managed to stay up, but the majority took off into a flat grey sky and had "downhill only" trips for re-lights. Continued launching into those conditions was all part of an "understood" master plan: if those on the ground "refused" launches, the start line could be opened, giving those that remained airborne a chance to get underway and so gain an advantage. The tactics were further complicated by the fact that the "remote" start point was some three miles away from the airfield, close to Leighton Buzzard.

The weather that changed so quickly remained fickle: blue gaps developed and the overcast began to burn off – although grey high cover to the north-east suggested problems on the return journey.

STANDARD CLASS NATIONALS

Dunstable, June 15 – 23

With the apparent incentive to get underway sooner rather than later, those who were airborne grovelled on track in weak lift under low clouds until around Oxford where the base rapidly went up by 1500ft and a relatively straightforward day developed with good lift and long fast glides for much of the course. The re-lights' line was working flat out, but those who had to start some 20min later received a bonus: local weather improved rapidly and their run to good conditions was easier and faster so that many caught up with the leading edge of earlier starters.

But the day was not without its pitfalls: four pilots landed within 20km of Dunstable on the way out, Steve White (LS-7) fell to the ground on the last leg near Thame, while Chris Rollings (SZD 55) and Ray Payne (Discus) landed a few fields away from the finish line.

Key Officials

Director: John Jeffries
Deputy director: }
Chief marshal: } Derek Sears
Photo assessment: }
Met: Tom Bradbury
Task setter: Robin May
Control: Joan Bird
Start/Finish: Jeremy Beringer
Tug master: Nick Hoare
Communications: Tim Newport-Peace
Photo development: Tony Danbury
Comp Sec & PR: Suzy Mooring

Sally Wells (LS-7) was the fastest, but a 50pts photo penalty pushed her into 4th place for the day and Peter Sheard (Discus) took the lead. His score was 983pts and the results of that day eventually dominated the overall results of the Championships.

On Friday the weather delayed the first launch until 1.30pm, but then looked good for a task of only 202.9km. It continued to look good on the first leg to Caxton Gibbet, but then it rapidly went to worms as a wide band of clag with some drizzle appeared from the NW and blocked the into wind leg to Kettering. For many, the last usable lift was around Grafton Water, although there were heroic low level struggles further on, some into the area of Kettering and just past the wind adjusted distance Y which needs to be exceeded by at least one pilot to turn a day into a contest day. Warren Kay (ASW-24) got furthest, but in the confusion of low level flying near the 2nd TP he forgot to photograph it and so the day

went to Phil Jones (Discus). With most competitors landing out before Y – this was a "cheap" day, devalued to 57pts.

Saturday, June 22 did not look good and proved to be even worse. Strong winds, low cloudbase and frequent showers meant that an outlanding was a certainty and the only question was whether it would be possible to fly far enough into wind on the 2nd leg from Cambridge to Newport Pagnell to make it a contest day. Ralph Jones (Discus B) managed to do just that, earning 29pts for another heavily devalued day. Launching started at 2.35pm and continued – on and off – until 5pm. There was a lot of hanging around on the ground and more than half of the field did not manage to get away, with some not taking off at all. Ralph, Tony Pozerskis (Pegasus) and Warren were amongst the early starters, managed to stay up (separately!) and fly some distance on the 2nd leg. Jed (Discus) took a launch after 4pm and ended up far enough on the 2nd leg to overtake Peter Sheard in overall standings.

Jed's and Warren's overall scores turned out to be identical, producing a minor headache for the organisers and a "joint" Championship title.

On Sunday, June 23, the weather was so bad that the prizegiving was held at lunchtime and we were off home – until another competition.

For a good Championship it is necessary to have a large number of contest days and Championship weather, which should be varied – but good enough to allow tasks of at least 4 – 5hrs duration on each day.

By those yardsticks, the 1991 Standard Class Nationals were not a success, much to the disappointment of all those involved; weatherwise, they were being compared to the Standard Nationals of 1987 at Booker, which only had one contest day.

Gliders

Discus	17	DG-300	3
LS-7	11	Pegasus	2
LS-4	8	DG-100	1
ASW-24	4	SZD 55	1

But then not many competitions are blessed with ideal weather and this was a valid contest and the result was not a fluke: both Jed and Warren flew very well and consistently and were worthy winners.

Poor weather, re-briefings and long waits for go/no go decisions have been known to fray some nerves in some competitions of some



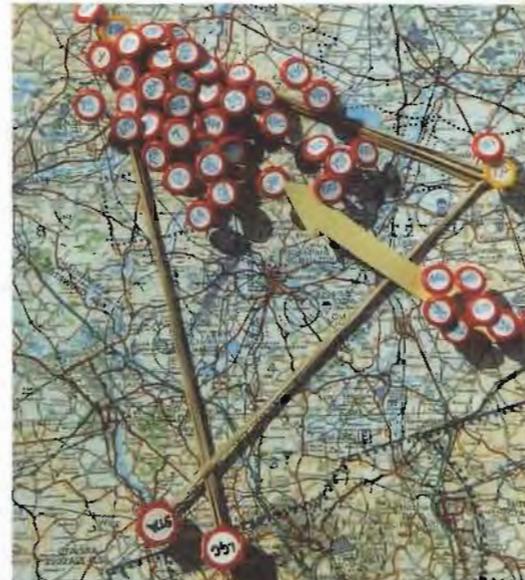
Jed Edyvean and Warren Kay, the joint winners sharing the Championship cup. Photo: Jo Jeffery.



Peter Sheard who was in 3rd place. Photo: Jo Jeffery.



Tom Bradbury, the Met man, assisted by ITV Met man Alex Hills who has recently taken up gliding. Photo: Jo Jeffery.



Above: The toll of Friday, June 21. Photo: Tony Danbury.

Below: Launching in 20min. Photo: Tony Danbury.

years back, but not in this one. The atmosphere remained very good throughout; even John Jeffries was impressed. But then his organisation team was very competent and ran the show very effectively and without fuss. We were all impressed.

As it turned out, Warren would of course have won outright had he remembered on Day 2 at Kettering that cameras are for taking TP pictures. But then Sally Wells would have won had she banked hard enough for a good TP photo on Day 1. On the other hand, Chris Rollings might have won had he not expired on the final glide on Day 1. And if only... There must have been at least 43 other "if only" stories and they will no doubt provide enough hope and motivation for most of us to turn up at another British Nationals this or next year. Only optimists need apply.

Full results on p257.



THE GEC 15 METRE CLASS NATIONALS

Lasham, July 13-21

The competition was opened on Saturday, July 13, by Major General Robin Grist, director of the Army Air Corps, and the Lasham Regionals was run at the same time. Like the Nationals, the B Class had five days but the A Class six.

The weather, as was expected, played its part this year. From the start the weatherman, Tom Bradbury, told us not to expect too much. The director, Peter Purdie, then said there was no hope of flying that day and the next briefing would be the following morning.



Brian Spreckley, the 15 Metre Class Champion and former World Champion, at the daily briefing.

Day 1, Sunday, July 14

Task: 197km polygon, Chieveley, Westcott, Chieveley

Photographs by Terry Joint

The forecast was for a wind of 280/15 and thermal strengths up to 2kt! Not a day to encourage anyone to fill us up with too much water.

Although two thirds of the Class did get back in difficult conditions, the day was won by Ralph Jones (Ventus C) with his son Steve (Ventus) 1.1km/h slower in 2nd place. Sign of things to come? Watch this space. Brian Spreckley (LS-6) came 3rd, 3km/h behind Steve.

Day 2, Monday, July 15

Task: 231.2km polygon, Didcot, Bicester, Didcot.

The pilots were to get used to Didcot this week and the Booker Boys complained they might finish at Booker by mistake.

The forecasted wind was again strong at 300/25 and with a rapid increase in cloud cover moving in, this in fact killed most of the thermals too early for anyone to get home.

Eric Smith (LS-4) won the day with 106.8km. Brian Spreckley was 2nd, having covered 106.4km to put him 1pt behind for Monday, and Ted Lysakowski (Ventus B) was third with 104.5km.

Day 3, Wednesday, July 17

Task: 246.4km polygon, Didcot, Newport Pagnell, Didcot. (Told you they would get to know Didcot.)

At last a day which looked full of promise. The forecast was for lighter winds and thermals to go to 4kt with a cloudbase above the launch height for a change. The day didn't go as promised with an approaching front coming in earlier than forecast, putting paid to thermals.

Simon Redman (ASW-20c) and Jed Edyvean (Ventus C) shared 1st place with a distance of 203km, George Metcalfe (ASW-24) was 3rd, .6km behind the winners.

Day 4, Saturday, July 20

Task: 289.2km polygon, Bicester, Pitsford, Bicester.

Now at last a forecast that looked like it might succeed. Light winds, a 3500ft cloudbase and 4kt thermals. Some of the early launchers came back for more water and then raced off only to land just past the first turn (not that Steve and Ralph pair fly of course). The more cautious did not have the same difficulty and fair thundered round with Brian Spreckley winning with 66.7km/h. Pete Sheard (Ventus A) was 2nd with 65.6km/h and Tim Scott (ASW-20c) 3rd with 64.6km/h.



Above: Paul Davis (Discus B) competing in the Lasham Nationals' grid.





Regionals held at the same time. Below: the



Eric Smith, who came 2nd, receiving his prize from the MP, Bill Walker.



Above: Don Spottiswood, BGA chairman. Below: The briefing.

Day 5, Sunday, July 21

Task: 248.3km optional TP polygon.

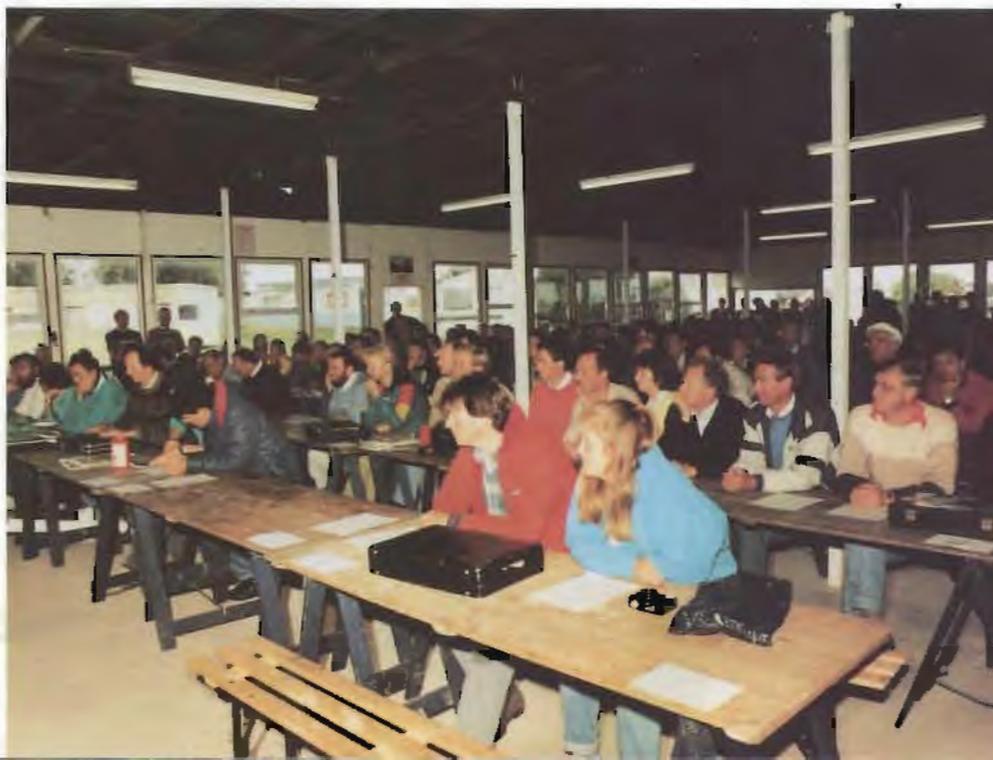
Calm wind and sunny skies welcomed us all in the morning. Perhaps a proper racing task day at last. Well it did start out like that but rapidly the spread out overtook us and the thermals weakened again. The winners managed to find the sunny holes and some good 4kt climbs were to be had. Mike Young (SZD 55) came 1st at 59km/h followed by Sally Wells (LS-7) at 57.2km/h and Tim Scott at 56km/h.

The overall winners were 1 Brian Spreckley (4510pts); 2 Eric Smith (4339pts) and 3 Ted Lysakowski (4284pts).

The competition was closed by our friend in Parliament, Bill Walker MP.

Many thanks to GEC for their sponsorship. I hope it will continue for many years to come.

The Regionals A Class was won by Mike Jordy (ASW-20L) and the B Class by Derek Piggott (Astrir CS).





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STANDARD AND 15 METRE CLASS NATIONALS' RESULTS

FINAL RESULTS

Standard Class Nationals

Pos	Pilot	Glider	Day 1.20.6 250.2km polygon Swindon East, A34/A303 Junc, Headington			Day 2.21.6 202.9km ▲ Coxton Gibbet, Kettering			Day 3.22.6 250.2km ▲ Six Mile Bottom, Newport Pagnell			Total Pts
			Speed (Dist)	Pos	Pts	(Dist)	Pos	Pts	(Dist)	Pos	Pts	
=1	Kay, W. M.	ASW-24	78.1	3	979	89.6	=7	46	100.6	3	21	1048
=1	Edyvean, J.	Discus	78.2	2	981	91.8	=3	50	93.2	=5	17	1048
3	Sheard, P. G.	Discus	78.4	1	963	91.8	=3	50	81.4	=9	10	1043
4	Campbell, D. R.	Discus	77.3	4	966	87.1	12	45	0.0	=18	0	1011
5	Wells, S.	LS-7	79.5	5	950*	82.2	=17	40	95.2	4	18	1008
6	Gaisford, P. A.	Discus	75.7	7	935	96.4	2	55	0.0	=18	0	990
7	Richards, E. W.	Discus	74.8	9	928	82.6	=17	40	81.4	=9	10	978
8	Lysakowski, E. R.	Discus B	73.8	11	914	91.8	=3	50	84.5	8	12	976
9	Smith, E.	LS-4	75.5	6	939	74.3	=34	31	0.0	=18	0	970
10	Strathern, M.	LS-7	75.0	8	931	80.9	=26	38	6.7	=18	0	969
11	Parker, S. J. C.	LS-4	74.7	10	927	78.2	=28	35	0.0	=18	0	962
12	Pozerski, A.	Pegasus	72.7	13	897	82.2	=17	40	105.2	2	23	960
13	Kay, A. E.	ASW-24	72.5	=14	893	89.4	=7	46	81.4	=9	10	951
14	Tribe, A. D.	LS-4	73.1	12	902	85.6	=14	43	28.0	=18	0	945
15	Hackett, N. G.	LS-7	72.5	=14	893	82.2	=17	40	81.4	=9	10	943
16	Watt, D. S.	ASW-24	72.5	=14	893	89.4	=7	46	0.0	=18	0	941
17	Hood, L. S.	LS-7	71.6	18	890	80.9	=26	38	59.9	15	4	922
=18	Dobson, J. B.	LS-4	71.5	19	878	78.2	=28	35	0.0	=18	0	913
=19	Harding, R.	Discus	72.1	17	897	89.5	=44	26	28.0	=18	0	913
20	Jones, R.	Discus B	69.2	25	842	82.2	=17	40	116.1	1	29	911
21	King, P. A.	LS-7	69.2	24	843	89.3	11	47	93.8	=5	17	907
22	Oleander, S. G.	LS-7	70.6	20	864	82.2	=17	40	0.0	=18	0	904
23	Arnall, R.	Discus	69.9	21	854	69.5	=44	26	81.4	=9	10	890
24	Lemlin, R.	Discus	68.6	28	835	91.8	=3	50	0.0	=18	0	885
25	McAndrews, G.	Discus	69.6	22	853	73.6	=34	31	0.0	=18	0	884
26	Clarke, A. J.	ASW-24	69.6	23	849	74.3	=34	31	39.3	17	1	881
27	Alldis, C. J.	LS-4	69.0	26	840	74.3	=34	31	17.2	=18	0	871
28	Jeffery, P.	LS-7	66.8	27	837	76.2	=31	33	0.0	=18	0	870
29	Booth, D. A.	DG-300	68.2	29	827	74.3	=34	31	75.8	14	7	865
30	Cox, T. W.	DG-100G Elan	68.0	30	825	69.5	=46	23*	89.5	7	15	863
31	Alkinson, K. R.	DG-300 Elan	68.0	31	824	76.8	=30	34	0.0	=18	0	858
32	Spencer, J. D.	Pegasus	67.2	32	812	74.3	=34	31	46.9	16	2	845
33	Nicholson, B.	Discus	66.8	33	807	74.3	=34	31	6.7	=18	0	838
34	Crabb, P. G.	LS-4	66.7	34	805	74.3	=34	31	0.0	=18	0	836
35	Langrick, D. J.	LS-4	65.7	35	790	73.6	=34	31	0.0	=18	0	821
36	Hyett, C.	DG-300	65.4	36	785	74.8	=33	32	0.0	=18	0	817
37	Coward, P. J.	LS-4	64.2	37	786	69.4	=47	48	0.0	=18	0	814
38	Throssell, M. G.	Discus	62.3	38	739	85.8	13	44	0.0	=18	0	783
39	Rollings, C. C.	SZD-55	(242.0)	=39	383	76.2	=31	33	0.0	=18	0	416
40	Payne, R. D.	Discus B	(242.0)	=39	383	55.8	=47	11	0.0	=18	0	394
41	White, S. A.	LS-7	(186.2)	41	267	82.2	=17	40	0.0	=18	0	307
42	Crabb, S. J.	LS-7	(139.1)	42	175	84.0	=16	42	0.0	=18	0	217
43	Barker, K. D.	Discus	(134.8)	43	166	73.4	=43	30	DNF	=18	0	196
44	Jones, P. R.	Discus	(28.5)	44	5	98.1	=1	57	32.5	=18	0	62
45	Ashcroft, J. P.	LS-7	(23.1)	=45	0	85.6	=14	43	0.0	=18	0	43
=46	Kingerlee, J. C.	LS-7	(17.6)	=45	0	82.2	=17	40	0.0	=18	0	40
=46	Stewart, D. R.	Discus	(22.5)	=45	0	82.2	=17	40	0.0	=18	0	40
Hors Concours												
	Galotti, D. R.	Discus	67.1	=32	812	69.5	=44	26	0.0	=18	0	838

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DNF=did not fly
*=penalty

The results of
the Open Class
Nationals, with a
report, and the
Regionals will be
in the next issue.

FINAL RESULTS

15 Metre Class

Pos	Pilot	Glider	Day 1.14.7 197km polygon Chieveley, Westcott, Chieveley			Day 2.15.7 231km polygon Didcot, Bicester, Didcot			Day 3.17.7 246km polygon Didcot, Newport Pagnell, Didcot			Day 4.20.7 289km polygon Bicester, Pitsoford, Bicester			Day 5.21.7 248km alternative TP polygon			Total Pts
			Speed (Dist)	Pos	Pts	Dist	Pos	Pts	Dist	Pos	Pts	Speed (Dist)	Pos	Pts	Speed (Dist)	Pos	Pts	
1	Spreckley, B. T.	LS-6	70.6	3	958	106.4	2	731	200.0	7	887*	66.7	1	1000	52.3	6	934	4510
2	Smith, E. R.	LS-4	61.1	11	827	106.8	1	732	194.4	8	895	54.0	11	922	56.3	4	973	4339
3	Lysakowski, E. R.	Ventus B	67.3	4	912	104.5	3	722	165.0	20	754	60.1	8	959	52.3	5	937	4284
4	Wells, S.	LS-7	56.4	18	761	102.1	5	711	169.6	=16	778	59.8	9	957	57.2	2	985	4192
5	Scott, T. J.	ASW-20c	60.3	14	815	60.9	26	468	200.0	=4	907	64.6	3	987	56.0	3	974	4151
6	Redman, S. J.	ASW-20c	49.9	25	671	86.1	=10	637	203.0	=1	918	58.2	10	948	51.3	=8	928	4102
7	Young, M. J.	SZD 55	63.1	9	854	73.9	17	555	200.0	=4	907	(170.4)	31	563	58.0	1	1000	3879
8	Morris, G. D.	ASW-20L	65.5	7	867	59.8	27	461	190.0	9	868	(185.9)	=23	606	51.6	=8	928	3750
9	Sheard, P. G.	Ventus A	66.5	=5	902	75.5	16	566	162.5	22	741	65.6	2	993	(151.1)	27	411	3613
10	Edyvean, J.	Ventus c	55.0	20	741	103.7	4	718	203.0	=1	918	(182.7)	=25	597	(155.4)	=25	429	3403
11	Morris, B. C.	LS-7	(141.1)	37	403	86.1	=10	637	165.0	31	708*	62.2	7	972	(238.7)	18	676	3396
12	Cuming, M. F.	LS-4	63.9	8	865	29.0	=32	185	181.8	12	837	(182.7)	28	577*	51.7	7	931	3395
13	Evans, A. D.	ASW-20c	57.2	16	773	96.0	=8	583	84.0	38	360	(199.0)	21	638	50.0	12	912	3366
14	Jones, R.	Ventus c	71.8	1	975	73.3	=18	551	107.2	34	461	(97.6)	41	332	50.3	11	917	3236
15	Brice, P. F.	ASW-20L	56.5	17	762	32.2	=30	215	163.1	21	744	(185.9)	=23	606	48.7	13	899	3226
16	Baker, P. E.	ASW-20	(157.2)	=33	438	96.0	15	609	157.2	26	714	(199.9)	20	640	43.3	17	795*	3196
17	Jeffery, P.	DG-600	45.5	30	610	99.1	6	692	161.0	24	733	(239.5)	13	736	(138.8)	=39	376	3147
18	Metcalf, G. E.	ASW-24	61.3	10	830	71.6	=22	539	202.4	3	916	(182.7)	=25	597	(99.2)	=43	251	3133
19	McAndrew, G.	ASW-20	60.5	12	818	12.5	38	28	166.7	18	763	(197.6)	22	634	46.6	14	878	3121
20	Harding, R. W.	Discus B	(127.9)	40	361	54.6	28	426	181.4	13	836	(167.0)	34	554	50.7	10	919	3096
21	Jeffery, P.	LS-7	54.2	21	731	86.1	=10	637	165.7	19	758	(173.4)	=29	572	(139.8)	=33	376	3074
22	Somerville, A.	Discus	52.4	23	705	73.3	=18	551	101.1	37	369*	51.6	12	737	(224.0)	19	629	3011
23	Jones, S.	Ventus	70.9	2	983	72.5	20	548	169.5	=16	778	(85.7)	43	290	(145.0)	=29	392	2989
24	Alldis, C. J.	LS-4	51.6	24	695	86.1	=10	637	184.2	11	846	(103.5)	=37	354	(103.5)	=37	354	2961
25	Hartley, K. J.	ASW-20eL	48.7	28	653	98.0	=8	683	174.8	15	805	(168.7)	=32	559	(100.4)	=42	255	2855
26	Hood, L. S.	LS-7	49.1	27	659	18.1	37	62	179.0	14	827	62.5	=5	974	(150.0)	28	408	2850
27	Cook, I. R.	Ventus c	60.3	13	816	29.0	=32	185	92.2	36	395	(201.8)	=18	645	45.9	15	874	2816
28	Ashcroft, J. P.	LS-7	53.0	22	714	0.0	=40	0	165.5	=23	710	62.4	=5	974	(160.2)	23	444	2842
29	Spencer, J. D.	DG-600	55.0	19	742	0.0	=40	0	73.5	39	315	(226.5)	=15	704	44.0	16	852	2613
30	Moulton, A. P.	ASW-20	(147.1)	36	416	36.6	29	257	189.1	10	865	(226.3)	=15	704	(134.8)	37	360	2602
31	Glossop, J. D. J.	ASW-20	66.5	=5	902	32.2	=30	215	156.5	=27	710	(76.9)	44	256	(170.8)	22	472	2555
32	Dobson, J. B.	Ventus	(89.3)	41	234	86.1	=10	637*	135.0	33	598	(204.7)	17	652	(145.0)	=29	392	2513
33	Starkey, C. G.	Ventus	58.4	15	789	11.6	39	19	198.3	6	900	(120.0)	36	413	(141.5)	=32	386	2507
34	Stewart, D. R.	Ventus	(169.2)	=31	464	66.7	25	507	156.5	=27	710	(142.8)	35	487	(124.9)	39	284*	2452
35	King, P. A.	LS-7	(22.9)	44	38	97.6	7	690	155.7	32	705	(83.3)	42	317	(201.0)	20	564	2314
36	Corbett, C. G.	ASW-20	(169.2)	=31	464	27.1	35	166	161.3	23	735	(103.5)	=37	354	(175.7)	21	487	2206
37	Payne, R. D.	Discus	(157.2)	=33	438	0.0	=40	0	160.4	25	730	(201.9)	=18	645	(143.2)	31	387	2200
38	Cunningham, G. W.	ASW-24	47.9	29	643	29.0	=32	185	100.6	35	433	(168.7)	32	559	(135.1)	36	361	2181
39	Hawkins, P. S.																	



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AMERICA

Neil MacLean describes gliding at three very different clubs in the United States

Neil, an assistant instructor, has been gliding at Lasham since 1973. He was secretary of the Surrey & Hants GC for two years and now owns one third of a Std Cirrus.



Every once in a while I visit some corner of the USA on business. I rarely have more than the odd day to spare and as a result have never got round to acquiring an American glider pilot's licence, but whenever I can I like to visit a local gliding site and perhaps have a flight as P2 in the two-seater just to see how things are done, and to view the countryside from the air.

On a visit to California and Washington State this April and May I was able to visit three sites, although I only flew at one. I found three rather different approaches to gliding.



Neil's photo of the Calistoga Glider Port. (Notice the downwind take-off. Landings are in the opposite direction, stopping ready for the next flight.)

The first was Calistoga Gliders, about 80 miles north of San Francisco at the north end of the Napa Valley. This used to be a well-known soaring and training site and has been described at least twice recently in these pages (June 1989, p141 and August 1990, p175). The original operation has moved, but the site has changed hands and is now rather unique in that it operates almost exclusively to supply passenger rides to paying customers.

They operate a fleet of the rather magnificent three-seater (so long as the two in the back are fairly friendly and don't weigh more than 340lbs)

Schweizer 2-32 gliders, and several Pawnee tugs, but to emphasise the fact that these are simply passenger rides the controls in the back seat have been removed. There is a rather elderly Schweizer 2-33 (a bit like a K-7 with struts) for occasional instruction, but the only single-seater I saw was a 1-26 doing duty as gate guardian.

From a glider pilot's point of view the most interesting thing to photograph was the price list which goes from \$75 for a 20min ride for one passenger to \$135 for a 30min ride for two. At the current rate of \$1.70 to the £ this is about £45 to £75, but there seemed to be no shortage of customers the day I called.

About 40 miles south of Calistoga I came across Lagoon Valley Soaring, near Vacaville, California. This is a more typical commercial gliding operation, offering basic and advanced training and the hire of two-seater and single-seater gliders. Glider hire and instruction can be booked in advance, and since the day I called was a Sunday all the two-seater slots had been reserved. During the week, however, there is usually an opportunity to fly on a casual basis.

Prices here are more like those in England, a 2000ft aerotow costing \$20, and glider hire between \$35 and \$42/hr, but you also pay for the instructor's time at \$22/hr. For training they use modern G103 and K-21 gliders, and you can hire Pegasus and SZD 51-1 (Junior) single-seaters. An 80min lesson including an hour's ground instruction and debriefing, and a 20min flight from a 3000ft aerotow, costs about \$66, which is not too bad, bearing in mind the rather higher level of incomes in America.

My third visit came about by chance as a result of a trip to Richland, in the State of Washington. The subject of light aviation crept into the con-

versation over lunch (as it does) and I was immediately introduced to the tug pilot of the local soaring group which operates from Richland Airport. This is a small private group who fly mostly single-seaters but also run a Blanik and a Super Cub.

No sooner had I indicated my interest in gliding (not to mention a certain enthusiasm for flying a Blanik, a type which had so far escaped mention in my logbooks), than phone calls were made and arrangements arranged, and I was invited to appear at the airport at the end of the working day. I duly turned up at about 1730hrs and found the tug pilot and an instructor waiting for me. We enjoyed a pleasant half hour of local soaring in weak thermals (it was only the beginning of May, after all).

FIRST EUROPEAN JUNIOR CHAMPIONSHIPS

Falköping, Sweden – June 23 – July 6

Steve Jones (Discus B) came 3rd in the Standard Class of the first European Junior Championships with Mike Miller-Smith (Discus) 10th and John Toon (Discus) 25th. John Garrity (ASW-19), also from Britain, was 24th in the Club Class.

There were 61 gliders in the two Classes of this seven day competition of contrasting conditions. It rained during the first week but the weather changed for the second half with temperatures rising from 15°C to 25°C.

The Standard Class had a struggle on Day 1 when only five made it back to the airfield from a 226km task to the south, Michael Miller-Smith landing 500m from the finish line.

The weather began to co-operate on Day 3, July 2, but the ground was very wet, especially around the second TP in both Classes, and only 15 of the Standard Class completed the 273.5km five leg task, Steve Jones coming third at 77.88km/h.

The next day, with a 5000ft cloudbase, the Standard Class had a 412km task and the Club Class flew 328km with only one outlanding.

On July 4 conditions were excellent with the Polish pilot Tomasz Rubaj (SZD 55) flying the 384km Standard Class task at 121km/h, which helped him win the Championships with 5786pts. Riccardo Brigliadori (Discus) from Italy was 2nd with 5613pts, and both pilots went on to fly in the World Championships. Steve Jones amassed 5432pts for 3rd place. Danish pilot Flemming Schnaider (LS-1c) was the Club Class Champion with 5094pts: Kai Siebert (Germany) 2nd with 4867pts and Harri Janakka (Finland) 3rd with 4859pts, the last two pilots flying DG-101s. ✕

Unlike many American gliding operations this one is cross-country orientated, as well as giving some instruction, and a couple of weeks after my visit a group of four pilots from Richland flew a 300 mile O/R to the neighbouring state of Idaho. For a pilot from Lasham it was an interesting experience to fly out of a commercial airport, with one's comings and goings under air traffic control, and power traffic having to be advised of the glider circling over "the dump".

Everyone I spoke to at these three different types of gliding site was very friendly and welcoming to a visiting pilot, but special thanks are due to my friends at Richland for arranging the Blanik flight. Incidentally I have recently received from them a list of about 150 gliding sites in the USA affiliated to the Soaring Society of America. If anybody is visiting the United States and would like to see this list, contact me via Lasham Gliding Society or at home on 0734-429712 and I shall be happy to provide a copy. ✕

ANNO DOMINI -

and how to fly one

Ric Prestwich has returned to gliding after 18 years and is hooked again

There appear to be lots of people who know the answers about geriatric pilots, but few who put the case from personal experience.

I originally came into gliding in 1949 at Cambridge, when I was bitten by the bug let out of the bag by David Carrow. Twenty years later, after 950hrs and a similar amount of power, I fell foul of the system at the Mynd where the two-seater had total priority and everyone else waited. Deciding not to waste any more of my life at the CFI's whim, I sold my glider and bought a boat.

I had sailed since I was five, and early on found that fortunately I was a natural navigator. This was an asset both when flying in Africa and sailing round Europe. Eventually, however, I ran out of nephews, so I sold my beautiful boat and went sailing with friends.

Siren voices in the shapes of Ron Rutherford, Vic Carr and Tony Adams coaxed me down to Sleaf, gave the old alcoholic a sniff of the gin

and I was hooked again.

This time I was 59, reasonably fit, but had not sat in a cockpit for 18 years. I had a tow to 4000ft with Vic in the Astir, and fortunately found that flying was like cycling, you never lose your balance. However, I overshot the landing by 200 yards and finished half way down the main Sleaf runway. Nevertheless I felt reasonably happy and had two more tows, then a tow to 4000ft in a Mosquito B in which I bought a share.

Three-and-a-half years and 200hrs later it is interesting to take stock.

1. The modern ships seem incredibly easy to fly and cockpits are really comfortable.
2. There seems little free airspace left. In my previous incarnation I landed on Lyneham, Brize Norton, Fairford, Horsham and Manchester Airport in my Olympia 2 and was usually fed and offered a tow home.
3. Standards have risen dramatically. Whereas my Gold badge was No. 16, I notice that there are now over 400 all three Diamonds.

Previously tremendous efforts in a Skylark 4 and a Dart 17 got me over bits of Wales in waves. Now my ASW-20 takes me to Snowdon against 40kt in 1½hrs, and the classic "knight's move" of two forward and one sideways takes me to the Clwyd wave in under an hour.

Physically I am fortunate because my severe airsick problems have disappeared with the years and my flying time per launch has doubled. Otherwise I am akin to an elderly, high mileage, car which may continue to work provided you don't flog it to death. Nevertheless there are many ailments which can put a stop to any flying, but fortunately I've avoided them so far.

At Sleaf there is a number of pilots in their sixties or more who fly regularly. The answer is in the statistics, namely that our hours and kilometres per launch compare with any club in the country.

However, none of us is immortal and the moral is obvious. Gather ye aerial rosebuds while ye may! We are all too old for the other type. ☐

AIR LINES

Like some exotic bird of passage the aerobatic pilot comes back to the airfield in the spring. Then throughout the good part of the year he stops here to refuel as he hustles his thirsty, sharp-nosed Pitts from one air display to the next. We feel flattered by his brief visits as you feel flattered when some wild creature makes its home in your garden, or a strange cat selects your lap to sleep on.

On the day that the midsummer storm swept across the airfield we all helped him to push his little aeroplane into the safety of the hangar. There was no real necessity for our help. The biplane was so light that the pilot could have managed it alone, but we wanted the excuse to touch it.

The Pitts stood in the gloomy hangar, its scarlet and cream paintwork beaded with rain, its nose raised primly, slumping it amongst our shabby Chipmunks. It was a machine that had the power to make even a Ferrari seem undistinguished.

We asked the usual questions about the aircraft, a little shyly because it, and what the aerobatic pilot could do with the performance, were far outside our experience. He answered seriously and politely, though the same questions must have been put to him a thousand times before. Like his aeroplane the pilot was small, neat and tough. You had to look very hard to see on him the marks of those tensions that forced him into regions where the rest of us dare not go.

We stood listening to the sound the rain made on the corrugated roof of the hangar and watching the dark edge of the horizon cracking slowly apart to reveal the pale oyster-blue above. From

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a breast-pocket of his overalls the pilot took out a card marked with the hieroglyphs of a series of aerobatic manoeuvres. He paced out the sequence slowly along the horizontal line of the open hangar door, occasionally checking the card, frowning, muttering to himself, making tight, controlled movements of his hands. It made me remember being backstage while a dancer rehearsed the steps of a new routine. We were all there in the hangar with the pilot, but he was a long way from us and he was already alone.

TERRY HURLEY

RAMBLINGS FROM GERMANY

Our airspace situation has improved again – the two new ICAO maps for the former GDR were published at the beginning of May but are difficult to obtain. I had reserved a copy of the northern one which turned out to be a mistake since its too far north to be of much use – some say its more suitable for sailors since it maps the coastal region with all the islands and rivers!

There is a certain amount of confusion but it's not often that the authorities have a large amount of new airspace to manage. The results are that at all times VFR traffic can operate essentially unrestricted up to the eastern limit of the former buffer zone along the border, and at weekends (and Soviet holidays) the northern and southern "thirds" of the former GDR are also available. During the week there is a maximum height limit of 1000ft (due to the Soviet forces).

In fact, many pilots from our area are reluctant to fly over the new territory since the results of landing out can bring problems – such as trying to find a telephone and then achieve a connection. We have, however, made much use of the possibility to fly around Hamburg – the area to the east is quite good for thermals. We have had a rather poor season (the cross-country season is generally considered to run from mid April to mid June. Anything that comes after that is supposedly icing on the cake!) We had one really good day in April, one in May and a couple of so-so days.

On Sunday, May 13, there was a fly-in to Stöln-Rhinow Airfield (60km north of Berlin). This is where Lilienthal carried out many flights (and had his fatal accident). This fly-in (combined with prizes for the longest flight in the form of cat's cradle) was organised so that the actual date would be announced via the taped weather forecast for gliding – in principle this service is a good idea, marred by seemingly inaccurate weather forecasts for the cost of a telephone call! The weather on this occasion was not so helpful either – one member of our club had a most interesting flight managing to reach Stöln-Rhinow where a total of 148 gliders had arrived. Many more were scattered around the countryside.

We "Northerners" do not have the best situation for long cross-country flights – with the closeness of the North and Baltic seas combined with the Elbe and associated marshes we are somewhat limited. A "good" flight here is 300km; 500km triangles are rare.

HOWARD E. MILLS

MORE ON SEA-GLIDERS

In his introduction to Paul Minton's S&G Classic in the April issue, p69, Frank Irving mentioned an expedition to Yugoslavia in 1956 which was mainly to look for sea-gliders. The article has brought the following response from a Greek pilot who helped design such a glider



The Greek sea-glider.

Plato was the first to have the idea of flying a water sailplane on the Greek islands. But don't get the wrong idea. It wasn't Plato the philosopher.

Greece is a blend of rocks and water which is not a bright combination for out landings, so a water sailplane seemed to be a great project. Back in the 1970s Plato Κουρουβακαλης and I, both instructors with the Athens GC, decided to experiment.

My preliminary drawings were for a light single-seater but Plato preferred a heavier two-seater. As he was the one to build the glider, I had to follow and designed just the sea-going part (the hull's underbody).

The 33ft span was the result of oregon pine planks being available and the 3ft wide side-by-side cockpit was designed for very close friends.

After 3000hrs' work Swordfish was ready for the first tow from Athens harbour, using a powerful motor boat and a 200ft water-ski rope. The take-off and landing were very gentle but drag producing floats weren't installed for the first flights as the wings floated anyway.

We continued the trials for some months. The only peculiarity was just after take-off when you had to pay special attention to gradually lift the tow rope out of the water.

We stopped flying from Athens when a piece of driftwood drove through the hull on landing but tests continued for a while on a lake by one of the two gliding clubs in northern Greece. But the flights were glides without any soaring.

The main problem, and one we never suspected, was the immense drag of the tow rope in the water. A long rope wouldn't allow the motor boat to speed up at all but a rope wound on a drum in the boat could be the answer. After take-off you could unwind the rope as the glider climbed. But we never got this far as the operation was already complicated and expensive.

The Swordfish was abandoned to her fate – on a stormy night a rusty roof landed on the hull.

But for anyone wanting to soar with the seagulls, don't plan to use motor boat launches. A light water sailplane could be catapulted from the mountainous Greek islands to land on the sea. Is there anyone with 3000hrs to spare for the experiment?



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BGA & GENERAL NEWS

WORLD CLASS GLIDER COMPETITION

The international competition to choose a one-design FAI World Class glider is making progress. The judging panel have chosen 11 of the 42 designs to go through to phase 2.

They are from the Aero Club D'Italia (Italy); Imre Bano (Hungary); Christiano Borrelli (Italy); Christian Brondel (France); Vladimir Fedorov (USSR); Zdravko Gabrijel (Yugoslavia); Ulrich Horn (Germany); Donald Roberts (USA); Günther Rochelt (Germany); Roman Switkiewicz (Poland) and Vaclav Zajic/Marian Meciár (Czechoslovakia).

The prototypes will be tested next summer and the winner has a year to obtain the type certification. After that the drawings must be available to any manufacturer in the world willing to produce one or more gliders. Then for the first time all competitors will be flying the same glider type, so making pilot skill the only determining factor.

It is intended that this World Class glider, being suitable for all levels of experience, cheap, easy to operate and simple to maintain, will bring more people, especially the young, into gliding and help to contribute to the expansion of the sport.

NATIONAL LADDER

"The Ladder scores up to the end of July 19 make fairly sorry reading, both in number and size of scores," comments Ed Johnston, National Ladder steward.

However, he says there have been some fine achievements and was particularly impressed by John Parsons who flew a 303km triangle during a course at Bicester, gaining Silver distance, 5hrs, Gold distance and Diamond goal.

Open Ladder

Leading pilot	Club	Fits	Pts
1. A.J.Davis	Bristol & Glos	2	6645
2. J. Cardiff	London	4	6384
3. C.Pullen	London	4	6126
4. D.G.Roberts	Cotswold	2	2888

Weekend Ladder

Leading pilot	Club	Fits	Pts
1. R.Palmer	Avon	4	3053
2. E.Johnston	Cotswold	4	2947
3. A.Grimley	Avon	4	2403
4. C.Morris	Avon	2	1740

FATAL ACCIDENTS

There have been several further fatal accidents making the current year the worst on record.

On May 25 Jerry Odell, a serving RAF Squadron Leader, was killed when his 17m Vega suffered structural failure. The glider was launched from Cosford and the accident occurred some five miles west of Whitchurch. It had been climbed to 10 000ft, almost certainly in cloud, then descended rapidly to 5000ft before the failure which was evidently due to flutter. The extensive wreckage trail and the barograph confirm the height. There is medical evidence to suggest that the pilot was possibly incapacitated during the break-up. In view of the nature of this

BGA AGM/DINNER-DANCE

The BGA AGM, dinner-dance and prize-giving will be at the Post House, Crick, Northants on Saturday, February 22, so put the date in your diary. Full details will be circulated with the December issue.

accident it was investigated by the AAIB with BGA assistance.

On July 14 John Berry, a member of the Stratford GC, was killed while flying the club owned Club Libelle at Snitterfield. The glider was being winch launched and the wingtip dragged along the ground for a few feet before take-off. When the glider became airborne it rotated into a very steep climb and spun from about 80ft while still attached to the cable; it hit the ground wings level and slightly beyond the vertical.

On July 28 a Puchacz spun in at Rivar Hill, the site of the Shalbourne Soaring Society. The student, Derek Sproule, was killed instantly and the instructor, David Maleham, died from his injuries later that day. According to witnesses the glider was launched to approximately 1000ft and spun while still attached to the cable which detached soon afterwards. The glider made two turns to the left, recovered, then spun immediately to the right; the rotation had stopped at impact.

The glider also struck a parked car, the owners of which were picnicking near by but, fortunately, no third parties were involved.

W. G. Scull, BGA director of operations

PLAN TO INCREASE AWARENESS OF RISKS

Recent accidents (see above) have resulted in a number of endeavours to increase awareness of the risks. There has been a "safety flash" which should be on all club notice boards and an instructors' newsletter to emphasise some important teaching points. The newsletter will become a regular feature. Incidentally, if you did not receive the newsletter then the BGA does not have your correct address!

On August 12 there was a joint meeting of national coaches, the Instructor and Safety Committee chairman, chaired by Don Spottiswood, to address the subject of safety. The outcome was an action plan with target dates for a number of proposals. These include briefings for CFIs and Instructors, articles in S&G, the assessment of gliders with critical winch launch characteristics, advice on pilot experience for certain types of glider, revision of the type conversion card, training progress cards for pre- and post-solo and a review of certain Operational Regulations and Recommended Practices regarding cloud flying and the use of radio during the launch.

W. G. Scull, BGA director of operations

DISCOUNT FERRY FARES

A 20% discount on brochure prices with Sealink Ferries for those travelling for "sporting occasions" might well interest glider pilots. It is also available for competition officials or helpers and

applies to all Continental excursions for a minimum period of 72hrs.

For further information contact Mick Millane Motorsport, 18 Croxton Close, Stockton on Tees, TS19 7SW, tel 0642 587784.

OBITUARY

PETER MICHAEL HARLIE TREADAWAY



It is a small consolation to all of us left behind that when the De Havilland Rapide Pete Treadaway was flying crashed at an air display at Audley End he was doing what he loved most.

I think it unlikely that there are many people who were better known throughout the aviation world than "Tredders". Nobody can believe that this tragedy could have happened to a pilot of Pete's immense skill and meticulous regard for safety.

It is a tragic coincidence that his career started with the company who built the aircraft in which he died. His aviation life and work was closely woven with DH aircraft of all kinds. Even the BAe 125 he flew for a living was made behind the same factory gates at Hatfield he entered all those years ago.

With nearly 17 000hrs and countless types of powered aircraft in his logbook, Pete also truly loved gliding and there are many who are better glider pilots because he had taught them.

There was never a stronger advocate for bringing young people into the sport and he always had time to talk to and advise even the rawest of *ab-initios*.

Romping a K-13 round 300km triangles proved his cross-country skills but he was much happier soaring the Kestrel around East Anglia in the knowledge he would get home for opening time.

Albeit a modest and unassuming man, Pete

had a mercurial personality and any relationship with him would have its ups and downs. He was uncompromising in his views, particularly with regard to safety, and would never suffer fools gladly. If you were prepared to accept this, he was a staunch and true friend. I valued his friendship and am proud to have known him. His sons Peter and Paul are following him into aviation, Peter as a pilot and Paul as an engineer.

PETER WHITMORE

GLIDING CERTIFICATES

ALL THREE DIAMONDS

No.	Name	Club	1991
358	Craven, P. D.	Lakes	16.5

DIAMOND DISTANCE

No.	Name	Club	1991
1/523	Jordy, M. J.	Buckminster	9.5
1/524	Logan, M. W. B.	Bannerdown	9.5
1/525	Craven, P. D.	Lakes (in USA)	16.5

DIAMOND GOAL

No.	Name	Club	1991
2/1943	Atkinson, R. P.	Cotswold	9.5
2/1944	Grimley, A. P.	Avon	27.5.90
2/1945	Parsons, J.	Shalhouse	9.5
2/1946	Moore, G. J.	London (in Australia)	28.11.90
2/1947	Triplett, D. A.	Shropshire	9.5
2/1948	Gagg, M. H.	Wrekin (in France)	18.5
2/1949	McEllin, M.	Bristol & Glos (in France)	18.5
2/1950	Dent, F. M.	Bristol & Glos (in France)	18.5
2/1951	Brett, R. C.	BFGGC	29.5
2/1952	Law, M. J.	Decside (in Australia)	25.2
2/1953	Fack, R. J. H.	Midland (in France)	31.5
2/1954	Parlington, C. R.	Strubby (in France)	31.5
2/1955	Pinkerton, F. W.	Nene Valley (in France)	31.5
2/1956	Young, S.	Victoria (in Australia)	9.1

BGA ACCIDENT SUMMARY

Edited by JOHN SHIPLEY
Chairman, BGA Safety Panel
Compiled by David Wright

Ref Number	Glider Type	BGA No	Damage	Date Time	Place	Pilot/Crew		
						Age	Injury	Hr
1	Discus B	-	S	3.10.90 1210	Portmoak	47	N	894
The pilot rapidly descended into the circuit to land before an approaching heavy shower. On a somewhat lower than usual final approach ground observers noticed that the wheel was still up and radioed a warning. The pilot attempted to lower the wheel while only about 15ft and lost control of the glider. The left wing hit the ground and broke off.								
2	Pegasus	2841	M	12.10.90 1249	Aboyne	25	N	384
The pilot started his circuit in changeable wind conditions with a 10kt tailwind on the downwind leg. He continued with the circuit as the wind could have easily changed back. However, it did not and he was unable to prevent the glider running off the end of the runway where it hit a rock damaging the fuselage.								
3	Sport Vega	2758	M	9.10.90 1045	Aboyne	0	N	-
The fuselage was left on the dolly broadside to the wind while an oxygen cylinder was removed. When a strong gust of wind blew it on to the ground breaking the canopy.								
4	Sid Libelle	1513	S	16.10.90 1050	Portmoak	68	N	340
At about 150ft on the aerotow the rope detached from the tug. Although there was a landable area ahead the pilot chose to turn back to the airfield. During the turn the glider lost height and hit the ground left wing first, breaking the fuselage in three places. The pilot escaped injury.								
5	DG-200	2368	M	11.10.90	Aboyne	57	N	865
As the visiting pilot joined the circuit he noted an aerotow positioned on the runway so selected the grass strip. He had, however, failed to appreciate the lack of any wind and, despite the use of full airbrake (but not sideslip?), overshot into a rough part of the airfield. The undercarriage collapsed as the glider landed heavily.								
6	Bocian 1E	1900	W/O	24.10.90 1445	Husbands Bosworth	67 24	N S	1224 -
During the aerotow in poor visibility P1 had problems with low cloud and a misted canopy. Above cloud he released at 2000ft then descended through a gap to find cloudbase was only 800ft. He chose a good field and started a circuit but extended the base leg to land short, then spun in off a low final turn. (P1 experienced but not in field landings.)								
7	Bocian 1E	2325	N	11.10.90 1745	Husbands Bosworth	59	N	15
During the pre-flight checks the front cockpit airbrake lever was found to be somewhat "sloppy" but functioned correctly. After a dual check flight P2 took the glider solo. On base leg he "cracked" the brakes then found they would not close. He could not reach the airfield so landed in a field without damage. The lever had failed below seat level.								
8	Falke	M/G G-BHSD	M	18.11.90 1245	Lasham	36 36	N N	354 ?
This motor glider accident occurred while the aircraft was being taxied in windy conditions. Turning slowly into wind, ready to take off, the downwind wing touched the ground and the tail lifted. The propeller hit the ground and broke a tip off, stopping the engine.								
9	K-6C9	3332	N	1.11.90 1530	Aboyne	50	N	206
After wave soaring at 12 000ft the wave slot closed and the pilot decided not to follow the 8-10 other gliders into that area of cloud and set up a cloud descent on a northerly heading. Reducing speed to a minimum, he finally broke cloud at 100ft above ground! He was able to turn into wind and made a safe landing in a field.								
10	K-13	2405	M	15.12.90 0900	Wycombe Air Park	47	N	49 min
The pilot on his third solo flight failed to recognise that he was too low on the downwind leg until he turned base. He flew straight to the airfield but could not clear a patch of rubble along the airfield perimeter. The glider's tailplane hit a fence picket.								

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DIAMOND HEIGHT

No.	Name	Club	1991
3/1026	Nicholson, J. B.	Lasham	29.3
3/1027	Wilson, K. M. H.	Booker (in Spain)	18.4
3/1028	Townsend, F.	Derby & Lincs	9.4
3/1029	McNair, W. R.	Ulster (in Australia)	19.5

GOLD BADGE

No.	Name	Club	1991
1545	Smith, A. D.	Lasham	18.3
1546	Atkinson, R. P.	Cotswold	9.5
1547	Backes, N.	Midland	9.5
1548	Wooller, R. E.	Blackpool & Fylde	4.5
1549	Gagg, M. H.	Wrekin	18.5
1550	Dent, F. M.	Bristol & Glos	18.5
1551	Brett, R. C.	BFGGC	24.5
1552	Law, M. J.	Deeside	25.2
1553	Nicholson, J. B.	Lasham	29.3
1554	Fack, R. J. H.	Midland	31.5

GOLD DISTANCE

Name	Club	1991
Atkinson, R. P.	Cotswold	9.5
Backes, N.	Midland	9.5
Grimley, A. P.	Avon	27.5
Parsons, J.	Shalbourne	9.5
Moore, G. J.	London (in Australia)	28,11.90
Triplett, D. A.	Shropshire	9.5
Gagg, M. H.	Wrekin (in France)	18.5
McEllin, M.	Bristol & Glos (in France)	18.5
Dent, F. M.	Bristol & Glos (in France)	18.5
Brett, R. C.	BFGGC	24.5
Law, M. J.	Deeside (in Australia)	25.2
Nicholson, J. B.	Lasham	29.3
Fack, R. J. H.	Midland (in France)	31.5
Parrington, C. H.	Strubby (in France)	31.5
Pinkerton, F. W.	Nene Valley (in France)	31.5
Young, S.	Victoria (in Australia)	9.1

GOLD HEIGHT

Name	Club	1991
Ward, R.	Devon & Somerset	30.10.90
Smith, A. D.	Lasham	18.3
Richardson, J. W.	Blackpool & Fylde	4.5
Wooller, R. E.	Blackpool & Fylde	4.5
Boath, P. A.	Deeside	12.5
Kerby, B.	Stratford on Avon	20.5
Johnson, S. D.	Derby & Lincs	22.5
Williamson, Kerstin	Victoria	28.11.90
Ell, S. R.	Derby & Lincs	22.5
Mann, F. J.	Burn	9.4
Thornley, S. A. M.	Cambridge Univ	9.7

SILVER BADGE

No.	Name	Club	1991
8620	Warwick, P.	Midland	9.5
8621	Murray, A. W. A.	Cambridge Univ	12.5
8622	Gardner, P. A.	Trent Valley	26.4
8623	Cheoros, J. E.	Lasham	27.5
8624	Johnson, R. A.	Coventry	1.6
8625	Clark, H.	Portmoak	1.6
8626	Britton, N. A.	Avon	4.6
8627	Joesse, C. A.	Kestrel	3.6
8628	Maddox, R. J.	Avon	3.7
8629	Redhead, D.	Lakes	29.5
8630	Grimley, A. P.	Avon	28.8.88
8631	Morley, K. J.	Two Rivers	13.4
8632	Parsons, J.	Shalbourne	9.5
8633	Turner, Ann	Two Rivers	10.5
8634	Harrison, J. T.	Glyndwr	22.5
8635	Hamilton, J. D.	Bristol & Glos	9.5
8636	Edwards, S.	Lasham	20.6
8637	Hammond, B. R.	Lasham	9.5
8638	Dearden, A. R.	East Sussex	9.7
8639	Reece, J. R.	Blackpool & Fylde	20.6
8640	Emerson, K.	Aquila	29.6
8641	Atherton, I. D.	Burn	29.6
8642	McAulay, N. T.	SGU	29.6
8643	Graham, R. C.	Blackpool & Fylde	3.6
8644	Rouse, M. W.	Cotswold	4.6
8645	Roberts, A. M.	Blackpool & Fylde	30.6
8646	Ingham, R.	Blackpool & Fylde	29.6
8647	Johnstone, D.	Fenland	14.7
8648	Hoare, N.	London	29.6
8649	Ward, O. M.	Cotswold	3.7

Ref Number	Glider Type	BGA No	Damage	Date Time	Place	Pilot/Crew		
						Age	Injury	Hr
11	K-13	2256	S?	21.11.91 1500	Saltby	P2 45 64	N N	195 1
P1 briefed the early solo pilot on cable breaks prior to some training. The first at 500ft was handled well but P2 did not react as quickly when the second was pulled at 200ft. P1 did not take control early enough to prevent a very heavy landing at low speed.								
12	YS-53	1197	M	9.12.90 1030	Lasham	P2 20 34	N N	406 350
During a spin recovery the front canopy broke at the frame and opened. The pilot in the rear seat took control while the other pilot restrained the canopy. Full aileron and rudder was required to maintain straight flight so turning right only a safe circuit and landing was made. Poor maintenance partly to blame. Pilots were not wearing parachutes!								
13	Bocian 1e	1843	N	16.12.90 1245	Aboyne	P2 27 0	N N	669 14
After entering the third spin of the sortie at 2000ft a crack was heard as the swaged rudder cable joint under the rear seat failed. P1 told P2 to be ready to bale out but the glider ceased spinning after 3-4 turns and was levelled out. At 1800ft P1 decided that a straight ahead landing could be made and this was done. Cable was not proof loaded.								
14	Falke	M/G G-BODU	S	12.1.91 0935	Rufforth	P2 54 44	N N	2964pwr 0pwr
On a second motor glider circuit, carb heat was applied during the downwind leg and then de-selected on base leg. The throttle was fully opened on the go-around and, after taking off normally, the engine stopped as the aircraft reached 150ft. With little space ahead P1 lowered the nose, turned right then left, but hit the ground wingtip first.								
15	PA25 Pawnee	Tug G BELL	N3	2.12.90	Burn	46	N	110pwr
At about 150ft on the approach the tug pilot felt a slight jerk. Although he had only been about 50ft below the normal glide path the tow rope had hit 11000kV power lines and shorted them out. A 300ft rope had, unknown to the pilot, been used by mistake.								
16	PIK 20e	-	N	7.10.90 1425	North Hill	57	N	463
After turning finals, in turbulent conditions, the pilot started selecting landing flap. The nose started to lift and the stick felt as if it was on the forward stop. As he reduced flap to recover speed the pilot had difficulty maintaining control in the turbulence. He then saw the ASI's speed-to-ly ring had fallen out and jammed the stick.								
17	ASW-20L	2589	M	20.1.91 1430	Saltby	44	N	1017
After rigging and DI the pilot, after a normal control check, took a winch launch. The glider lifted off normally but as the cable developed slack the pilot lowered the nose. He was then unable to stop it dropping and bounced through three hard landings before coming to a halt. The elevator was not connected. No positive control checks!								
18	IS-30	3180	S	26.1.91 1300	Lleweni Parc	P2 51 48	N N	643
P2 was making an approach to an short uphill section of the airfield. He was allowed to approach too fast and when at 30-40ft he put the nose down P1 did not take over quickly enough to prevent the nose wheel hitting hard, bouncing the glider into the air. The right wing touched and swung the glider sideways for the final landing.								
19	Std Jantar	2151	M	19.1.91 1240	Lleweni Parc	34	N	159
After pushing the canopy levers forward the pilot pushed upwards to confirm it was shut. During the winch launch he signalled 'too fast' and the side wind opened the canopy and blew it off. He landed normally. This canopy locked by pulling the levers back and needed a firm push to check shut. His normal glider had forward locking levers.								
20	Not applicable	-	N	23.1.91 1230	Kitson Field	0	N	-
At the top of a normal winch launch the weak link failed and a last moving 'snake' of cable fell on to the winch driver's cab. It found its way through a narrow opening in the wire mesh guard and hit the driver about the head, nose, jaw and teeth. Fortunately he was only marked and not badly cut. The club proposes to modify the guard.								
21	IS-28	-	M	3.11.90 1500	Nr Walney Island	P2 50 46	N N	643
P1 visually checked the canopy locking lever and pushed up on the canopy. After several manoeuvres P1 demonstrated a right hand spin during which the canopy blew open and became stuck, inverted alongside the cockpit. A normal recovery was flown and a safe landing made with P2 holding on to the frame. A firm push down was needed to overcome latch.								
22	Pirat SZD 32	1933	S	17.2.91 1400	Connel	46	F	3
This fatal accident occurred after the glider was seen to climb slowly on a shallow reverse auto launch then, after releasing at between 150-300ft, it flew ahead then turned left. A spin developed and the pilot was unable to recover before hitting the ground. The airbrakes were seen open which may have hindered any spin recovery.								
23	KA-8e	2418	M	2.2.91 1230	MorrIDGE	47	N	7
The glider touched down just short of a slight ridge which lifted it about a foot into the air. The second touch down was again normal but the glider hit another ridge while moving slowly. Some damage to fuselage longerons was found. The effect of the hard, ridged ground may have been compounded by structure weakened by previous repairs.								
24	Pegasus	3567	M	3.2.91 1430	Duxford	43	N	34
In light wind conditions the pilot appears to have lifted off too early and allowed a PIO to develop. The glider climbed above the tug, made a shallow dive then climbed steeply before descending heavily on to the main wheel. The glider pitched forward on to the nose and the rope released.								
25	Bocian 1e	3529	M	16.2.91 1140	Halesland	P2 37 42	N N	643 1
On a check flight P1 pulled a simulated cable break at about 400ft. P2 started a 'S' turn but turned back too early and was still high so carried on turning to land downwind. It became apparent that he was running out of room so P1 took over and turned back into wind. During the turn the wingtip hit the ground followed by the nose.								
26	K-7	1259	S	17.3.91 1425	Rufforth	P2 41 39	N N	318 12
After a briefing P2 attempted a full airbrake, sideslip approach. P1 took over on finals below 50ft but was unable to prevent the glider's left wing hitting a signpost near the runway edge. The glider swung around through 45° and touched down travelling sideways.								
27	Bocian 1e	1804	M	9.3.91 1503	Halesland	P2 25 50	N N	439 1
A simulated cable break was arranged for the P2 from an adjusted circuit, leaving P2 at 300ft over the centre of the cable run. P1 took over control as the landing ahead looked marginal. During this time a K-8 was launched, passed the two-seater, then released. The cable fell across the wing of the two-seater damaging the wing 'D' box.								
28	K-21	3705	S	23.3.91 1240	Dunstable	P2 47 32	M S	964 50min
Following the first simulated cable break at 200ft the next was pulled at 20-30ft in a shallow attitude at 60kt. The P2 positively lowered the nose, opened and then closed the airbrakes. P1 attempted to take control, but failed to prevent a heavy landing on the nose wheel.								



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Derek Piggott MBE was formerly Chief Instructor at the Lasham Gliding Centre and has also served as an RAF and stunt pilot.

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Startup, P. A.	Bicester	10.5
Lovegrove, R. A.	Two Rivers	20.5

Part I

Name	Club	1991
Heath, J. T.	London	10.5
Holt, D.	Eagle	25.5.90
Hammond, B. R.	Lasham	10.5
Richardson, J. W.	Blackpool & Fylde	5.6
Harris, C. I.	Midland	20.6
Ferguson, Lyn	Two Rivers	20.4
Treharne, G. J.	Southdown	1.6

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Ref Number	Glider Type	BGA No	Damage	Date Time	Place	Pilot/Club		
						Age	Injury	Hr
29	K 13	2989	M	18.3.91	Lasham	55	N	338
				1130		P2	59	M
The initial winch acceleration surprised the crew and the glider started a steep climb. At about 30ft the cable detached and P2 lowered the nose steeply to regain speed as the ASI was reading 35kt. He then was unable to round out and the glider made a heavy landing on the skid.								
30	K 6CR	3396	M	30.3.91	Saltby	46	N	82
				1500				
The pilot saw the K-8 on the runway while on the downwind leg and expected it to be clear of the runway in time for the landing. This was not the case and so she decided to land off one side of the runway rather than use the alternative landing area. Shortly after roundout the left wingtip hit a bush which swung the glider around.								
31	LS 7	3714	M	19.3.91	Saltby	43	N	58
				1400				
The pilot lowered the undercarriage but failed to lock it down and so it collapsed at touchdown, resulting in a belly landing on the runway. (This has now occurred to a number of the LS-7s in the UK.)								
32	K-8	-	M	23.3.91	Portmoak	47	N	12
				1020				
The pilot experienced repeated "diving turns", i.e. wing and nose drops during hill soaring turns. After deciding to land he entered a developed spin and jettisoned the canopy ready to bale out. The spin stopped and so he continued to land safely. The ASI's pipes were found to contain water - the pilot had not noticed the speed and altitude clues.								
33	K-13	2285	N	30.3.91	Wormingford	P2	54	N
				1206				
During aerobatics at 70kt, the left airbrake opened. P1 opened the other brakes to eliminate the initial asymmetric drag and landed safely. The left bell crank trunion had fractured allowing that brake to unlock and open. Any pre-existing crack would not have been seen without removing it from the glider.								
34	Vega	2774	M	23.3.91	Galewood	48	N	268
				1245				
Thirty yards into the ground run the undercarriage retracted, trapping the tow rope in the doors in spite of the pilot being released. Eventually the rope pulled out and the glider stopped. The bearing at the cockpit end of the operating system shed its housing and operating lever. This was caused by poor mechanical security.								
35	Falke	M/G G-	M7	14.4.91	Husbands Boworth	P2	45	N
				1230				
P2 rounded out at 5ft, opened the spoilers and the nose suddenly dropped. P1 was unable to prevent it stalling in (Falke's drop the nose when the spoilers are opened. The stall also produces an unannounced nose drop.)								

F=Fatal; S=Serious; W/O=Write-off; M=Minor; N=Nil



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CLUB NEWS

Copy and photographs for the December-January issue of *S&G* should be sent to the Editor, 281 Queen Edith's Way, Cambridge CB1 4NH, tel 0223 247725, to arrive not later than October 8 and for the February-March issue to arrive not later than December 3.

GILLIAN BRYCE-SMITH
August 14

ANGLIA (Wattisham)

Despite poor weather we have had some achievements. Congratulations to Chris Bret and Richard Salter on going solo, Richard at 16 years. The next day Richard's father, Mike, completed his Silver badge with a distance leg as did Jason Phelps with a 50km and Silver height. Stu Hammon leaves us for Scotland and we thank him for all his help. We have bought a trailer for our Astir.
J.R.C.

ANGUS (Arbroath)

Although the weather hasn't been brilliant we have had several good cross-countries. Congratulations to Martin Clarke on his Bronze badge.

We look forward to our 21st birthday celebrations in August.
D.A.P

AQUILA (Hinton in the Hedges)

After a slow start with CFI Duncan McKay and secretary John Rayment attending one of Chris Rollings' excellent cross-country courses, we are into a more successful phase with John Cooper, Richard Collings, Steve Blackmore and Karl Emerson gaining Silver distances and James Lancaster going solo at another site. And there was furious activity when we had wave over the site.

We were saddened by the death of George Scarborough who had been a good friend to Aquila over the years. George, who had heart surgery two years ago, seemed to be recovering.

Below: Shane Barnes (AEI) of Aquila GC with 74 year-old Dora Trew who had her first flight at their open day.



Alan Fry and his daughter Linda of the Newark & Notts GC who went solo on successive flights.

ing well and been displaying his inimitable talents with the Olympia he and his son, Ian, had just bought.
J.R.

BATH & WILTS (Keevil Airfield)

Our task week was again destroyed by the military but South Wales GC invited us to join theirs at Usk. Thank you. Despite the weather we showed the flag with Stuart North winning.

After a hard fight we ended up a close 3rd in the Inter-Club League. Congratulations to George Rowsell (going solo); Kath Jefferies (Bronze leg); Dave Smith (Silver distance) and Mike Chalmers (PPL and becoming an instructor).

The latest 1:500 000 chart has our new site marked as "The Park." It is hoped it will be open next spring.
B.H.

BICESTER (RAFSA Centre)

Cross-countries and kilometres are well down on the last few years but with numerous students our launch rate is high. Congratulations to all our new solo pilots and Steve Burchell on his Silver badge.

The Inter-Services Regionals had five days with 61 gliders competing. George Lee (Janus C) won the A Class and all but one day; Neville Weir the B Class, this being his first competition, and Alan Sommerville the C Class. It was an excellent Comp with superb organisation by Bicester. Well done "Spud" Hallam and Davy Rae for following them round the 300km task and to Gary Bennett flying a K-6E in the C Class - we believe he is the first paraplegic to fly a competition and he successfully completed three days.

C.A.D.

BLACK MOUNTAINS (Talgarth)

There was good easterly wave and some fine soaring for the Southdown GC expedition.

The clubhouse has been extensively renovated and is now entirely held together by a new coat of paint. We have had some considerable media interest and even the tug pilot was interviewed by Radio 4.

A 1948 T-21 has arrived. Congratulations to Godfrey Herrin for completing his Gold badge.
D.U.



"Doc" Dorothy Souper of Norfolk GC fame now lives in Derbyshire and visits the Marchington GC for some soaring. She is photographed by Peter Warren on her 2243rd glider flight in the Super Blanik with chairman Ray Steward.

BORDERS (Galewood)

Poor weather has meant few cross-countries, even for our August task week, though there were several climbs to 8000ft in wave. Our thanks to Robin Johnson for again organising and task setting this week.

We have a second Vega and a Libelle and a Pirat have joined the club fleet. We are grateful to Bill Fleming for selling us his glider after ill health restricted his flying and wish him a speedy recovery.
A.B.

BUCKMINSTER (Saltby)

Our open day/longest day on June 22 was very successful. We were lucky with the weather and flew from 5.15am to 9.30pm.

For the first time in many years we had two competition days for our Inter-Club League weekend and we are joint 1st with Coventry GC.

Nottingham Polytechnic GC took a club Puchacz and the K-6 to the Inter-University task week at Nympsfield and came 5th in the Glass and 3rd in the Wood Class. Graham Storford gained Silver distance in the K-6 on his first cross-country and won the final day.

Mike Calvert and Bill Morecroft have Silver

Below: Andy Chapman who landed a K-6cr at Sleep after flying Silver distance from Marchington. He was on a lead and follow task but his leader landed out! Photo: Peter Foster.



heights. Bill Munns has retired as treasurer and we thank him for all his work, also our thanks to George Brown and Dennis Gliddon, the course instructor and the tug pilot.
M.E.

BURN (Burn Airfield)

The disappointing season was at last rewarded with some good soaring in July. On our popular cross-country course Brian Scothern completed his Silver badge with a 50km; Bill Jepson achieved the UK Cross-country diploma and there were 100kms for our two-seater crews – Chris Townsend, Martin Holland and Martin White.

The K-21 trailer is near completion – our thanks to all involved.
D.G.K.

CAIRNGORM (Feshiebridge)

We enjoyed expeditions from Blackpool, Aboyne and Portmoak which produced two Gold heights.

Our thanks to Alistair Morrison on running a successful course in August, assisted by Tish Johnstone and Andy Carter, which gave us new members and lots of flying, and to Tish for producing a club sweatshirt to commemorate our 25th anniversary.

Congratulations to Ray Lambert on his Bronze badge and for the club newsletter.
S.K.



Lindsay Bird of Glyndwr after her first solo on her 16th birthday.

CAMBRIDGE UNIVERSITY (Gransden Lodge)

You will see that our address has changed and we are operating from our new site at Gransden Lodge from October 1. Visitors are welcome both by air and road, although powered aircraft other than tugs retrieving gliders are not permitted under our planning permission. Access by road is only via B1046 between Longstowe and Little Gransden – the entrance is opposite Gransden Lodge Farm, about 2 miles from Longstowe.

If you fly in please keep well clear of Little Gransden airstrip 2km to the SW of our airfield (our own gliders do not overfly this area below 1300ft). There are three grass runways to choose from – approx N-S, E-W, and NE-SW.

We are very sad at the death of one of our instructors and tug pilot, Pete Treadaway in a fly-



Phoebe Bright and Suzanne Gurney of Southdown GC who were sent solo on the same day by instructors Dave Felix and Ted Palmer.



Marjorie Andrews of Culdrose GC who went solo at the age of 70.



Above: Dartmoor GC members, from l to r, Alan Holland (instructor), Norman Wood (aged 71), Richard Roberts (aged 16) and Don Puttock (instructor). Below: Chairman, Tim Bowles, and CFI, John Swannack, pour out the bubbly at the Dukeries GC's hangar warming party.



ing accident in a DH Dragon Rapide at Audley End recently — our sympathy goes to his family. (See BGA News.)
B.B.S.

CLEVELANDS (RAF Dishforth)

Summer has arrived at last and our competition pilots are busy. Our first barn dance was a great success and we tried our best with the longest day between the thunderstorms.

Congratulations to Benny Benedict on going solo and to Phil Thorpe on his Silver height.
J.P.

COTSWOLD (Aston Down)

Tim Macfadyen again won the Spanish Open/15 Metre Nationals at Huesca (flying *hors concours*). Mike Randle won our mini comp, organised by CFI Ruth and enjoyable despite indifferent weather.

Mike Oliver, Geoff Fellows and Simon Lucas have Silver distance and Chris Ashworth has distance and height. Congratulations on going solo to Paul Boylan, Dave Gardiner and Dave Lewis and to Sarah Lee on her instructor rating.
G.M.

COVENTRY (Husbands Bosworth)

The season finally picked up with Silver distances by many including Ian Freestone and Mike Hughes. Congratulations to Sonja Hornby, Peter Davies, Cliff Jones and Ann Wildman on their AEI ratings and to Brian McDonald and Peter Jones on becoming assistant instructors.

We are currently running the Women's European Championships and re-running our task week over the same fortnight. Well done to Jerry Langrick on winning his Class in the Northern Regionals.
T.W.

CULDROSE (RNAS, Helston)

We celebrated our 25th anniversary on June 29 with a dinner and disco and the acquisition of a new Puchacz.

The weather has played havoc with our flying — most trial instruction evenings were cancelled and the longest day.

Much work has gone into building a new truck for autotowing and the Bedfords have been repaired, serviced and one modified to carry the reverse pulley — many thanks to Roy Richards, John Smith and Dave Brown. The Pirat has been re-covered — particular thanks to Paul Williams and to Kevin Brigden for acting as secretary.

We welcome back our CFI, George Kosak, from service abroad and John Beaty. Congratulations on going solo to Marjorie Andrews (at 70 years), Dave Brown and Steve Coulthard; Pete Green and Barry Fitzgerald (Bronze badges with an AEI rating for Barry) and Pete Pengilly (assistant instructor rating).
R.A.

DARTMOOR (Brentor)

The latest to go solo are "Stormin" Norman Wood, aged 71, and Richard Roberts on his 16th birthday. Norman is our oldest pilot without previous air experience who has learnt to fly with us and Richard joined as a nine year-old. Dick Toop (another septuagenarian), Phil Jarman and

Dave Hooper have Bronze badges.

Frank Maves has been with the Czech Air Force at Chivenor working with the grandsons of men he knew in 1940, while Alan Wright is leaving us for RAF Cranwell.

Our latest courses were hampered by fog and heavy rain but Alan Holland still made them enjoyable on the days when wave appeared.
F.G.M.

DEESIDE (Aboynæ)

Competition Enterprise attracted good attention from the media including three minutes of prime TV time. (See the report in this issue.)

The wave season started well with Bob Dall riding the July wave to 29 000ft, Mike Surrey getting Diamond height and Dave Pirie (Capstan) stopping short of Diamond at 18 000ft for Gold height.

Congratulations to Jill Thomson and Steve Pirie (going solo); Paul Booth (Bronze badge); Peter Coward (2nd in the Western Regionals) and Dave White (2nd in Enterprise).

Our resident instructor Mike Law will provide launches for visitors during the winter, but phone in advance. We are also well on with 1992 spring and autumn wave season bookings. For reservations contact Fiona Bick at the site or on 05055 4382.
G.D.

DUKERIES (Gamston Airport)

After much blood, sweat and toil the completion of the hangar was suitably celebrated with a hangar warming party organised by Linda Taylor.

Congratulations to Mike de Torre on his duration with a 6hr flight and to Keith Gregory on his Bronze badge.

Beryl and David Clarke have bought a K-6cr, our third privately owned K-6.
J.C.P.

EAST SUSSEX (Ringmer)

The club has seemed determined to take the silly season to heart with incidents ranging from our novices outlying our pundits by a factor of 200, to the Sussex police marksmen using the field as a helicopter base for a real live lion hunt.

We are saving up for a two-seater to fit into our new T-hangar. The anniversary of the brilliant soaring day last year when both winches broke down simultaneously was celebrated in style this year with another good soaring day. We now have three winches, but guess what ... ?
L.M.

ENSTONE EAGLES (Enstone Airfield)

The season's flying has been very good, despite some poor weather, with Simon Woodley flying both Bronze legs on the same day.

Belated congratulations to Eric Giles on being awarded the John Hands trophy for services to competition gliding at the BGA dinner — a richly deserved prize.

Club facilities are ready for the Open Class Nationals and our thanks to those who have

Please note the early deadline of December 3 for the Feb-March issue due to Christmas.

given so much time, energy and resources on our behalf.

M.S.

ESSEX (North Weald)

We have spent several weekends at our new site at Ridgewell when North Weald has been closed. These were quite successful, although the lack of suitable infrastructural facilities meant we couldn't do as much winch launching as we would have liked. By next season we hope to have good winch launching and some basic buildings (all offers gratefully received).

We regret that powered aircraft and motor gliders are requested not to visit us at Ridgewell.
G.W.L.

Obituary — Eddie Lipski

It is with profound regret that we announce the death of Eddie Lipski.

Eddie was our treasurer for some 15 years and his efforts on behalf of the club contributed in no small measure to the eventual purchase of Ridgewell. Unfortunately his illness prevented him from flying there, but he maintained strong interest in the project until the end.

His passing is painful to bear and his many friends will miss his infectious good humour. Eddie leaves a widow and three children to whom we offer our sincere condolences.
M.L.A.

FENLAND (RAFSGA)

The improved weather has increased our cross-country with a 5hrs for Don Johnson. Ian McTeer soloed on his 16th birthday with first solos also for C. Brown, M. Hubbard, Cath Kelly, Christina Mayo and Caroline George, giving us seven new female pilots this year.

"Bam Bam" Burston won a day in Class B of the Inter-Services Regionals and finished 8th; Paul Mclean was 4th and Ron Smith 11 was 11th. In Class A Rhod Evans was 16th after instrument problems and Kev Sharp learnt a lot winning every day in the back seat piloted by George Lee, triple World Champion.

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Ron Smith 11 and "Bam Bam" have been posted.

It is with deep shock and sadness we learnt of the death of Jerry Odell in a gliding accident. Until recently Jerry had been with us for many years and was best remembered for the inventions we sometimes had to test. The Rover car winch and the Vega wingtip extensions worked brilliantly. We will greatly miss him and his favourite saying "Let's commit aviation."
M.A.E.

GLYNDWR (Lleweni Parc)

Congratulations to Brian Allen and Lindsay Bird on going solo, Lindsay on her 16th birthday. Membership is growing quickly and our site potential for wave soaring and club expeditions is becoming more widely known with several Gold height claims since April, despite a lot of northerly and easterly winds, our poorest direction.

We have the use of a V8 powered Wild winch to supplement the Supacat.

The autumn wave season is booking up quickly, so contact the office as soon as possible.

D.A.B.

GRAMPIAN (Laurencekirk)

We now have a very comfortable large caravan, thanks largely to Dennis who did most of the work. Others have tuned our winch engine to give beautiful launches.

Amongst our many visitors was a member from the Grampian GC of Australia who made a video to show the difference between our operations.

R.J.S.

HEREFORDSHIRE (Shobdon Airfield)

Thanks to tug pilot John Warbey we have been operating on request during the week, resulting in some very successful flights.

Chris Rollings is bringing the BGA Janus on November 4, and possibly a Discus, for advanced training in wave soaring.

R.P.

MARCHINGTON (Marchington Airfield)

The long awaited DG-500, the first in the UK, looks set to be a popular addition to our steadily improving fleet.

Despite poor weather we have had a number of achievements - Phil Pritchard, Brian Pope, Bill Slater, Jeff Greatwood and Dave Treder have gone solo; Val Roberts and John Wale have Bronze badges and Andy Chapman Silver distance.
A.R.

MENDIP (Halesland)

Despite a poor season we have had a good crop of badge flights. Congratulations to Paul Edwards (a combined height and distance); Dave Townend, the younger, (Silver distance and duration); George Whitcombe-Smith (Bronze legs); John Alcock, David Lloyd, Pete Dunlop and Mick Longhurst (going solo) and Bob Merrit (5th in the Booker Regionals)

We had two very successful *ab-initio* courses but the two soaring courses suffered badly from

the weather. However, the Junior and Puchacz demonstrators were very popular.

Our longest day launches were down, again thanks to the weather. We had a fancy dress party in the evening. Our open day is on September 1 and we have the use of an immaculately refurbished T-21 from Joe Ackerman.
T.A.D.H.

MIDLAND (Long Mynd)

The last two months have been disappointing with maybe a dozen cross-country days. Some members have been gliding in France (Sisteron and Le Blanc) and Spain.

But we had two good days in August. On the 4th Charles Carter, Paul Stanley and Rose Johnson flew Silver distances, giving Rose her Silver badge, and on the 8th we had many cross-countries totalling 1667km. Gordon Kerr (K-6ca) gained Gold distance and Diamond goal and Charles Carter his 5hrs.

Martin Smith, Georgina Comins, Heidi Duncombe, Patricia Warren and Jamie Hamilton have gone solo. Chris Aldis flew in the Standard Class Nationals and Simon Adlard has entered the Junior Nationals.

We hosted the Inter-Club League Rockpolishers from July 13-14 with one good day.

A.R.E.

NENE VALLEY (RAF Upwood)

We had a very successful open day in July. Both club K-8s have been put to good use and we intend buying a SZD Junior for the club fleet. Congratulations to "Taff" Turner on going solo.
D.H.

NEWARK & NOTTS (Winthorpe)

At our AGM Mike Evans took over as secretary from Shirley Maddex. Our thanks to Shirley for the great job she did for us.

Our mini courses for monthly members are very successful and attracting some newcomers. We commiserate with Bob Patrick whose barograph failed on his Silver distance but congratulate Bill Griffiths (Bronze badge); Richard Jackson (Bronze legs); Andy Roe and Melvin Balogh (Silver heights); Mike Abrahams (completing his Silver badge with a distance leg) and Richard Keyse (going solo).

Our thanks to Bob Grant and John Cawrey

who quickly repaired a broken drum on our main winch.

Visitors are always welcome, whatever their mode of arrival.

M.A.

NEWCASTLE & TEESIDE (Carlton Moor)

We are one of the oldest gliding clubs in the UK, founded 60 years ago as the Newcastle GC. We moved from airfields near Tyneside to Carlton Moor, on the N edge of the Cleveland Hills, 1200ft amsl some 50 miles S of Newcastle, about 30 years ago. The name was then changed to include Teesside, but for some years we haven't had any members from the Tyneside area so it was agreed to change our name again. We are now the Carlton Moor GC.

Congratulations to Peter Stevens on going solo and welcome to Mike de Vries from Holland.
J.E.

NORFOLK (Tibenham Airfield)

Congratulations to Roger Abrahams and John Gammage (assistant Cats); Peter Ryland, Peter Smart and Terry Cooper (full Cats); Ray Rawlings (Silver distance and 5hrs); Ray Hart (Gold height) and Neal and Phil (going solo).

A particular big thank you to Terry Jeffery and his team for continuing to make our clubhouse such a superb environment.

R.J.H.

NORTHUMBRIA (Currock Hill)

Two instructors and four other members attended BGA cross-country courses. We now have a Motor Falke which should be useful for field selection exercises and another glass machine (Cirrus).

The barn dance was a great success and we are exhibiting a single-seater at the Sunderland Air Show in August.

R.D.

OXFORD (Weston on the Green)

Congratulations to Dave Weekes and Donal Meehan (Silver badges) and Martin Cooper (Bronze).

Our cross-country book is looking rather sad this year with frustrated pilots including almost anything out of gliding range. Neill Lawson-Smith's first cross-country attempt finished in a field with retrieve details somehow being relayed back to base via a kindly airliner!

A senior citizen with a yen for a glider flight out-bid others for the mini course we donated to Radio Oxford's auction and enjoyed it so much she wants to join the club.

Neil Turner is organising a publicity display of gliders in the centre of Oxford.

F.B.

PORTSMOUTH NAVAL (Lee-on-Solent)

We have bought a Puchacz and sold off several older gliders - although our venerable T-21 is now owned by a club syndicate.

Congratulations to Graham Churton, Dave Kearns, Jackie Pearson, Beverley Kaye, Roger Perry, George Bell, Nick Boyd, Lee Barclimore (going solo) and to Graham Tucker, Nigel Gilkes and Dave Murray (Bronze badges). Also to Martin Heneghan who was 2nd in the Inter-

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Services Regionals' C Class and won the Goodhart trophy for the best performance by a Naval pilot.

An expedition to Thouars, France, didn't yield many cross-countries but well done to Derek Ballard, John Hale, Claire Higgs, Yvonne Clark and Alan Clark (3rd overall) for winning prizes in a three-way competition with Thouars and Nior GCs. Also in France, Claire Higgs and Dave Hockings completed their Silver badges and Mick Budgen flew Silver distance.

RATTLESDEN (Rattlesden Airfield)

We hosted the Inter-Club League on August 10-11 when difficult conditions made task setting by the director, Martin Aldridge, an unenviable job. We all enjoyed the barbecue and barn dance organised by Mark and Karen Wright.

Congratulations to David King and Steve Wright on becoming instructors and to Reg Smith and Wilf Reynolds on going solo. Our new hangar is nearing completion.

M.E.

SCOTTISH GLIDING UNION (Portmoak)

A dismal June and July meant reduced activity. Our longest day was severely disrupted by the weather with only 62 launches and the recession seems to have affected course booking, but August has brought an improvement.

David Bruce led a very successful cross-country week which included a two-day expedition to Feshiebridge, where we were made most welcome, numerous field landings and the completion of their Silver badges with distances by Justin Kennedy and Angus McLachlan. Congratulations also to David Clempson (Gold badge); Drew Forrest, Ian Poole and Neil Macaulay (Silver badges); Julian Gibson (Bronze badge); Ed Murphy, Jim Miller and Dick Oostindie (going solo) and Brian Scougall (4th in the Northern Regionals).

Edinburgh GC, who fly with us, did well at the Inter-University task week with their K-8, flown by Stephen Blair and Jonathan Price, winning their Class against some hotted ships.

M.J.R.

SHALBOURNE (Rivar Hill)

At the time of writing our thoughts are dominated by the recent tragic accident which claimed the lives of two of our members, Derek Sprules and our chairman, Dave Maleham.

S.C.O.

Obituaries

Dave Maleham

I first met Dave in 1983 and we learnt to fly together. In those days he usually turned up at around 7am and stayed until we shut up shop. He could be found DI-ing cables, carrying fuel to the winches (we couldn't drive them around in those days), retrieving cables and winching. And at the end of the day he'd do it again, ensuring the equipment was ready for the next users.

That was typical of Dave. He never lost sight of the fact that people came to the club to enjoy themselves. Rarely, if ever, was his voice raised in anger. Dave's calming and tolerant personality cooled many an anxious moment. As an instructor his confidence and calmness spread to

countless newcomers to gliding which was his passion on which all his spare time and energy were channelled.

Dave renovated a number of gliders, in addition to doing a lot of work on the club fleet. It was all part of enjoying himself, both on the ground and in the air. His weekend of epic flights – over 17hrs in two flights – are still spoken of.

We extend our sympathies to his wife and children.

Jonathan Mills

Derek Sprules

Derek came to our April open day and promptly joined, loving every minute of his flying. He was an exceptionally nice man, quiet, but always helpful, willing and enthusiastic. He was phenomenally keen, almost obsessed with learning more, and put everything into his flying. His interests were all things sporting.

We offer our condolences to his family.

Roger Madelin

(Both obituaries are extracts from the Shalbourne's memorial issue of their newsletter.)

SOUTHDOWN (Parham Airfield)

We have a new Puchacz and are replacing our Grob Twin Acro with a DG-500. Our much loved K-8 has been re-covered and restored by a team led by Ron King with similar plans for one of our K-13s this winter. Our new Tost winch is looking resplendent on its prime-mover chasis and we are hoping for vastly improved launches.

Congratulations to Bob Adams, Richard Appletree, John Hawkins, Richard Loy and Graham Walker (Bronze badges) and Eddie Fitzgerald, Neil Passmore, Phoebe Bright and Suzanne Gurney (going solo). Phoebe and Suzanne joined on the same day and were sent solo on the same day by Dave Felix and Ted Palmer who completed their instructors' rating together.

C.M.R.

SOUTH WALES (Usk)

Despite the weather we managed to have a task week with visitors from Keevil (see also Bath & Wilts) producing the winner, Stuart North. The task setter was Colin Broom.

Maureen Weaver and Mike Dunlop have AEI ratings; Stan Fenton (5hrs) and John Phillips (300km). Simon France and Dave Jeffries both climbed to 16 000ft in wave on August 10 while Cardiff was under rain.

We are planning a wave week in autumn. Contact the club for details.

N.S.J.

STRATFORD ON AVON (Snitterfield Airfield)

Steve Gale and Nigel Wall have gone solo with durations for Bob Berry and Mark Parsons and a Silver badge for Phil Pickett. Well done.

H.G.W.

Obituary – John Berry

It is with great sadness that we report the tragic death of John Berry on July 14. John joined Stratford GC in 1989 as a PPL holder and soon converted to gliding.

He was amongst the keenest of our members,

and an example to us all by invariably being one of the first to arrive to ensure that everything was ready for an early start to the day's flying. It says much about him that few members realised just how hard he worked on their behalf.

Our deepest sympathy goes to Gem and the family.

N.R.S.

STAFFORDSHIRE (MorrIDGE)

Our new Tost winch has been joined to its 16 litre Mercedes diesel engine and will soon be launching in anger. A DIY project to build a back-up winch based on a fire engine chassis is well advanced.

Expeditions to Sutton Bank, Galewood and Aboyne are planned. Proposals for a new site at Seighford near Stafford are awaiting planning approval.

B.G.

Obituary-John Timms

John, whose recent death has saddened us all, came to gliding late in life after wartime service on Lancasters and subsequent civilian power flying. He loved every minute of his soaring experiences and the banter of comradeship on the airfield; his selfless work on ground equipment and social activities help keep us flying and solvent.

Our sincere condolences go to his wife, Jean, who supported John in supporting us on so many of our barbecues and open days.

John's ashes were scattered, at his request, on MorrIDGE Airfield on August 10.

Barry Gilman

SURREY & HANTS (Lasham Airfield)

Our new Ventus C is proving very popular. Last year five Gold distances, five Diamond goals and two Diamond distances were flown in club aircraft.

Much hard work has raised the standard of the fleet which consists of a DG-101, two Discus, a Ventus A and a Ventus B. Recently one of the K-8s was in a head-on mid air collision with an Astir in a thermal. Despite the K-8 losing 5ft of the port wing including half the aileron both pilots landed safely.

Mike Miller-Smith came 10th in the European Junior Championship; Alan Baker 4th in the Lasham Regionals' A Class and Glyn Bradney 2nd in the B Class, all flying club gliders.

P.R.H.

THRUXTON (ThruXton Airfield)

Alistair Caie has taken over from David Jarvis as chairman. David was thanked at a recent barbecue for his steady leadership in steering the club through some difficult times. Andy Mercy and Steve Lambourne are now assistant instructors.

Thanks to kinder weather, there have recently been a number of notable flights.

J.B.L.

ULSTER (Bellarena)

A lower key presence at the Ulster Air Show and our open day produced some new members with one, Kieron Sullivan, soloing in July. Brian Irwin has also gone solo and Jim Lamb celebrated his

Bronze badge by buying an Astir with Trevor Busby. One of the ex-RAF Motor Falkes is in its new T hangar.

Harry Hanna and Mick Wilson join the instructors and our favourite Hungarian, George, returned to do some tugging for the "Gliding for Schools" scheme and is spending August with the Dublin GC.

A TV crew has been filming us for a holiday programme to go out in January. Alan McKillen and John Lavery have PPLs and John an AEI rating.
B.T.

VALE OF WHITE HORSE (Sandhill Farm)
Well done to Dave Foster who helped us win the SW Inter-Club League and earned a place in the Junior Nationals.

Our second twin drum Buick powered winch is nearly finished.
S.J.W.

VECTIS (Isle of Wight Airport, Sandown)
Congratulations to Barry Pearce and Chris Waghorn on going solo. We have an expedition to France at the end of August and a syndicate Libelle has joined us.
L.T.

WELLAND (Lyveden)
Congratulations to George Davidson and Tim Harris (going solo, George also gaining a Bronze leg); Bob Rowland and Mick Esden (Bronze

badges with Silver height for Mick) and Andy Parrish (assistant Cat rating).

Alec Strachan is now winch master and the new pilot check system introduced by CFI Keith Scott is working well.
R.H.S.

WOLDS (Pocklington)
There have been some notable flights, despite the poor weather, with Alistair Bell, aged 17, a recent solo and Bronze pilot, completing his Silver badge in one flight. Many enjoyed the exceptional conditions on August 8.

Our longest day broke yet another record for visitors attending and launches due to fair weather and our new Supacat winch.

Fund raising for a new glass two-seater is going well due to great efforts by the Two-Seater Fund Committee.
N.R.A.

YORK GLIDING CENTRE (Rufforth Airfield)
Congratulations to Mark Rowntree, Alan Jolley, Chris Sturdy, Ben Walker, Cliff Burnett and Bob Gamble (going solo); Chris Brayne (Bronze leg); Dave Rowntree, Alan Wrigley, Geoff Barnham and Mike Cohler (Silver height with 5hrs for Geoff and Mike) and Alan Kilbride (Silver distance and a 100km triangle).

The longest day was from 0416 to 1802 with almost 14hrs of constant activity. We have a new Astir syndicate and a fourth K-6.
A.W.

YORKSHIRE (Sutton Bank)
The Northern Regionals proved to be the best competition of the year so far with seven contest days. Congratulations to Russell Cheetham on winning the Open Class and to Bob Fox who came 2nd. Also to Jerry Langrick and Mike Brook, 1st and 2nd in the Sport Class.

We will be hosting Competition Enterprise next June.

Visitors are always welcome, with or without their own gliders.
C.L.



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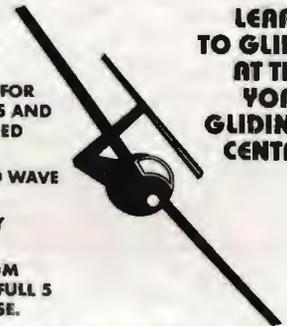
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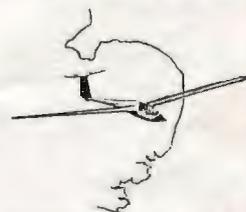
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Top Spin

I was delighted to read Bill Bedford's 41-year-old account of his British National and UK local absolute altitude and gain of height record flight in an Olympia 2b, reprinted as the S&G Classic in the last issue, p192, for Bill has been my ultimate flying hero for almost as long as I can recall.

Anyone who has been to as many international airshows as have been Penguin's lot over the past four decades will know him as THE display pilot *par excellence* – his aircraft always positioned in exactly the right part of the sky and its attributes most engagingly displayed. Who else remembers his breathtaking multi-turn spins with a Hunter T.66A at the 1959 Farnborough? They began with eight turns, smoke pots trailing, on the Monday, had gone to ten turns by midweek and culminated on the closing Sunday with an apparently endless 13 turns.

I have a particular reason to hold Bill in high regard and a signed picture hangs on my office wall as a reminder as I write. It was with Bill Bedford that I first exceeded Mach 1, in a Hunter T.7, in a transonic dive over the Channel on May

10, 1957. When I – or, rather, we – recovered somewhere south of Brighton, Bill quietly asked if there was anything else I would like to do. Perhaps unwisely I mentioned that I was partial to hesitation rolls. We then proceeded to cross Sussex and much of Surrey, almost all the way back to Dunsfold, in a continuous eight-point hesitation roll.

Bill made a brief return to gliding ten years or so back when, near the end of his working life, BAe asked him to evaluate the then still Finnish-built Pik 20 as potential "offset" barter goods when the Finnish Hawk trainer deal was being set up.

If, and when, Bill ever writes his memoirs – and *the* definitive work on display pilotage as many of us have been urging him to do for years – that will be a book for every aviator's shelf.

I'm now for the birds.

After 56 years of sharing planet Earth with them, some 40-odd years of sharing its hills and over two decades of soaring with them sometimes in close company, I recently decided to learn something about birds.

Feathered ones.

Last spring I signed up for a short course in birdwatching – actually six very pleasant accompanied evening walks – and I am now firmly hooked. A recent overnight stay at the Copeland Bird Observatory, on a delightful and otherwise uninhabited island off the coast of Co Down, confirmed me in a new addiction.

But I'm amazed how little even the most expert ornithologists know about aerodynamics and the theory of flight. (Perhaps I could take the reverse perspective and slam soaring pilots' ignorance of birds.)

Even handy phrases that I had wrongly assumed aviation had inherited from avian science are either unknown or are hardly used in that field. Say "aspect ratio" to any twitcher or birder and you'll be met with a blank and uncomprehending stare. They have no such convenient phrase to use when discussing the relationship of span to chord. Come to think of it, they don't use "chord" either while "leading edge" and "trailing edge", if not completely unknown, seem to be rarely used.

It was on the boat going out to the Copeland islands that I realised how little the study of birds



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involves the study of aerodynamics and flight. Two low flying cormorants went past the bow, going Hell for leather in ground effect. I was with my most knowledgeable birdwatching *guru*, who earns his living as a professional ornithologist, setting up tours, lecturing and so forth.

But he didn't know what the blazes I was talking about. For all these years he had thought sea-skimming birds flew that way simply to be as near as possible to their grub, rather than for the conservation of energy and cruising efficiency.

For a few fleeting moments, as I lectured him, I had the rare feeling of being a guru too.

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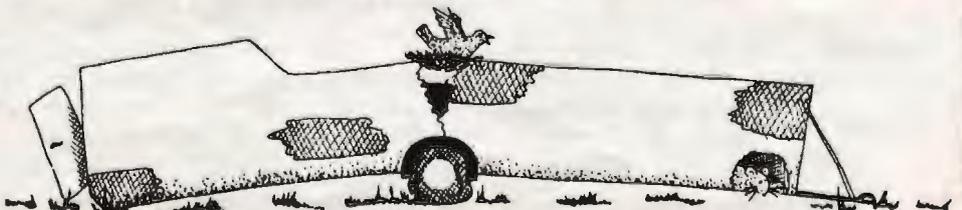
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ADVERTISERS' INDEX

ABS	282
A.C.Black	266
Aerospace Information Centre	Insert
AMF Enterprises	226
Anglia Sailplanes	277
Anglo-Polish Sailplanes Ltd	265
Argyll & West Highland Gliding	274
Benalla GC	279
Black Mountains	275
Bon Accord Jewellers	281
Booker GC	275
Bristol & Gloucestershire GC	275, 284
British Gliding Association	263
Buckminster GC	275
Cair Aviation Ltd	278
Cambridge University GC	275
Centrelne Services	IFC
Charleston Hotel	280
Claeton Aero Club	229
Classifieds	281-284
Peter Clifford & Co	281-258
Connevens Ltd	281
Cornish Gliding Club	274
Cotswold Gliders	279
Coventry GC	275
Culdrose GC	274
Desk Top	279
John Edwards	276
Enstone Eagles GC	276
European Soaring Club	282
Flite Lines Marketing Ltd	227
D. Garrard	278
Glider Instruments	258
Goodison Glider Instruments	279
HT Communications	270
IMC	274
Joint Air Services	281
JJ Associates	234
JSW Soaring	276
Kent GC	275
Lake Keepit	250
Lasham Gliding Society	276
London GC	275
London Sailplanes Ltd	229
Lowe Electronics	226
Lowndes Lambert Ltd	260
Marchington GC	276
McLean Aviation Ltd	256
Midland GC	275
Mowbray Vale Insurance	230
Neogene Paints	258
Norfolk GC	278, 284
Northumbria GC	276
Oxfordshire Sport Flying Club	258
Parker Sailplanes	266
Piggott Brothers & Co Ltd	261
Protech Sailplane Services	282
RD Aviation Ltd	1BC
Rematic	278
Sabre AAV	228
Sailplane & Engineering Services Ltd	243
S&G	266
Schofield Aviation	282
Scottish Gliding Union	258
Sedgwick Aviation Ltd	232
J.L.Smoker	278
Soaring Equipment Ltd	244, 266
Skydragons Paragliding	258
Soaring Magazine	233
Soaring (Oxford) Ltd	277
Southdown Aero Services Ltd	233
South East College of Air Training	280
Southern Soaring Tours	235
Southern Sailplanes	BC
Spindelberger	228
Sportavia Soaring Centre	279
Sunsail	271
Roger Targett Sailplane Services	267
Thomas Sports Equipment	272
Trimble Navigation Europe Ltd	238
Ultra-Pro Ltd	266
Waikerie GC	279
B. Weare	279
Wells Design Ltd	283
Welsh Borders Para Centre	280
C.P. Witter	284
Wolds GC	276
York Gliding Centre	276
Yorkshire GC	277
Zulu Glasstek	277



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