



FINAL GLIDE

Clubhouse: 01869 343265
Launch point: 07836 773210
Editor: 01628 624387

Issue 24: October 2005

Edited by Claudia Büngen

DAISY DID BERLIN



Text: Dave Weekes, photos: Peter Boulton

Star of the show – Peter Boulton. He scored an hour's free ride in a Stemme S10 and flew a priceless primary glider all on the same day. And before setting off to Germany, he'd never towed a trailer further than from the hangar to the launch point!

It was all based on a cunning long-term plan. The Vintage Glider Club International Rally in Germany in 2002 had been brilliant. Finland and Poland in 2003 & 2004 were too far, but the rally was scheduled for Germany again in 2005 and I figured that it would be fun to go, and with Daisy this time as well as BNK. First step in the cunning plan was the construction in 2003/04 of the "Forth Bridge scale model", AKA Daisy's trailer.

Incidentally, for those of you who may have thought that the said trailer is over-engineered, there is a German guy who owns a magnificently restored T21 ("Primrose") for which he recently bought a trailer, a bit like our small Ka 8 trailer, where the tail end of the fuselage and the wingtips hang out in the breeze at the back. A bus misjudged the extent to which such items swing out on corners and took a good chunk out of one wing. There's a lot to be said for plenty of steel!

Then getting people to go to Berlin. Rob wasn't a problem, he does what he's told.

Pete Brooks, despite not having previous experience of the VGC, was keen, but we needed at least two pairs of drivers to haul both gliders nearly 800 miles to the other side of Berlin (which is nearly Poland after all).

Carole and Cloudy were poverty-stricken, Graham had mistakenly booked a holiday on the Isle of Wight and I was beginning to think that Daisy wasn't going to make it when Peter Boulton was given a ten day pass and we were off.

So we arrived at Dover in the rain at about 11.30 for the 1.45 ferry and were promptly offered an earlier crossing. Daisy on the open trailer was attracting attention. "Is that a Sedbergh?"

one customs officer asked. "I used to fly them in the ATC".

So we got to Dunkerque a couple of hours earlier than expected, and trundled off through the rain, which finally stopped as we crossed the border into Germany. The miles were ticking off slowly at about 100 kph, with cars in the fast lane tailgating each other at Warp 5 and trucks going by with ease. When approaching Berlin a police car pulled up alongside who we thought was just interested in Daisy, so we continued at 100 kph. He vanished but reappeared a few kilometres down the road and pulled us over. Unfortunately his English was much better than my German. "What is the speed limit for trailers in Germany?" he asked. "100 kph?" Pete Brooks suggested. "90" I bid. "The speed limit for trailers is 80 kph" he said sternly. "Maximum 90. Have a nice day." So the last 100 km felt even slower, because we weren't sure if he or one of his mates might not pop over the horizon again. But we did like the "Maximum 90" bit of realism.

We arrived at Eggersdorf-Müncheberg airfield and played the "I've just bought this tent, how the hell does it go together" game. We also

discovered that between us we had four cooking stoves, three sets of cooking equipment, all Rob's spices and wok, three heavy toolkits, five chairs between four of us and a pile of other stuff which we didn't need, especially as we found that there was an on-site Polish restaurant offering a package of three square meals a day for £12 all in – and a couple of lovely cashiers/receptionists keen to practice their already excellent English.

Signing up for the rally the following day produced a problem. In finest UK style, Peter Boulton didn't have any form of paperwork to prove that he knew how to fly. "I thought you had to wait until you've finished your bronze". The need for certification was a contrast to the previous German rally. "It's because they're East Germans" was one (apparently slightly

continued on page 4

Also in this issue:

500 km in Australia



Junior Nationals 2004



Sutton Bank 2004



Feshie May & Sept. 2005



Letter from NZ



Sarah conquers the Cerne Abbas Giant



Ground equipment update



Willy Weaklink Quiz



OGC: The early years

NOT AN EDITORIAL

It took over a year before I could face editing another issue of Final Glide. Much as I enjoy doing it, it is still quite time-consuming. And the most horrifying prospect was having to write an editorial - I can't even write this sort of thing in German, let alone in English!

Therefore I've decided to wriggle my way out of this task and instead include a mail I received from Mike O'Neill, a once active flying member of the OGC, now an Associate member, after the last (my first) issue of Final Glide was published last year:

I read the remembrance to Tom Lamb, by Phil Hawkins and understood only too well the exhortations to get out and do something you really want to do and to do it now rather than later. Sadly I fit into the 'kids to raise, no time and no money category', for which I make no apologies but do feel a sense of frustration from time to time (well, a lot of the time actually!). But I made sure I got out with a vengeance and learned to glide before events overtook me, as I knew they certainly would.

I am in a minority of one in my family when it comes to having an interest in gliding, so it was great to read my namesake Lewis O'Neill's well written piece on his progress to going solo. But for 30+ years age difference, the article is an almost perfect echo of my recollections on taking up gliding with OGC - a wonderful memory I will cherish forever (albeit that I hope to resume gliding one day).

Perhaps the main reason for writing is to say how great it is for an Associate like me who, unable to get down to Weston, to be able to receive and read about progress at the Club. On behalf of all Associates then, a big thank you and I can't wait to receive the next issue whenever you feel able to steel yourself again to what must be a big undertaking.

...Thanks Mike and everyone else who gave me feedback, I hope you'll all enjoy this year's issue!

Claudia Bungen



CLUB LADDER

Nick Hill
Club Ladder Steward

Ever wondered what to do after a cross-country flight apart from drink beer and explain what, with the benefit of hindsight, you should have done instead of what you actually did? Well you could enter your flight in the cross-country ladder to see how you compare with both OGC and other UK glider pilots. Each flight is allocated a score based on distance and speed achieved and the OGC pilot with the highest score made up from their best four flights is awarded the club ladder trophy at the AGM.

You can enter your flight in the red cross-country book that is normally to be found in the club house or online at the web site <http://www.aircross.co.uk/bgaladder>. This web site has the ladders for all UK clubs as well as a combined ladder for all the UK. Many pilots who enter their flights on the web site themselves also add descriptions and logger traces of their flights. Anyone can download the logger traces which can be used to try and work out just how the top pilots fly cross country faster than you do.

At random intervals I check the red book and the web site and ensure both versions contain the same set of flights and post a copy of the

latest ladders on the notice board in the club house.

Since the ladder printed in the last final glide there have been two club ladder seasons (October 1st to September 30th) so here are the Open Ladder tables:

2003/04 Open Ladder

Pilot	Flight 1	2	3	4	Total
Howard Stone	2526	1614	1058	933	6131
Martin Hastings	1675	647	288	181	2791
Claudia Bungen	1660	536	416		2612
Nick Brooks	818				818
Andy Butterfield	494	200			694
Carole Shepherd	544				544
Paul Morrison	353	154			507
Graham Barrett	351	70			421

2004/05 Open Ladder

Pilot	Flight 1	2	3	4	Total
Howard Stone	1943	1235	1210	1129	5517
Phil Hawkins	1826	1166	440	427	3859
Carole Shepherd	1396	441	282	68	2187
Martin Hastings	570	548	465	424	2007
Nick Brooks	878	515	337		1730
Chris Shepherd	687	507	418		1612
George Crawford	887	708			1595
Paul Morrison	482	481	357	118	1438
Graham Barrett	544	377	350		1271
Claudia Bungen	409	193	188		790
Simon Walker	570	53			623
Rob Jackson	541				541
Andrew Bray	406				406

The number of national ladders has now grown to six:

- Open – For all cross country flights
- Weekend – Restricted to flights made at weekends and bank holidays
- Junior – Restricted to Juniors (Under 26 at the start of the season)
- Height – For height gain flights only
- Wooden – For gliders constructed primarily of wood and/or metal (an odd classification of wood?)
- Distance – Cumulative distance from all cross-country flights

For the 2005/06 season I will display Open, Weekend and Wooden ladders in the club house as the wooden ships ladder is a new one that appeared part way through the current season.

2004/05 has been a good year for the number of people on the ladder – either by entering their flights in the book, on the web site, or because I had a copy of their logger trace.

Hopefully we can have even more names in the 2005/6 season and maybe someone else can challenge Howie and Phil for the Open Ladder.

So for the 2005/6 season please try and remember to enter the details of your flights in the book or on the web site.

If you have any questions about how flights are scored or the ladder then just ask.

AUTUMN WEEK AT SUTTON BANK

Neil Swinton

The idea of leaving early on the Saturday morning was a good one. We could get to Sutton Bank by lunch time, eat, get a quick check flight, and then even fly our own gliders. We started well, managed the first bit of the plan, and shortly after 8.00am the 4 glider convoy (Cirri 579 and 616, DG 100 251 and Astir 798) left Weston. The trouble was, no-one had told 579's trailer the plan. And after just 15 miles, a big cloud of white smoke was seen pouring out of the trailer wheels, and the convoy dived into a handy layby on the A43. Steve looked at it, kicked it, lit up, and decided it could do a few more miles to meet up with Andrew who was by now just a couple of miles up the road at the services. "I'll bet he's left the brakes on" Andrew had said, and sure enough... he was right! After allowing a 'cooling off' period, Andrew removed the wheel and discovered that all the grease had been smoked away. So where do we find grease to replace it? Luckily Claudia had a tube of Shell Aerogrease in the 251 trailer which she kindly donated. I really hope she never finds out quite what that tube of aircraft quality grease was worth...

When we did arrive at Sutton bank it was mid afternoon, and blowing a cold, rough and blustery westerly wind. There was a small group of people huddled together for warmth at the launch point, and the thought of going outside into the cold and joining them did not really appeal. Instead, we parked up the trailers, tied them down using some odd bits of iron and rope, and went off to find our accommodation. Janet had booked us all into a holiday cottage, down the hill, about 3 miles from Sutton bank. This was one of a small group of cottages in a farmyard around a central swimming pool and sauna, and very nice it was too.

Sunday brought the same cold, rough west wind with the ridge cycling from between 300' up to 1500'. The Sutton Bank winch was brought out onto the short west run ready to ping people off into the hill-lift. £6.00 for a 400' launch makes the OGC winch seem like very good value. We all asked for site checks, some us being unlucky (that included me) and getting the K21, Andrew being luckier and getting the DG500, and Claudia being really lucky and getting the new DG1000. During the day nobody contacted serious wave, as it was too rough for aerotows. Monday we all rigged, but the wind had dropped, and the cloud base was low, so apart from some extended scratching about off the aerotow, not much happened. Best bit was watching the videos that Garry had taken of the take-offs and landings. Slow-motion replays can be very harsh :)

Tuesday was raining hard at briefing, with 'no chance of a clearance', and the CFI advised that sight-seeing was the best option. So after a nice long swim in the holiday-cottage pool and a quick sauna (Note to self – don't do that again...) we all went off to York. Where at 2pm the sky cleared to deep blue, with long north-south wave bars. As we walked round the walls, the pilots were all keeping their eyes firmly fixed on the ground in front of them, to avoid catching an accidental glimpse of the sky and bursting into tears. Next day we heard all the stories, one visiting pilot had reached 22,000', although that was in cloud. A couple of the locals reached 7-8000' although the rest had failed to connect with anything. Wednesday gave us a gentle westerly, with low clouds, and some weak wave/hill soaring. I really enjoyed playing along the edges of the clouds over the site, never climbing much, but extending the flight times with weak lift from somewhere. Eventually the cloud base dropped down make flying the ridge a bit dodgy, and I was forced to land. Good fun however. Thursday was raining, like really really raining, so after another swim, we went off to Scarborough. Where thankfully (!) it kept on raining, so

the pilots at least were happy... The seafront ride on the open top bus, in the cold rain, was certainly invigorating!

By Friday, the weather was changing, but not really for the better. Friday gave light southerlies and with an aerotow launch some extended scratching was possible on the long south ridge. I never really got used to being 600' over the terrain, at the other end of the ridge with the site in the distance and the GPS moaning and telling me I was way below glide slope. Ridge flying is a very different sort of flying to our normal Oxfordshire thermals. Holding the Cirrus at min-sink while floating up and down the ridge is so unlike the 'stand-it-on-its-ear and crank it round tight' sort of flying that we normally do. Saturday gave us a much stronger southerly, and many more of the home club members turned out for flying. Because of the better lift we were launched by winch onto the south ridge, which initially became very busy owing to a limited band of hill lift. At times having 18 other gliders on the same bit of sky looked most exciting. The ridge soon improved once some regular thermal assistance allowed gliders to escape and push outwards. On Saturday the second OGC contingent had arrived, and Steve T. showed us all how (not?) to do it by having a 200' cable break in the Skylark and proceeding to 'go for the ridge' rather than landing ahead. He managed it, and climbed away with a round of applause, but we wondered how many hill walkers had 'hit the dust' as the big 'lark skimmed over the ridge-side path...

The day then became very showery, and just before one major shower hit the field all the gliders on the ridge were forced to 'land back'. For a few minutes it all became a bit hairy, as pilots tried to land in increasingly rough conditions into increasingly smaller spaces. One Cirrus (not an OGC one) suffering undercarriage damage as it was 'dumped' in the turbulence, one OGC pilot avoided damaging his undercarriage by not using it at all, and Stew Otterburn flew the length of the field in the club Discus at about 5 foot trying to find a landing gap. As he flew past me, getting closer to the cliff edge all the time, he did look a bit worried! The showers continued on and off, and with our normal perfect timing we derigged three gliders in the pouring rain, finally shutting trailer doors just as the rain stopped. The sun then came out, the wind went round to west, and we left for home at 6pm with the sight of 5 or 6 gliders high in clear blue skies over the west ridge. Such is gliding...

The second OGC contingent stayed on for most of the next week, and have their own stories to tell. One of them involves Rob Jackson and a 7 hour retrieve, but you will have to ask him yourself about that one... :)

AVERAGE SORT OF WEEK AT FESHIE

Phil Hawkins

The weather at Feshie last week (Ed.: May 2005) was no better than average, I would say. There was gold-height wave on two days, the best height achieved (not by me, I hasten to add) being 19,800ft above site. On both of these days I managed to be in the wrong place. For the first one, the wrong place consisted of walking around the shops in Inverness due to an error of judgement on my part. I believed the weather forecast - big mistake. On the other day, the wrong place consisted of the wrong wave. Along with 2-3 other unfortunates, I was aerotowed off to the secondary wave some 4 miles downwind of the airfield, in a 40 knot wind, and this only went to about 6000ft. That wasn't enough to get over the top of the primary cloud into the best bit, and when the intervening trough suddenly filled in we had an interesting descent through cloud to get back to the site. It was rough in the circuit below 500ft. Some of the subsequent landings were even more exciting than mine. Never seen a pair of wings bending in opposite directions at the same time. I also flew on another day when only hill soaring was available, but that was enjoyable in its own sedate way.

DAISY DID BERLIN (CONTD.)

rude) explanation from a West German. Haste was phoned. "Can you ring the BGA, tell them the situation and see if they'll allocate Peter a licence number provisionally". To our amazement it worked (or did Haste just make up a number – he's owed a lot of beer by PB either way). Whatever, by the following day Peter was signed up and legal. This minor glitch did however lead to our becoming acquainted with the three rather charming girls who'd been drafted in to act as English interpreters for the rally. Rob's tongue dragging on the ground was becoming noticeable.

The airfield was huge – a 2300 metre main runway, mostly grass, with a bit of tarmac at each end. I didn't know you could fly Mig 15's off grass, but apparently the East German air force could. The winch run occupied barely half the length on one side of the airfield, while aerotows (£12.50 to 2000 feet) started halfway down the main runway.

There were two twin drum winches, four little ultralight CT tugs (which did fine on the lighter single-seaters but were a bit pressed by two-seaters and heavier single-seaters) and a Wilga tug for the bigger stuff.

Thursday (28th July) and Friday were blazing hot and pretty non-thermic, but so what, Daisy and the Skylark were rigged and launched (at £3.50 a launch you can afford to fly a circuit or two after having driven 1200 km). A queue

instantly formed for goes in Daisy – which is known amongst T21 owners for having the C of G hook, several of which are in production in Holland and Germany, but none yet completed. A lot of people wanted to try it.

Friday night was the infamous VGC International Evening. That's the one where each nationality sets up a stall and gives away "national" food and drink – especially drink. The British theme was "afternoon tea" – scones, cakes & Pimms – always an innocuous tasting drink but with interesting side effects when taken in quantity. My favourite was the Finnish smoked reindeer on black bread open sarnies – "Have some smoked Rudolf, try a bit of Bambi" – they've got no shame, the Finns. And they had some very strange liquorice flavoured vodka – I know, it sounds disgusting, but it's really very nice. Following previous experience of the International Evening I personally stayed off the Scandinavian and Eastern European firewaters but I'm not sure that the others did.

Pre-evening entertainment included the Seelow Cannoneers (dressing up as soldiers hauling an 1800's cannon around the country and making it go BANG is good for a while but the repertoire is limited) and stupendous glider aerobatics by Chris Zahn in his 1930's designed open cockpit Habicht.

Peter Boulton was circulating with a lot of money, in the form of cameras and lenses slung around his neck. This drew the attention of the Stemme agent, whose (young blonde) daughter promptly invited him for a flight (with daddy unfortunately) the following day – well

maybe with those cameras he could afford 220,000 Euros for a Stemme S10! Sorry Rob, conjuring tricks doesn't have the same effect as a big lens.

The hot weather broke that night, with the mother of all thunderstorms. I've never seen lightning like it – almost continuous across the sky for a couple of hours, plus heavy rain & wind gusts. It was a tribute to modern tent construction that most of the campsite was still standing in the morning. Pete Brooks was the main casualty amongst us – his tent didn't have a built-in groundsheet and all his stuff ended up extremely wet. However, seeing some of the trees in the district which had been flattened by wind bursts, we all got off lightly.

The rally had been organised by the Air Sports Association of Brandenburg, with a lot of local sponsorship. The publicity for the event had been huge, posters everywhere, big articles in the newspapers, TV coverage and at the weekend thousands of spectators turned up – yes, to watch gliding! Of course there was also a huge beer tent, food stalls, bouncy castle, live music, more Habicht aerobatics and some remarkable model flying displays as well.

Thermal conditions had picked up after the storm line and on Saturday I had a nice hour or so local soaring in BNK. There were the usual queues for the open cockpit experience in Daisy which resulted in my swapping for a flight in a Gö IV, a slightly strange (and cramped) side-by-side two-seater (with a canopy). It was also the day that Peter Boulton did his Stemme flight ("adjust the air conditioning to suit yourself") and flew the Hol's

No	Type	Quantity	No	Type	Quantity	No	Type	Quantity
1	2G	1	21	Grunau Baby 2B	2	41	Olympia Meise	3
2	ASK 16	1	22	Grunau Baby III	6	42	Pirat	1
3	Bergfalke II/55	3	23	Hol's der Teufel	1	43	R11-b Cimborra	1
4	Bergfalke III/IV	1	24	Hütter H17	1	44	Rhönlerche II	5
5	Bocian	1	25	Hütter H28	1	45	SF 27A	1
6	Carmam M200	2	26	Jaskolka	3	46	SF 28A	1
7	Condor IV	1	27	JS Weihe	1	47	SG 38	1
8	Cumulus 3F	1	28	Ka 2/2B	5	48	Slingsby T13 Petrel	1
9	DFS Habicht E	1	29	Ka 3	1	49	Slingsby T21B	5
10	DFS Reiher III	1	30	Ka 6BR/CR	7	50	Slingsby T31	1
11	Doppelraab V	1	31	Ka 6E	2	51	Slingsby T45 Swallow	1
12	Elfe S-4A	1	32	Ka 7	2	52	Slingsby T50 Skylark 4	1
13	EoN Olympia 2/2B	2	33	Ka 8B	2	53	Spatz A	1
14	Fauvel AV 36	1	34	Krajanek	1	54	Specht	3
15	Fauvette	1	35	Kranich II	2	55	Spyr Va	1
16	FES 530 I/II	3	36	Kranich III	2	56	Standard-Austria S	1
17	Foka 4	2	37	L-Spatz 55	6	57	VT 16 Orlik II	1
18	Foka C	1	38	Lunak	1	58	WA 26CM	1
19	Gö 1 Wolf	1	39	Minimoa	1	59	Weihe 50	3
20	Gö IV	2	40	Moswey III	1	60	Z 23 Honza	1

DAISY DID BERLIN (CONTD.)

der Teufel, a "new build" of an early 1930's primary. If I'd been the builder with 2000 hours of my life invested, I wouldn't have let anyone near the Hol's, but in fact many people (myself and Pete Brooks included) got to fly it in the week.

Sunday was a repeat of Saturday's public festivities and included a nice 60 minute flight in Daisy with a young long-haired German (unfortunately male) while Pete Brooks spent 40 minutes flying one of the retrieve car drivers. Members of the public inspecting the launch queue included the Fürstenwalde



branch of Hell's Angels, who took one look at Daisy and declared her to be "prima". They left me a business card so that I could email a photo of them with Daisy (even Hell's Angels become respectable with age!).

On the Monday the attempts to reduce the length of queue for flights in Daisy continued (without success). In the evening a reception for the rally participants was given by the Prime Minister of the State of Brandenburg – if that's not political support for gliding, then I don't know what is!

Tuesday was a minor personal disaster, with me failing to fly more than circuits in Daisy with either of the quite decorative interpreters from the office but then (naturally) spending an hour and a half at 4500 feet with a (male) Belgian pilot, freezing cold but loving every minute. Included in one thermal stack were several T21's, the Czech guy in his Hol's der Teufel (at 1100 metres!), Chris Zahn in the Habicht (which despite having a VNE of 220 knots apparently thermals like a Ka 8), the Slingsby Petrel, a Weihe or two – it was impressive – and Chris seems to be able to thermal the Habicht while inverted just as well as when it's the right way up!

Wednesday was the one day of the rally that was washed out by rain. Peter Boulton & Rob went on a high speed coach tour of Berlin (nothing, I'm sure, to do with the office interpreters going on that trip) while Pete Brooks and I visited the neighbouring airfield which had a nice little aeronautical museum containing a lot of impressive RC models of

early aircraft and a guy seemingly spending most of his life recreating a 1913 Taube two-seater. Thursday was our last flying day. I finally got to fly the Hol's der Teufel (and thermal it, briefly!) and then achieved a long standing ambition by flying Graham Saw's Slingsby T13 Petrel - gull winged, totally immaculate and one of only two in the world.

The final rally count was 110 gliders comprising 60 different types and 330 registered participants. Pretty good by any standards.

And we made it back home without meeting any nice German policemen – and it rained most of the way to the German border.

Next year, in August, the VGC International Rally is at Angoulême, near Bordeaux, in France. Apparently the French authorities have issued a special clearance for all vintage & classic gliders to be flown, even UK registered ones, even by British pilots, throughout August 2006. Think on it folks – and don't book any alternative holidays!

JUNIOR NATIONALS 2004

Paul Wilford

The Juniors is, in my opinion, an excellent competition which successfully combines the tasks of introducing young and ambitious pilots to serious competition with the provision of a highly competitive comp that is great fun. I have very fond memories of my days flying the Juniors despite my mediocre performances. Last year I went to the Juniors at Lasham as Matt Robain's crew. A rabble (myself, Cass, Ant, Lisa, Dave, etc.) of OGC youth set up camp on the airfield at Lasham with a few tents and a generously donated caravan (Thanks Carole & Ian) and went about drinking far too much alcohol. Oh and there was some flying to get on with too.

The weather for the week did not look promising in the run up to the comp and there was much speculation about the ideas behind running the Juniors alongside the 15m Nationals as was happening at Lasham. Day 1 was taskable in the end and a 109km task was set for the 50 juniors pilots, who were all itching to get started. My pilot (Matt) got round in his LS4 at 65.1kph which put him in 12th place. I'd say that's a fine effort for the first day of your first comp, especially considering the standard and experience of some of the pilots further down the rankings. The next few days were basically spent grid-squatting, going to the cinema, swimming in Portsmouth and sitting around in a lovely dry caravan while lightening battered the ground around us (literally). The juniors missed out on a (barely) flyable day because of the presence of the 15m Nationals who got away in the narrow window available leaving no time to launch the Juniors pilots.

The Friday finally presented some hope with forecasts for Saturday and Sunday looking much better. Sure enough, on Saturday the grid was launched on a 320.7km task (Lasham-Birdlip-Northampton South-Illesley-Lasham) with some more far more optimistic and now very determined pilots competing for some sort of position in the results. The task was well set and the crews got to sit at the airfield and watch some finishing action from both the comps. The winner (Jon Meyer) got round at just under 100kph and Matt was 17th for the day with a speed of 86kph.

Sunday was another flying day with a 149.4km task set (Lasham - Wantage - Oxford East - Lasham) with the specific intention of sending the entire grid over the Oxfordshire countryside to terrify the OGC pilots enjoying the weather. I personally had to tow a caravan back to Weston and try to get back to Lasham before Matt either got back or landed out, I got back in time and found Matt wasn't happy with his 25th place for the day. Overall Matt finished 16th in the comp, which I still maintain is a good result for a first comp, and it's the first time I've ever crewed at a comp and not had to go out on a retrieve. Andy Perkins won the comp as he was expected to, being a British team member and all.

It's also worth mentioning Dave Bray's efforts flying a club Astir Hors Concours on the days it was reasonable to do so. Dave should've learned a fair bit about the comp atmosphere and gained some invaluable cross country experience for this year where I expect to see him making full use of his LS6 share to annihilate the opposition! Dave did however need to cheekily enlist the help of our country's dedicated Police force, en masse, to help carry the Astir out of a field one day. I'll leave it to Dave to tell that story to anybody who hasn't already heard it.

Ed.: ...and in the Junior Nationals 2005 Dave Bray flew his LS6 in the comp and came 13th overall (of 50 competitors)!

FOUND ON THE LIST SERVER:

It's 200 years since Lord Nelson's famous naval victory over the French and Spanish in the Battle of Trafalgar. To kick-start the anniversary celebrations, an actor dressed as Nelson posed for pictures on the River Thames at Greenwich. But before he was allowed to board an RNLI Lifeboat, safety officials made him wear a lifejacket over his 19th century admiral's uniform.

How Nelson would have fared if he had been subject to modern health and safety regulations:

You are now on the deck of the recently renamed British Flagship, HMS Appeasement.

"Order the signal, Hardy."

"Aye, aye sir."

"Hold on, that's not what I dictated to the signal officer. What's the meaning of this?"

"Sorry sir?"

"England expects every person to do his duty, regardless of race, gender, sexual orientation, religious persuasion or disability. What gobbledegook is this?"

"Admiralty policy, I'm afraid, sir. We're an equal opportunities employer now. We had the devil's own job getting 'England' past the censors, lest it be considered racist."

"Gadzooks, Hardy. Hand me my pipe and tobacco."

"Sorry sir. All naval vessels have been designated smoke-free working environments."

"In that case, break open the rum ration. Let us splice the main brace to steel the men before battle."

"The rum ration has been abolished, Admiral. It's part of the Government's policy on binge drinking."

"Good heavens, Hardy. I suppose we'd better get on with it. Full speed ahead."

"I think you'll find that there's a 4 knot speed limit in this stretch of water."

"Damn it man! We are on the eve of the greatest sea battle in history. We must advance with all dispatch. Report from the crow's nest, please."

"That won't be possible, sir."

"What?"

"Health and safety have closed the crow's nest, sir. No harness. And they said that rope ladder doesn't meet regulations. They won't let anyone up there until a proper scaffolding can be erected."

"Then get me the ship's carpenter without delay, Hardy."

"He's busy knocking up a wheelchair access to the fo'c'sle Admiral."

"Wheelchair access? I've never heard anything so absurd."

"Health and safety again, sir. We have to provide a barrier-free environment for the differently abled."

"Differently abled? I've only one arm and one eye and I refuse even to hear mention of the word. I didn't rise to the rank of admiral by playing the disability card."

"Actually, sir, you did. The Royal Navy is under-represented in the areas of visual impairment and limb deficiency."

"Whatever next? Give me full sail. The salt spray beckons."

"A couple of problems there too, sir. Health and safety won't let the crew up the rigging without crash helmets. And they don't want anyone breathing in too much salt - haven't you seen the adverts?"

"I've never heard such infamy. Break out the cannon and tell the men to stand by to engage the enemy."

"The men are a bit worried about shooting at anyone, Admiral."

"What? This is mutiny."

"It's not that, sir. It's just that they're afraid of being charged with murder if they actually kill anyone. There's a couple of legal aid lawyers on board, watching everyone like hawks."

"Then how are we to sink the Frenchies and the Spanish?"

"Actually, sir, we're not."

"We're not?"

"No, sir. The Frenchies and the Spanish are our European partners now. According to the Common Fisheries Policy, we shouldn't even be in this stretch of water. We could get hit with a claim for compensation."

"But you must hate a Frenchman as you hate the devil."

"I wouldn't let the ship's diversity co-ordinator hear you saying that sir. You'll be up on disciplinary."

"You must consider every man an enemy who speaks ill of your King."

"Not any more, sir. We must be inclusive in this multicultural age. Now put on your Kevlar vest; it's the rules."

"Don't tell me - health and safety. Whatever happened to rum, s0d0my and the lash?"

"As I explained, sir, rum is off the menu. And there's a ban on corporal punishment."

"What about s0d0my?"

"I believe it's to be encouraged, sir."

"In that case ...kiss me, Hardy."

FROM KIDLINGTON TO WESTON: MY EARLY YEARS John Freymuth

In August 1954, shortly after I had left school in Berlin and come up to Oxford to prepare for a university course, I was met by a girl named Belinda who happened to live in a flat in the same house. A year older than me, she was a tall, fair-haired and cheerful young lady looking forward to be presented to the Queen as a spring debutante. She returned from one of her weekend outings full of laughter, describing how she had scrambled from the ditch into which her boyfriend had driven them in his sports car.

A weekend later, and ready for more fun, she took me along cycling to Kidlington Airport and introduced me to the Oxford Gliding Club where she had recently started her ab-initio training in a fairly new open Sedbergh T21. She never came near to solo but somehow caught the attention of a press reporter as she smiled from the cockpit. A few days later, this picture of her appeared on the front page of a tabloid newspaper. The caption stated that "blonde spring debutante Belinda glided into London today to do some shopping".

The club had been refounded at Kidlington in 1951 with a few dozen enthusiastic members who used to come to the airfield by bus or bicycle. They started with three gliders and very basic equipment. Ground operations were often hampered by the soggy soil, and the only service vehicle, a roofless van chassis called the beaver, was liable to get bogged down in the mud. After a wet day, launch cables would therefore be retrieved along the peri track by guiding them through pulleys held by the Club President, Professor George Varley, and other volunteers. With launches normally below 1000 feet, cable breaks and snarl-ups were frequent, and the second winch drum, devoid of a pay-on gear, needed a human "winder on". Launch signals were given by bats, only years later to be supplemented by a hand-held Aldis lamp connected to a loose battery. Owing to the lack of any other communication between winch and launch point, any unforeseen delays caused anxious minutes of suspense and fostered mutual suspicion between the crews at either end and against the tow-car driver from both sides, until a messenger could be dispatched to resolve the mystery. But all these incidents, and the constant need for improvisation, added to the sense of fun and adventure, causing curses and laughter in equal shares and leaving nobody without a self-chosen task.

After a few more weekends, I had scraped together enough pocket money for a day membership at five shillings and a single launch at the usual rate of one shilling for my first-ever, short but fascinating air experience flight in the T21. The pilot was Ray Stafford Allen, the winch driver John Smoker.

Lack of time and money, and my return to Germany in the following year, restricted me to only occasional visits to Kidlington. Among my club friends from these early days was Anita, a very talkative middle-aged lady and one of the many refugees from Nazi Germany who had settled in North Oxford. She became a proficient solo pilot long before she decided to buy a pre-war car and started to take driving lessons. Quite unlike her flying, her first experience of motoring (with hand signals given through the open window) made her so nervous that she used to run down an oral check list both before each engine start and whenever a roundabout came in sight. Her club career was unfortunately spoiled when, in the absence of

an instructor, she called up an impromptu launch crew and winch driver and helped herself to some soaring in her private Grunau Baby.

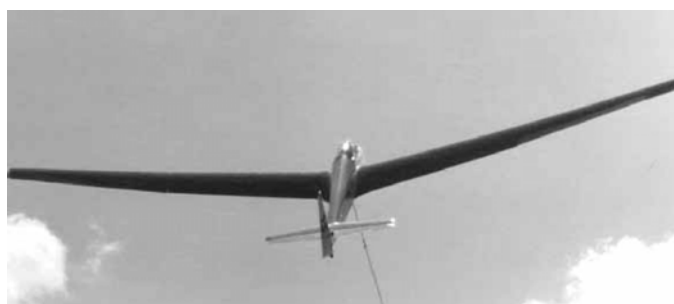
Another colourful member was Raymond, a sales agent for Rolls-Royce cars, who once arrived in one of these brand-new products for an acceleration and speed trial on the peri track. Some weeks later, he emerged from a German bubble car called the "Isetta" with only a front door entry. But normally he visited the club in his single-engined Cessna and invited members for a joy ride in the second seat.

It was not until 1958, and under the reign of Arthur Speechley, the powerful new Club Secretary, that I joined OGC as a full member and started gliding in earnest, if only during my student holidays. Two years before, the club had moved from Kidlington, where its hangars were taken over for industrial purposes, to its present site at Weston which soon proved to be a far better location. The only disadvantage was its greater distance from Oxford and the unsuitability of the narrow A 34 – then one of the most dangerous stretches of road in Britain – for cycling. A common and easy remedy was hitch-hiking, provided that you wore a sports jacket and tie and carried a shopping bag suggesting short-distance business. This was a normal attire anyway for well-groomed flying instructors and winch drivers.

My early mentors were Dave Roberts, Roy Collins, John Gibbons and John Ellis, who sent me solo, again in the much-loved T21, during the flying weeks in August 1959. For this decision, John had to pay by having to collect me and the heavy aircraft from the middle of the airfield, grumbling "This wasn't much like the one you did before!". In my log book he entered mildly: "Realised too low on downwind leg – strong sink – turned in early with normal landing".

Ever since then, I made these August weeks my favourite holiday, although sometimes with gaps of several years, slowly progressing to the Olympia, the Skylark 3 F and recently again to the Ka 8 for my 1000th launch. I feel indebted to several generations of club instructors and grateful for their ever-repeated patience with my modest goals.

This year, I paid a few visits to one of the new gliding clubs which have formed around Berlin after German reunification. Its members are as friendly and welcoming as any, their facilities superb, and each summer they host a delegation from Bicester. Their discipline is more rigid than ours, and the launch rate is high. Yet for me, there is no club like the one where my good fortune began 51 years ago.



WILLY WEAKLINK SENT ME A QUIZ...

- 1) Which of the below lists of weak links is in the correct order - weakest first?
 - a) Blue, yellow, white, red, black
 - b) We've run out of blues, sorry.
 - c) White, blue, red, black, yellow
 - d) Yellow, white, blue, red, black
 - e) White, yellow, blue, red, black
- 2) Willy has just launched from Weston, and finds himself in the Astir at 1,500' QFE over Beckley mast. There is no wind, and no thermal activity. He flies back at the best glide speed. At what height would he arrive back over the sandpit?
 - a) 614 ft
 - b) 902 ft
 - c) 616 ft
 - d) 819 ft
 - e) 579 ft
 - f) 251 ft
- 3) Same again, only this time he is in Daisy. I'll bet the duty instructor is pleased about that...
 - a) 202 ft
 - b) 303 ft
 - c) -1200 ft
 - d) -112 ft
 - e) 12 ft
- 4) Everyone knows that Slingsby gliders were built in Yorkshire. But where were the Eon Olympias ('Olys') built ?
 - a) Eton
 - b) Newcastle
 - c) Newbury
 - d) Earls Court
 - e) Eon, near Wrexham
- 5) What is the wing main spar of a K 13 built from?
 - a) Steel tube
 - b) Steel sheet
 - c) Aluminium
 - d) Wood
 - e) Concrete
- 6) How many brake horsepower does i) the Tost winch and ii) Taffy have?
 - a) i) 100, ii) 2000
 - b) i) 2000, ii) 4000
 - c) i) 425, ii) 240
 - d) i) 5000, ii) 2000
 - e) i) Too much, ii) too little
- 7) One of these does not exist. Select the wrong glider.
 - a) ASK 14
 - b) DG-101
 - c) LS-4
 - d) Slingsby Sky-4
 - e) Oly2-B
- 8) Arrange the club glider types in order of empty weight.
 - a) Ka 8, Astir, T 21, K 13, DG-505
 - b) Ka 8, T 21, Astir, K 13, DG-505
 - c) T 21, Ka 8, Astir, K 13, DG-505
 - d) T 21, Astir, Ka 8, K 13, DG-505
- 9) The Slingsby 'Eagle' was named after a popular children's comic of the time.
 - a) True
 - b) False
- 10) Frequencies : what are the i) DZ and ii) Oxford Base frequencies ?
 - a) i) 130.675, ii) 130.01
 - b) i) 130.65, ii) 130.10
 - c) i) 130.1, ii) 129.975
 - d) i) 133.65, ii) 130.1
- 11) Which club glider is Willy talking about? -> L/D 28, min sink 35 kts, best glide 48 kts
 - a) Ka 8
 - b) Daisy
 - c) K 13
 - d) DG-505
 - e) Astir
- 12) What is 'Elfin'?
- 13) Under the rear panel of the K 13's is fixed what seems to be a Thermos flask. What is it?
 - a) A source of static air for the ASI
 - b) A volume of air for the variometers
 - c) Somewhere to keep the instructor's tea
 - d) Static air for the altimeters
- 14) When you move the K 13 trim lever forwards (to fly faster one assumes), which way does the elevator trim tab move?
 - a) Up
 - b) Down
- 15) Using the tri-graph codes of two the club gliders (e.g. CCE, JSX etc), can you re-arrange the letters to form a 6 letter word connected with food?

(Answers please see page 12)

SCOTTISH PIE WEIGHING (FESHIE AUTUMN 2005)

Text: Neil Swinton, photos: Andrea Wahl

I have always resisted making a trip to Scotland with the glider because I had thought it would take days to get there, it would rain when I did get there, and then take days to get home again. I was just about right...

Phil and Fi had booked the Feshie cottage (Balbeag) for two weeks to coincide with the Feshiebridge October wave fest.

They were to take the K21 DaisyETA with them. Steve and myself travelled with Cirrus 579, and Nick and Claudia took DG100 251. Considering 579's reputation on these events, the trip north was fairly uneventful, although we did lose 50% of the hub caps off the trailer somewhere between Oxford and Stafford. The 21's journey north by all accounts was a bit more eventful. They reached the services north of Birmingham at about 6pm in the Friday night traffic only to realise

the trailer keys were hanging up on a peg in Phil's house. This would not have been so bad, until they realised the same key also unlocked the trailer from the car tow-ball, so without keys, they would be stuck with a glider trailer perched on the car hitch for two weeks... I'll bet that was an interesting conversation when they realised that. Anyway, one of Phil's relatives was

summoned on a motorbike, who rushed the keys up to them while they sat around and tried to enjoy a motorway service station for two hours. The K21 team then drove overnight direct to Feshie, while we all stopped off at Martin's Hotel in Windermere, where we were surprised to see the vast Capstan ('LouLou') trailer looming menacingly over the fence from a neighbour's house. Graham and Lynne had delivered it earlier that day for Martin to take on to Feshiebridge. A bit of traffic marshalling and grunting saw both glider trailers parked in Martin's voluminous car park, and an enjoyable evening was had in Windermere.

Next day we had a nice breakfast (thanks Martin!..), a wander along the lake shore and then drove in loose convoy from Windermere to Feshiebridge, although Mavis (my satnav) dropped a bit of a clanger by taking us right through the middle of Kendal on market day. Martin (with LouLou) and 251 went the sensible way on the by-pass. We arrived, parked up the trailers, found the house, and then enjoyed a meal in the clubhouse with the Cairngorm members and a few visiting members from Portmoak.

Sunday saw goodish weather and the offer of check flights for those who wanted them. Claudia flew the K21 with a borrowed instructor, I flew the club Puchacz, Nick flew the club Acro. Now I have never been to Feshie, so I was rather surprised by the aerotow, which takes off, climbs to about 800', and then veers off alarmingly towards the nearest lump of rock. Which is about 1500' high. Just when you think you are going to hit it, the tug banks around and, rather than aiming for the safety of the valley, it uses the hill lift and just aims for the next

bit of higher rock. When you eventually fall off the tow, you find yourself at 2000', surrounded by granite, and about 300' below the top of the 'bowl'. Not being the most adventurous of pilots I do confess to finding this a bit worrying. However after a few minutes we had climbed enough to leave the bowl and ventured out onto the main ridge. Once there you can climb above the hill, and then go out into the valley for thermal and wave hunting. Then back on the hill, and do it all again. The sheer scale of these 'hills' is impressive, the 'ridges' at Dunstable, Halton and Shenington are nothing like this. These are real mountains. The airfield is long, but really not that wide. On one side are trees, on the other a wide stream bed. The idea is that you land, and when you have lost most of your speed to taxi off to the side to leave the runway clear. Do this too fast and you hit the fence. Too slow, and you do not turn at all.

Now poor old Steve discovered that turning downwind, at low airspeed, in a Cirrus with a diddy rudder is fairly tricky, and after his landing the Cirrus was stuck firmly on the runway centre line. A sarcastic voice from the tug radio was heard 'Mike-Mike going around because *someone* hasn't cleared the runway' (with extra sarcasm on the *someone*). Steve hid for the rest of the afternoon. I then flew the Cirrus, and 251 and the K21 were continually flying most of the afternoon. Good day.



Monday it rained. Then it was windy. Then it rained, and was windy. We had a nice walk, and inspected where you have to land if the aerotow rope breaks low-down (the stream bed). I was glad I hadn't brought *my* glider with me... We wandered up the valley and found a nice sunlit waterfall. Before it rained on us again. We were going to ride on the local steam railway, but this week it was diesel powered. A diesel powered steam railway is missing the point a bit I thought.

Tuesday was different from Monday, as it started windy, and then got rainy, before being windy again. Martin and Steve visited the local bar in the rain, and spent far too long in there for Steve's own good of an afternoon. He tried to explain to us that they kept having more drinks in the hope of 'pulling' the barmaid. Whatever that means. Martin had even tried the line of 'I'm an instructor and I've got a two-seater - come and have a go', but even that failed. Nick, Claudia and I drove up to Inverness and met Andrea (Claudia's sister) off the jet from London. In the evening Fi and Phil had cooked Scottish haggis and English bread-and-butter pudding in an attempt to confuse our new guest, and we all had a splendid meal. We had all learned little bits of German to say to make Andrea feel at home, like 'my carriage has been struck by lightning', 'beware of the airfield jellyfish' and 'have you seen my hamster'. She seemed very impressed. At least I think that is what that look on her face meant.

Wednesday was windy. Like really windy. Oh and rainy. The locals stayed inside the club drinking coffee. The tug pilot did a bouncy take off, a quick circuit of the airfield and then landed, put the tug straight away and shut the hangar doors. So we got the message and didn't rig

SCOTTISH PIE WEIGHING (CONTD.)

anything, but instead did the tourist trail thingie and went up Cairngorm railway to have coffee and cake at the top. We were lucky to get good views, before the cloud came down and the rain started again. To the local bar to see the nice barmaid, and then back to the house and a 1000 piece jigsaw. Sadly with 999 pieces... I had developed a slight cold today, and in the evening Claudia brewed up a concoction of hot water, egg yolk, sugar and rum. Far far too much rum as it turned out. When I got to the bottom of the mug I realised my mouth had stopped working. It had absolutely no effect on the cold, and so I had another the following night. Today was Steve's birthday. He got a present of an elastic band powered plane. I borrowed it without consent on Friday morning and got it stuck up a tree at Balbeag...

Thursday was unique, in that it neither rained too much nor was windy. No one had ever rigged a capstan, but we managed to get the wings in the right way up, and because we didn't have too many bits left over afterwards, we thought it was safe to fly. Martin paid a short visit to the local smithy, who welded some vital pieces of the rigging gear together again. We also rigged the K21 and both single-seaters. We had a magic day, sunshine, cumulus, rainbows and a long working ridge. Phil even contacted some weak wave with Andrea in the K21. Nick and Martin flew LouLou a couple of times and discovered that she falls down really quite fast with wet wings. I had a ride in the tug, which goes even closer to the granite than the glider does. Coming into land in the Cirrus I noticed Claudia and Steve both by the runway waiting to take a photograph. Then they moved away. One of the club instructors had apparently given Steve his second telling-off in as many days, and shouted at them to move away from the runway sides. Although when it was later told to me, the story had grown to him shouting out 'Look out - Swinton's landing - Run for your lives'. A vast amount of photographs were taken that day, including some fantastic air to air shots of the Cirrus, the DG and the Capstan. A slight down point for me was landing long in the Cirrus with the K21 close behind me. The duty instructor wandered over with a rope to tow me back. "Nice landing and taxi off" he said. "Oh- thanks" says I. "Ach - not you yer clown, the wee gurlies in the K21" he says pointing to Andrea and Claudia. Humff. LouLou was put in the T-hangar as the locals plainly couldn't face watching us derig her.

Friday was windy and rainy at the same time. Claudia and Andrea went horse riding. We sat around, and then went down the local bar for lunch and a soft drink. As soon as we sat down the sky cleared, and long wave bars formed over the site. So we rushed back and rigged. Again the locals didn't, they just watched with bewilderment. The tug pilot did another bouncy take off, another quick circuit of the airfield and then landed. This time he said he would tow us if we were desperate. The CFI said that he was *desperate* to fly but *even he* wouldn't be taking a tow in this. We didn't either. So went to the local bar and watched the rain and the barmaid.

Saturday was - well - windy and rainy. The Puch and Acro were launching and flying the small west-facing ridge over the site. Unfortunately the wind was 90 degrees to the runway, so even having changed ends twice, we still had a tailwind on take-off. Steve launched the Cirrus, flew the ridge and landed, looking a little shaky. 'How hard can it be' I thought, and took a wobbly downwind takeoff to be placed on a rough rainy ridge with the cloud 200' above and rain everywhere. 'This hard' I realised. Claudia radioed the tug to say she wouldn't be taking her launch after all. It was raining all the time, the canopy kept misting up unless I kept the vent open, which was freezing my toes, and there was a lumpy blustery wind. I really couldn't face the thought of landing the thing in those conditions. Eventually the 'fun' of dodging

the clouds, rain and rock got too much, and after 50 minutes I battled my way out in the valley towards the airfield, where the rain and wind immediately stopped and the sun came out. I drifted down to a gentle landing in zero wind right by the trailers.

George and Simon had arrived by now, and the weather forecast as we left was looking quite promising with much less wind and rain.

Our journey back was painless, although stopping every 90 minutes for 'fag' breaks was a bit of a bind. Wasn't it Steve...

Funniest bit:

The local beer was called 'Sheepshagger'. Andrea asked Martin to explain what that meant. The whole bar went quiet as we waited...

Oh and the title:

We saw lots of rainbows. Many many rainbows. Each one we saw Martin would say "that's where they do the pie weighing"

When pushed to explain he said "Like the song from Wizard of Oz. Somewhere Over a Rainbow. Weigh A Pie"



FINAL GLIDE is produced using Power Publisher 2, printed on an HP Deskjet 5740, then copied and stapled by Uniskill of Eynsham. Distributed free to members, ex-members and friends of the Oxford Gliding Club.

Contributors to this issue were:

Anthony Buck, Claudia Büngen, John Freymuth, Matt Gage, Phil Hawkins, Nick Hill, Neil Swinton, Neil Turner, Andrea Wahl, Willy Weaklink, Dave Weekes and Paul Wilford.

Membership list by Ian Shepherd from the Club computer [all corrections to him please].

2X 500 KM IN AUSTRALIA

Matt Gage

My flying in Oz has been fairly limited due to the distance to travel - 3 hours each way to the club, and that is still not into the good country - it's like Feshie without the flat bits - you get nervous with cloud base at 6000' and ground at 4500' with few options in the higher country. small x/c tasks are possible on the lower ground, but you have to cross the high ground to get inland to the best conditions, however 890k was flown from the club last year. All heights are above sea level unless I say so. I can't set the altimeter to 0 at Bathurst as it's too high (2200' amsl).

Just about all the gliding sites are general airfields, so shared with just about anything. This makes a Radio mandatory as powered pilots here seem to use it as their primary VISUAL means of avoiding things. Most of these just have a compulsory radio frequency to use. they don't mandate making calls. The bigger airfields have mandatory broadcasts (MBZs).

So I took 2 weeks holiday and went to Narromine (500k inland from Sydney and just on the edge of the inland flat country). The 1st week was a club camp, the 2nd was the Narromine Cup week - a sort of non-competition competition. All tasking is self declared, with a simple points system. Declared = points x 1.2 and a true FAI triangle = points x 1.2, with a maximum of twice round a declared triangle. The main thing was to try and cover a lot of distance. I much prefer speed tasks !

1st task was an Australian test flight for the Cirrus - now registered, C of A, etc, which finally came through at 7pm the night I left Sydney. As the Cirrus is certified for spinning, I had to spin it - I agree with Haste, once is once too many.

During the 1st week, conditions were blue and rough. Actually, rough doesn't describe it properly, 30 seconds of off the clock sink, to hit off the clock lift with nothing in between was normal on a few days. Climbs were get as much bank as you could and pull, then see where you were spat out - put as much speed on as you dare and try and get through that sink.

I flew on 4 days that week, with 3 x 300k and 1 x 400k flights (my longest solo flight to that point), all of them at about 95kph - I just couldn't get through 100kph.

The 1st flyable day of the 2nd week didn't look too promising and too much wine the night before had me late on the grid and badly prepared. I quickly copied a few people's

declaration of Narromine, Condobolin, Parkes, Narromine (a 330k FAI triangle), then to see what else I could do. The only good thing I did was to fill with water - A simple lesson for me, as every time I flew without I got sick. 60 litres may not be a lot, but it makes a huge difference to the cirrus in Aussie conditions.

Things got worse as I had a total electrical failure as I got to the front of the grid, so push off and work out what was wrong. The panel had flexed towing out over rough ground and broken the case of all the fuses, and I didn't have any spares. Fortunately, I was able to borrow some. During this, I could see fantastic Cu forming to the south - arrrrrghh.

I finally got in the air at 1:30 (people were reporting 6 knots to 6500' from 11:30!!). Those I had hoped to leech off of were long gone, so I decided to abandon the task and fly to Parkes and see who I picked up on the way. (Parkes is about 100k south of Narromine). Approaching Parkes, conditions were fantastic and looked to be just as good to the far south (but not to the West - Condobolin way). A quick check told me that Temora (another gliding site) was 254k south of Narromine. That would be a 500k out and return - I had my task. I now needed to check on time. I was flying into a 10 knot headwind and had left at 1:40 (10 minutes to climb to 7000' including the tow). Convections were predicted to end at 6pm (but that was not based on the conditions we had, so I could expect longer). Anyway, I set a turn back time of 4:15 from where ever I was. There was some streeting, with good clouds. Climbs averaged about 5.5knots (total) with the best at over 9. Crossing the Lachlan river near Forbes, things didn't look so good to the south, with still 100k to run to the turn. It was blue, and gliders close to Temora were reporting weak climbs. I hadn't realised that another club had a camp there that week, so thought that these were from Narromine and as I was catching them, they would mark what thermals there were.

The 1st 2 climbs in the blue were similar to what had gone before, so I kept pushing on (90 knot cruise). Then things started getting worse. The next climb was only 4 knots and topped out at 6500' (I had been to 8500' earlier), but Temora was now in sight, its huge new

runway looking complete (there is a great aviation museum here, and the Canberra needed more tarmac than they had, to be safe - at least it won't be melting the gliding strip any more). There were also a couple of gliders circling low (I was down to 2500' agl here). I joined just above them at about 2000' agl (3000' amsl) over the airfield, and took a 2 knot climb drifting down wind back on the way back. It was 4:10, so just in time, and over 100kph in to wind for the 1st 250k, so 100kph was also possible if I could get going again.

Those gliders promptly landed, with me realising that no one else had come this far south.

At 5500', I'd had enough of this slow climb and pushed on, gradually getting better and better climbs until I got to the 1st Cu just south of Forbes. This gave me 8 knots back to 9000'. Almost home. I now started making silly mistakes, trying to get a final glide rather than just flying as I had been. I was taking 4 knot climbs rather than cruise at speed to the next 8 knotter. When I got to the 8 knotter, I didn't really need it.

This now gave me an interesting problem. Last climb = 8 knots (total average, peaks at 12). Set McCready to 8 knots for the final glide = cruise speed of 110 knots (with VNE at 119). Wind it up to remove my safety height, and I should do 118. So set off at 110, and I find good air the whole way back. I end up at VNE for 55k and still am at 1000' when I get back to Narromine! I'm too tired to do any more, so breaks out, open the water and land. I was amazed looking at the logger trace to see I had



2X 500 KM IN AUSTRALIA (CONTD.)

I landed at 6:09pm, my 1st 500k complete, with an on task speed of 113 kph, so that other target met as well. Conditions stayed good until 8:30pm (close to last light). A 750 in the cirrus was possible that day - If only I had been ready for it.

I had a rest the next day - I only did a quick 240k in the blue - others did 450.

The next day dawned, I was ready, the Cu started popping at 11am. Again, in the air, my declared task didn't look like a good one, so I just followed the conditions. This wasn't a fantastic day, just reasonable. Climbs averaged 4 to 5 knots, but with some big streets. The best being 72 km into wind flying at 75 to 80 knots and only losing 1500'. I had "fun" with about 4 commercial flights as this street went overhead Dubbo (a major regional airport - by Aussie standards). I was bouncing along the top of the MBZ. Hearing a glider talk to them caused a small amount of panic from one - they weren't expecting a response from a glider.

Again, the day ended with a VNE final glide from 50k out - my last climb was the best of the day. Looking at what I did afterwards, I had done 520k at 103kph, and came 3rd for the day - I just couldn't be bothered with what it took to win here - use the last 2 hours turning points closer and closer to home staying in gliding range.

This was also the 1st time I had had the chance to thermal with a wedge-tailed eagle, I actually met several, and cruised between thermals with some. These are big - about 2.5m wing span, and are not used to bigger birds. When you upset them, they come at you head on, talons out, aiming at the canopy. If only I had had a camera out, the picture would be incredible.

only taken 18 climbs all day - I took almost 25 on my 1st 300k in the UK.

It was then time to have a few days off and wait for the promised BIG day (it rained anyway). This finally dawned and I was ready. Glider full, food, water, etc. in cockpit and on the front of the grid. Then sit down with the "experts" (5 past and current national champions) and plan the best 750 for the day. This was suggested as going north first. Another group decided to go south.

It was then wait for someone to claim they could stay in the air and go - 11:00am - I need close to 100kph to do it. Have the tug drop me at 3250' agl just short of the start point and fly out in absolute smooth air. Was I too early? I finally felt a few bumps at 1000' agl and then something I could turn in at 750' agl with good fields to land in all around. I got to my 1st turn at 1:00, 150k done. This was too slow and conditions weren't building as predicted. I hadn't got above 6500' all day and hadn't seen more than 4 knots. I was feeling sick as well, so turn back and go home. 300k complete, but not what I wanted. All the "experts" also had trouble and abandoned early.

The group who went south quickly found good climbs, eventually getting 15 knots to 14000' and completed their tasks.

That was my last day as the following morning we had 280k to drive to the club, leave the glider and get back to Sydney (work the next day). We later heard that this was THE day with several 900k flights.

I'll be ready next time!

Willy Weaklink quiz answers:

- Q1: Answer d): Yellow (400dN), White (500), Blue (600), Red (750), Black (1000)
- Q2: Answer a): In theory, 614 feet (33,700 ft distance, 1 in 38 glide, 886 foot height loss). However, should you attempt this, and end up entangled in the television aerial on the Little Chef, Willy accepts no responsibility.
- Q3: Answer d): -104 feet. (1 in 21 glide, 1500 ft gives only 31,500 ft distance)
- Q4: Answer c): Elliotts of Newbury (EON) built the Oly range. And wardrobes.
- Q5: Answer d): Wood.
- Q6: Answer c): i) 425, ii) 240
- Q7: Answer d): There was a Slingsby Sky, and Skylarks 1,2,3 and 4, but never a 'Sky 4'
- Q8: Answer b): Ka 8 (419lbs), T 21 (508), Astir (595), K 13 (639), DG (815)
- Q9: Answer a): True.
- Q10: Answer d): 133.65 MHz for the DZ, and 130.1 MHz for Oxford base.
- Q11: Answer c): the K13
- Q12: Answer: One of the K13s. One was 'Redfin', the other was 'Elfin'.
- Q13: Answer b): A capacity of air. The variors work by measuring the flow in and out of the capacity as the atmospheric pressure changes with height.
- Q14: Answer a): Up. The trim tab moves up, deflecting the elevator downwards.
- Q15: I couldn't either....

So how did you do?

- 15: Genius, or you are the editor and saw the answers before the questions.
- 14: Nice try. Have you any interests outside gliding at all? Don't you think you should?
- 13-8: Normal for OGC. Whatever that means.
- 7-2: Hmmm. Maybe a little learning about gliding could be useful.
- 1: Potential B.I. material.
- 0: Hiya Stew....

SARAH CONQUERS THE CERNE ABBAS GIANT Phil Hawkins

It was supposed to be an exciting trip to far-off Dorset, but at first the reality felt very different. Fumbling about in cobblestone sink at 2000ft over the centre of Wantage, beneath a cloudless blue sky, I had the distinct feeling that this flight was going to be cut short, fairly shortly. The clouds had been so promising when we started the task, but over Oxford and Abingdon they had thinned out to nothing.

It was all Haste's fault. The night before, in the bar, he had got me interested in doing a flight to see 'the man with the big dick.' The Cerne Abbas giant is a figure cut into a chalk hillside, 180 feet tall, whose origins and antiquity are the subject of much speculation. Nobody knows how long he has been there. Apart from his most startling male attribute, he also wields an enormous knobbly club that seems out of proportion, about 120 feet long.

Haste has talked about using it as a turning point (TP) before, but maybe it was just the beer talking, because on Sunday morning he tried to back out of it. Foolishly I ignored his pleas for a more sensible task. Cerne Abbas was marked up on the map, and that's where I was going, or so I said.

And so, as I sank rapidly towards Wantage, I was thinking how silly I'd look in the bar that evening after ending up in a field only 25km away. I surveyed the generous selection of harvested crop fields to the south of Wantage, and wondered if there was a fish and chip shop open in the town on a Sunday. Landing out on a blue day is so depressing.

Luckily Haste brought me out of these daydreams by announcing a sustainable thermal between Didcot and Wantage, so I backtracked a couple of miles to join him. He had initially taken a more easterly route than mine, around Cowley and Didcot, whereas I had blundered straight ahead on track and hence needed rescuing. The thermal he found, unmarked by any cloud above, developed quite nicely and we were soon cruising ahead over the high ground south of Wantage, where the air felt more buoyant. We didn't stay together very long, however, because he got low again at Membury, whilst I was fortunately able to stay high over Lambourn and Marlborough. Over the Downs in the far distance, another line of clouds could be seen, a tantalising promise of better things to come.

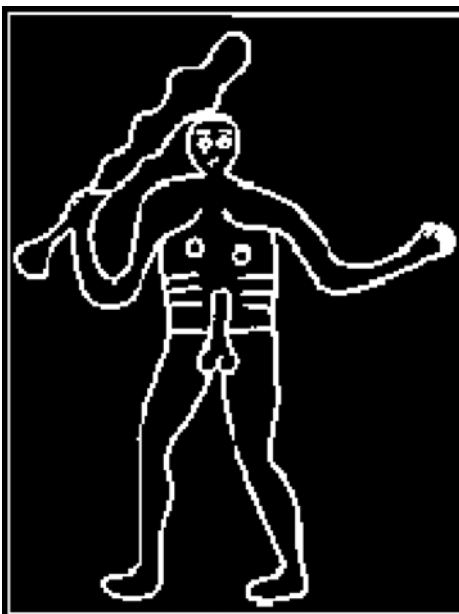
The going became easier over Devizes as the clouds in the distance drew closer. At a couple of sites to the east and south of Devizes, I noticed small gatherings of parapente enthusiasts soaring their banana-shaped parachutes along the hill slopes facing the wind. From previous visits I remembered the

semi-circular street pattern in the town, with the castle at the centre, shrouded by trees. On the western side is an impressive flight of canal locks, with a large square reservoir linked to each section of canal between the gates.

A very smelly thermal

A few miles short of Keevil airfield I arrived beneath the first isolated cloud. Expectations were high, but in reality the thermal was no better than the blue ones that I'd used previously. South of Keevil it was blue once more, but still there were magnificent clouds in the distance, beckoning hypnotically. Over the tall chimney at Westbury I found a very smelly thermal, which helped me around the western tip of the Salisbury Plain danger zone.

The area to the west of Warminster is thickly forested. Longleat safari park is near here, but the most striking feature is a huge circular building with a glass roof, right in the middle of the forest. There were many small sailing boats on a lake nearby.



Soon I recognised The Park, a gliding site on the top of a hill, and a small wispy cloud overhead marked a strong thermal. Haste decided to turn back at around this time, after another low scrape at Keevil. I was racing ahead under a glorious cloudscape, my Colibri logger now indicating only 34km to go. I pushed on to a superb cloud near Henstridge airfield, contacting the thermal at just over 2000ft and climbing to nearly 4,500ft seemingly in just a few turns. This gave me a good fast run down towards the coast. In the distance I could see Weymouth bay and the hazy outline of Portland beyond it, surrounded by a sparkling sea.

Map reading in this area was not easy. Lots of unknown villages nestling in the folds of the hills, with no major roads or railways to provide

good reference points. I was grateful for the reassuring read-out on the logger, methodically counting down the remaining distance. I could see an abrupt end to the clouds some distance ahead, marking the boundary of cool sea air, but fortunately this seemed to be further away than the TP. Following a curving line of clouds, I approached Cerne Abbas from the east. The giant was seen at last in full sunshine, but he looks rather small from 3000ft. He stands in a small rectangular field all by himself, his warlike stance somewhat spoiled by the silly expression on his face.

The long trek home

The flight moved into a new phase as I began the long trek home. Haste was reporting that conditions back at Marlborough were still as blue as ever, whereas I was romping ahead under superb clouds. I wondered if it might be better to return around the other side of the danger zones, via Salisbury. The clouds in that direction looked very good indeed, and the overall distance flown would be about the same. I therefore changed course slightly and headed for Compton Abbas, a picturesque little airstrip situated on a hilltop facing north. This was probably the best part of the entire flight when I stayed high and had long lines of weak lift and reduced sink.

Salisbury cathedral was bathed in the afternoon sun, and the clouds here were becoming sparse again. Looking north towards home, it was obvious that soon I would be heading back into the blue. I managed to re-set the logger so that it pointed to Weston-on-the-Green, but then received the gloomy news that it was still 105km away. Navigating carefully between Boscombe Down and Porton Down, I aimed for a small group of clouds near Thruxton, but they had all dissolved into nothing by the time I got there.

There was no alternative but to continue the glide, on a more northerly track towards Rivar Hill, since I was now clear of the eastern end of the danger zone. Very small and very isolated cloud caps could be seen miles in the distance, but none were remotely within gliding range. I blundered into a strong thermal a few miles short of Rivar Hill, but after passing that site, I was flying in strong sink for several miles.

The sinking torrent of bad air wouldn't stop. Convinced that I was merely reducing retrieve distance, I pushed hard to get through it, but I was saved by the sudden appearance of a little cloud, hovering within range over the western edge of Newbury. I had to change course by 90 degrees to reach it, but it was worthwhile. An even higher climb followed shortly

SARAH CONQUERS THE CERNE ABBAS GIANT (CONTD.)

afterwards, over the motorway junction. These were the last clouds I saw that day.

I began another long glide through the misty blue towards Didcot, but when I reached the power station there was nothing but a few weak movements in the air. Nothing worth stopping to circle in. I could envisage myself staying in zero sink here for the next half hour, never getting any closer to home, while the day slowly died and all chance of reaching home was lost. That wasn't for me. If you aren't climbing you might as well be gliding, that's what Haste says and he's right. So, sinking rapidly once more, I aimed for Abingdon airfield, which was within range and would provide a guaranteed landable surface.

Even lower than before, at around 1500ft over Abingdon town, I struck another violent thermal that tossed me about before I got it partially centred. But although it was very rough and squirry this thermal only went to just over 3000ft, and I wasn't sure I could get home from this position with a westerly crosswind. The DG-505 reported climbing over Cowley and I went to join him for a top-up, but when I got there he was miles away downwind to the east, at twice my height, no use at all. I merely continued towards home on a very marginal glide slope, hoping for something to turn up.

The relaxing finale

True to form, something did turn up, and I was able to do a few circles at Headington to improve the situation. When I returned to the local area Haste was still soaring there over the motorway junction, apparently waiting for the parachutists to pack up for the day so that he could land up by the hangar. It was now around 5:20pm and the thermal was slow by earlier standards. We plodded around in wide circles, watching competitors from Bicester making a bee-line for the finish beneath us.

Haste was attempting to contact the DG-505 (Paul Morrison and

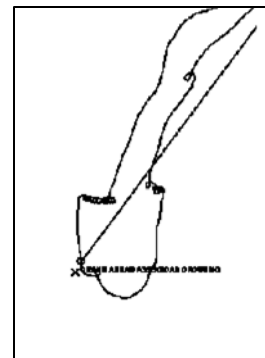
John Gibbons) for a photo session, but I cruised around Bicester control tower to put TP2 officially into the bag. Why? Because I had noticed, while fiddling with the logger in the morning, that the Cerne Abbas TP was only 148km. A straight out-and-return would not give me a 300km flight, leaving aside the detours around Abingdon and Keevil for airspace reasons. The distance to the giant was even less, around 146km, so an additional TP to the northeast of Weston would be required in order to make it a 300km task.

Minutes later, Claudia announced on the radio that the parachutists had closed down for the day, and that we could land up by the hangar if required. I cruised off the remaining height by completing a large circuit of the airfield around Heyford and Kirtlington, incidentally flying through several more good thermals on the way. After a long approach I was finally bumping and rolling up towards the trailer.

I was suitably grateful to both of the women in my life that day. To Sarah, my beautiful Mini Nimbus, for getting me home against the odds, and to Fiona for just being there with a cup of tea when I returned. A large group from the Club went out to the 'sausage pub' at Caulcott in the evening, and it was a great way to round off a memorable day.

The embarrassing PS

Whilst doing a quick change at home en route to the pub, I quickly downloaded the flight from the logger and printed it off. This caused some hilarity around the dinner tables. It was suggested that the southern tip of the flight track, around Cerne Abbas, is reminiscent of the giant's most famous attribute, and I'm not talking about the 120ft club. I couldn't possibly comment on that, but see the enlarged inset and make up your own mind!



GROUND EQUIPMENT - UPDATE

Neil Turner

As always it's never peaceful in the ground equipment workshop!

Taffy was working well giving good launches to 2000 feet, then suffered from high blood pressure and blew an oil filter! The problem was traced to a non-return valve in the filter block fallen out due to the filter head being fitted the wrong way round by the previous club. Once fixed Taffy has saved our bacon again!

The Tost winch decided that it too would throw a wobbly by wrecking its cable drums. The drums started to pull apart; this was due to a mixture of things: powerful winch engine, DG-505 and over-zealous use of the throttle.

I put a ban on launching the DG with the Tost to save the better of the two drums from damage. Now the drums that were fitted had been supplied by our good friends Tost at a cost of over £4000.00 and only lasted 18 months!! I decided to make enquiries at Skylaunch and a quick (not!) chat to Mike has sorted out that he could build us two new drums made from 15mm plate steel for a cost of £2000.00 each!

As you now know we have two nice yellow drums fitted to the Tost winch, hopefully these should last. The old drums weighed in at 63kg each, the new drums are 140kg! So please be a bit more careful when pulling the cable to the winch as it will take a bit more to stop the cable on the brakes.

Projects underway:

New Blue Rover is being converted to run on gas and a new tow out system is being designed and built. This will have a release device so the driver can drop the cables off at the end of a run and as the tow out bar is high up it should keep the chute off the ground when towed out.

On the Tost winch later this year or early next year we will change from 4.5mm winch cable to 4.2mm cable. Why? Main reason is that it is lighter so that should give a few hundred feet more in the launch!

On Taffy the gearbox requires a few adjustments and an oil change to improve the up slack AND I will change the throttle operation around so it operates the same as the Tost as in pull back to open. Please Note. This has not been done yet so please be careful!

All the mowers are up and running. If you want to do some mowing ask Carole or Neil S. BEFORE you mow. 1) To be shown how to use the equipment. 2) Where to mow. 3) What mower to use.

I think that's all for now. I would just like to thank Dave Weekes, Paul Rogers, Carole Shepherd and the others that have helped me keep the ground equipment going.

SIX FANTASTIC DAYS IN THE CAIRNGORMS

Written in German by Andrea Wahl,
translated by Claudia Bungen

27th September

Flight from Stuttgart to Heathrow, departure 7.15. Then from Gatwick to Inverness. Overslept, but managed to get to Stuttgart in time. Everything else went swimmingly, arrived at Inverness in the afternoon, where I was greeted by Nick, my sister Claudia and Neil – what a nice surprise, as I thought I'd have to get the train to Aviemore.

Back to Balbeag, a lovely, spacious log cabin set in a stunning landscape. Met Fi, Phil, Steve and Martin.

Went for a short walk to the Bear's Paw, a group of small lakes that look like a – bear's paw (good job it was only a short walk, my body began to demand some rest after a long day). The first encounter with the Scottish landscape was literally breath-taking: The air smelled of wild herbs and pine trees. I already felt like I was on holidays.

Got back to Balbeag and had dinner – Fi had kindly cooked Haggis, tatties and neeps – looked slightly odd, but was decidedly YUMMY! Bread and butter pudding for dessert and then cheese and biscuits. Went to bed very tired and with an overfilled tummy.

28th September

Rather windy, so plans to go gliding were abandoned, instead we went up the Cairngorm Mountain Railway and enjoyed the view over the valley. After a while the clouds descended, so we had a nice hot cup of tea in the Ptarmigan Restaurant to defrost.

On our return to Kincaig we went for a few pints down to the bar at the Loch Insh Watersports Centre.

Nice dinner in the Capercaillie restaurant in Newtonmore, as it was Steve's birthday.

29th September

Today looked like a good gliding day. The weather looked promising for some aerial sightseeing, so after a filling English/Scottish breakfast (how can anyone eat all this fried stuff for breakfast – but I realised it's definitely possible and lays a nice solid foundation for the day) we all went to the airfield and rigged the gliders. Rigging took only 10-15 minutes, apart from Loulou, which took slightly longer. Phil lent Claudia his two-seater ETA (DaisyETA), so she took me up for a flight. What a view you have from 3600 ft! What a unique landscape! I really can't describe it, and the many photos I took can only give an idea of what it was like. I managed to take some really good photos of Loulou with Martin and Nick, of the Bear's Paw and of Glen Feshie. After just over 1 hour we were back on the ground, and when Claudia saw the photos I had taken of Loulou she asked Phil whether he

could fly with me while she flew her own glider 251, so I could take some photos of her.

Another aerotow and amazing flight followed – Phil really is brilliant at explaining things, I learned so much about gliding on this flight. He even managed to contact some weak wave and up we went to 4300 ft. After I had taken some photos of Claudia, Phil carried on flying, and after a while my toes were beginning to feel slightly numb – it is rather chilly at 4000 ft in Scotland in September. But the frozen toes were worth it as when we were above cloud we saw an unusual phenomenon: a circular rainbow or glory. I even managed to take some photos of it with the K21 in the middle. After over 2 hours we landed and my toes slowly defrosted. In total I spent 3 hours and 25 minutes in the air over Scotland, which I hadn't expected at all! The others were quite impressed with my photos, even the locals asked me for copies.

This amazing day was finished off nicely with a few pints of Sheepshagger in the club house. As my English had improved quite a lot over the past few days I decided I was brave enough to ask what "shagger" meant. This caused a lot of hilarity all around, and I realised that it was probably something rather rude. Martin very quietly gave me the explanation and I turned the same colour as Claudia's pink socks.

Dinner was had back in Balbeag, where Fi had cooked another tasty meal, this time we had trout with veggies and freshly picked mushrooms. Another late night as we all relived the flights we had done today.

30th September

After a good night's sleep the weather didn't look very tempting, but we went to the airfield anyway. Claudia and Steve rigged their gliders, but after a chat with the tug pilot who had done one flight to check out the conditions it quickly became apparent that it was too dangerous to fly.

Claudia and I then decided to go horse-riding instead. It was great because it wasn't a case of trudging along on tired old horses, but instead the two of us and the second instructor split from the rest of the group and did a lot of trotting and cantering through the glen.

Later that day we had a look around the numerous outdoor shops in Aviemore, and in the evening we went back to the club house to have venison stew.

Again, a late night – the chemistry between the eight of us was just great, we had such a great time chatting and laughing. It didn't seem real and even now I sometimes think I've dreamt it all. Only when I look at my 352 photos I assure myself that it did all really happen.

1st October

The first thought today was: Oh no, it's my last day! However I decided not to think about that and instead to enjoy the day. Martin cooked breakfast again, then we went to the airfield. Like the previous days unfortunately it was too wet and windy to fly. Shame, I would have loved to fly Loulou, the glider Claudia had borrowed to fly with my son Morten in August. Anyway, after hanging around on the airfield for a while Claudia took me to the Dalwhinnie distillery where we went on a guided tour. Now that I know a bit more about making whisky I understand why good whisky is so expensive! After 3 hours we were back on the airfield, and the doors of the T-hangar where Loulou was parked had been opened, which made me hopeful of getting a flight after all. (Especially after Claudia and I had politely declined the "wee dram" of Dalwhinnie we were offered at the end of the tour, because we wanted to fly.) Alas, it was not to be. After a lot of nice hot cups of tea with milk we realised that the weather would not improve. In the evening we had another tasty gliding club dinner of roast beef with parsnips and other vegs.

After our return to Balbeag (Simon Walker, George Crawford, Graham and Lynne had arrived by now) Claudia brewed her Feuerzangenbowle* for us. We all sat in Balbeag, the log-burning stove and steaming mugs of Feuerzangenbowle keeping us warm, and chatted. So cosy, and what a nice way to relax.

2nd October

The final day had come. Fi and Phil had cooked another English breakfast, but I didn't feel like eating anything. After breakfast it was time to say goodbye. I fought back the tears, but on the way to Inverness I couldn't hold back any longer.

I have already decided that I want to join Claudia and her friends again next year on their autumn gliding trip – wherever they are going.

*Ed.: Feuerzangenbowle literally translates as "fire tong bowl": make Glühwein (mulled wine), then place the special metal grid, the "Feuerzange", on top of the saucepan, put a sugar cone on it, soak the sugar cone with high-percent rum (54% min.) and set fire to it. Keep pouring more rum over it until all the sugar has melted and dripped into the mulled wine. Pour the hot Feuerzangenbowle into a mug and enjoy!

If a Boeing 767 runs out of fuel at 41,000 feet what do you have?

Answer: A 132 ton glider with a sink rate of over 2000 feet-per-minute and marginally enough hydraulic pressure to control the ailerons, elevator, and rudder. Put veteran pilots Bob Pearson and cool-as-a-cucumber Maurice Quintal in the cockpit and you've got the unbelievable but true story of Air Canada Flight 143, known ever since as the Gimli Glider.

Flight 143's problems began on the ground in Montreal. A computer known as the Fuel Quantity Information System Processor manages the entire 767 fuel loading process. The FQIS controls the fuel pumps and drives all of the 767's fuel gauges. Little is left for crew and refuelers to do but hook up the hoses and dial in the desired fuel load. But the FQIS was not working properly on Flight 143. The fault was later discovered to be a poorly soldered sensor. An improbable sequence of circuit-breaking mistakes made by an Air Canada technician independently investigating the problem defeated several layers of redundancy built into the system. This left Aircraft #604 without working fuel gauges.

In order to make their flight from Montreal to Ottawa and on to Edmonton, Flight 143's maintenance crew resorted to calculating the 767's fuel load by hand. This was done using a procedure known as dipping, or "dripping" the tanks. "Dripping" could be compared to calculating the amount of oil in a car based on taking a dipstick reading. Among other things, the specific gravity of jet fuel is needed to make the proper "drip" calculations.

The flight crew had never been trained how to perform the calculations. To be safe they re-ran the numbers three times to be absolutely, positively sure the refuelers hadn't made any mistakes; each time using 1.77 pounds/liter as the specific gravity factor. This was the factor written on the refueler's slip and used on all of the other planes in Air Canada's fleet. The factor the refuelers and the crew should have used on the brand new, all-metric 767 was .8 kg/liter of kerosene.

After a brief hop Flight 143 landed in Ottawa. To be completely safe, Pearson insisted on having the 767 re-dripped. The refuelers reporting the plane as having 11,430 liters of fuel contained in the two wing tanks. Pearson and Quintal, again using the same incorrect factor used in Montreal, calculated they had 20,400 kilos of fuel on board. In fact, they left for Ottawa with only 9144 kilos, roughly half what would be needed to reach Edmonton.

Lacking real fuel gauges Quintal and Pearson manually keyed 20,400 into the 767's flight management computer. The flight management computer kept rough track of the amount of fuel remaining by subtracting the amount of fuel burned from the amount (they believed) they had started with. Their fate was now sealed.

According to Pearson, the crew and passengers had just finished dinner when the first warning light came on. Flight 143 was outbound over Red Lake Ontario at 41,000 feet and 469 knots at the time. The 767's Engine Indicator and Crew Alerting System beeped four times in quick succession, alerting them to a fuel pressure problem. "At that point" Pearson says "We believed we had a failed fuel pump in the left wing, and switched it off. We also considered the possibility we were having some kind of a computer problem. Our flight management computer showed more than adequate fuel remaining for the duration of the flight. We'd made fuel checks at two waypoints and had no other indications of a fuel shortage." When a second fuel pressure warning light came on, Pearson felt it was too much of a coincidence and made a decision to divert to Winnipeg. Flight 143 requested an emergency clearance and began a gradual descent to 28,000. Says Pearson, "Circumstances then began to build fairly rapidly." The other left wing pressure gauge lit up, and the 767's left engine quickly flamed out. The crew tried crossfeeding the tanks, initially suspecting a pump failure.

Pearson and Quintal immediately began making preparations for a one-

engine landing. Then another fuel light lit up. Two minutes later, just as preparations were being completed, the EICAS issued a sharp bong-- indicating the complete and total loss of both engines. Says Quintal "It's a sound that Bob and I had never heard before. It's not in the simulator." After the "bong," things got quiet. Real quiet. Starved of fuel, both Pratt & Whitney engines had flamed out.

At 1:21 GMT, the forty million dollar, state-of-the-art Boeing 767 had become a glider. The APU, designed to supply electrical and pneumatic power under emergency conditions, was no help because it drank from the same fuel tanks as the main engines. Approaching 28,000 feet the 767's glass cockpit went dark. Pilot Bob Pearson was left with a radio and standby instruments, noticeably lacking a vertical speed indicator - the glider pilot's instrument of choice. Hydraulic pressure was falling fast and the plane's controls were quickly becoming inoperative. But the engineers at Boeing had foreseen even this most unlikely of scenarios and provided one last failsafe - the RAT.

THE GIMLI GLIDER

Wade H. Nelson

The RAT is the Ram Air Turbine, a propeller driven hydraulic pump tucked under the belly of the 767. The RAT can supply just enough hydraulic pressure to move the control surfaces and enable a dead-stick landing. The loss of both engines caused the RAT to automatically drop into the airstream and begin supplying hydraulic pressure.

As Pearson began gliding the big bird, Quintal "got busy" in the manuals looking for procedures for dealing with the loss of both engines. There were none. Neither he nor Pearson nor any other 767 pilot had ever been trained on this contingency. Pearson reports he was thinking "I wonder how it's all going to turn out." Controllers in Winnipeg began suggesting alternate landing spots, but none of the airports suggested, including Gimli, had the emergency equipment Flight 143 would need for a crash landing. The 767's radar transponder had gone dark leaving controllers in Winnipeg using a cardboard ruler on the radar screen to try and determine the 767's location and rate of descent.

Pearson glided the 767 at 220 knots, his best guess as to the optimum airspeed. There was nothing in the manual about minimum sink - Boeing never expected anyone to try and glide one of their jumbo jets. The windmilling engine fans created enormous drag, giving the 767 a sink rate of somewhere between 2000 and 2500 fpm. Copilot Quintal began making glide-slope calculations to see if they'd make Winnipeg. The 767 had lost 5000 feet of altitude over the prior ten nautical (11 statute) miles, giving a glide ratio of approximately 11:1. ATC controllers and Quintal both calculated that Winnipeg was going to be too far a glide; the 767 was sinking too fast. "We're not going to make Winnipeg" he told Pearson. Pearson trusted Quintal absolutely at this critical moment, and immediately turned north.

Only Gimli, the site of an abandoned Royal Canadian Air Force Base remained as a possible landing spot. It was 12 miles away. It wasn't in Air Canada's equivalent of Jeppesen manuals, but Quintal was familiar with it because he'd been stationed there in the service. Unknown to him and the controllers in Winnipeg, Runway 32L (left) of Gimli's twin 6800 foot runways had become inactive and was now used for auto racing. A steel guard rail had been installed down most of the southeastern portion of 32L, dividing it into a two lane dragstrip. This was the runway Pearson would ultimately try and land on, courting tragedy of epic proportions.

To say that runway 32L was being used for auto racing is perhaps an understatement. Gimli's inactive runway had been "carved up" into a variety of racing courses, including the aforementioned dragstrip. Drag races were perhaps the only auto racing event not taking place on July 23rd, 1983 since this was "Family Day" for the Winnipeg Sports Car Club. Go-cart races were being held on one portion of runway 32L and just past the dragstrip another portion of the runway served as the final straightaway for a road course. Around the edges of the straightaway

THE GIMLI GLIDER (CONTD.)

were cars, campers, kids, and families in abundance. To land an airplane in the midst of all of this activity was certain disaster.

Pearson and Copilot Quintal turned toward Gimli and continued their steep glide. Flight 143 disappeared below Winnipeg's radar screens, the controllers frantically radioing for information about the number of "souls" on board. Approaching Gimli Pearson and Quintal made their next unpleasant discovery: The RAT didn't supply hydraulic pressure to the 767's landing gear. Pearson ordered a "gravity drop" as Pearson thumbed frantically through the Quick Reference Handbook, or QRH. Quintal soon tossed the QRH aside and hit the button to release the gear door pins. They heard the main gear fall and lock in place. But Quintal only got two green lights, not three. The nose gear hadn't gone over center and locked, despite the "assist" it was given by the wind.

Six miles out Pearson began his final approach onto what was formerly RCAF B Gimli. Pearson says his attention was totally concentrated on the airspeed indicator from this point on. Approaching runway 32L he realized he was too high and too fast, and slowed to 180 knots. Lacking divebrakes, he did what any sailplane pilot would do: He crossed the controls and threw the 767 into a vicious sideslip. Slips are normally avoided on commercial flights because of the tremendous buffeting it creates, unnerving passengers. As he put the plane into a slip some of Flight 143's passengers ended up looking at nothing but blue sky, the others straight down at a golf course. Says Quintal, "It was an odd feeling. The left wing was down, so I was up compared to Bob. I sort of looked down at him, not sideways anymore."

The only problem was that the slip further slowed the RAT, costing Pearson precious hydraulic pressure. Would he be able to wrestle the 767's dipped wing up before the plane struck the ground? Trees and golfers were visible out the starboard side passengers' windows as the 767 hurtled toward the threshold at 180 knots, 30-50 knots faster than normal. The RAT didn't supply "juice" to the 767's flaps or slats so the landing was going to be hot. Pearson didn't recover from the slip until the very last moment. A passenger reportedly said "Christ, I can almost see what clubs they are using." Copilot Quintal suspected Pearson hadn't seen the guardrail and the multitude of people and cars down the runway. But at this point it was too late to say anything. A glider only gets one chance at a landing, and they were committed. Quintal bit his lip and remained silent.

Why did Pearson select 32L instead of 32R? Gimli was uncontrolled so Pearson had to rely on visual cues. It was approaching dusk. Runway 32L was a bit wider, having been the primary runway at Gimli in prior year. Light stantions still led up to 32L. And the "X" painted on 32L, indicating its inactive status, was reportedly quite faded or non-existent. Having made an initial decision to go for 32L the wide separation of the runways would have made it impossible for Pearson to divert to 32R at the last moment. Pearson says he, "Never even saw 32R, focusing instead on airspeed, attitude, and his plane's relationship to the threshold of 32L."

The 767 silently leveled off and the main gear touched down as spectators, racers, and kids on bicycles fled the runway. The gigantic Boeing was about to become a 132 ton, silver bulldozer. One member of the Winnipeg Sports Car Club reported he was walking down the dragstrip, five gallon can full of hi-octane racing fuel in hand, when he looked up and saw the 767 headed right for him. Pearson stood on the brakes the instant the main gear touched down. An explosion rocked the 767's cabin as two tires blew. The nose gear, which hadn't locked down, collapsed with a bang. The nose of the 767 slammed against the tarmac, bounced, then began throwing a three hundred foot shower of sparks. The right engine nacelle struck the ground. The 767 reached the tail end of the dragstrip and the nose grazed a few of the guardrail's wooden

support poles. (The dragstrip began in the middle of the runway with the guardrail extending towards 32L's threshold) Pearson applied extra right brake so the main gear would straddle the guardrail. Would the sports car fans be able to get out of the way, or would Pearson have to veer the big jet off the runway to avoid hitting stragglers?

The 767 came to a stop on its nose, mains, and right engine nacelle less than a hundred feet from spectators, barbecues and campers. All of the race fans had managed to flee the path of the silver bulldozer. The 767's fuselage was intact. For an instant, there was silence in the cabin. Then cheers and applause broke out. They'd made it; everyone was alive. But it wasn't over yet. A small fire had broken out in the nose of the aircraft. Oily black smoke began to pour into the cockpit. The fiery deaths of passengers in an Air Canada DC-9 that had made an emergency landing in Cincinnati a month before was on the flight attendants' minds and an emergency evacuation was ordered. The unusual nose-down angle the plane was resting at made the rear emergency slides nearly vertical. Descending them was treacherous.

The only injuries that resulted from Pearson's dead-stick landing of Flight 143 came from passengers exiting the rear emergency slide slamming into the asphalt. None of the injuries were life-threatening. The fire in the aircraft's nose area was battled by members of the Winnipeg Sports Car Club who converged on the plane with dozens of hand-held fire extinguishers. Pearson had touched down 800 feet from the threshold and used a mere 3000 feet of runway to stop. A general aviation pilot who viewed the landing from a Cessna on the apron of 32R described it as "Impeccable." The 767 was relatively undamaged.

Air Canada Aircraft #604 was repaired sufficiently to be flown out of Gimli two days later. After approximately \$1M in repairs, consisting primarily of nose gear replacement, skin repairs and replacement of a wiring harness it re-entered the Air Canada fleet. To this day Aircraft #604 is known to insiders as "The Gimli Glider." The avoidance of disaster was credited to Capt. Pearson's "Knowledge of gliding which he applied in an emergency situation to the landing of one of the most sophisticated aircraft ever built." Captain Pearson strongly credits Quintal for his cockpit management of "Everything but the actual flight controls," including his recommendation of Gimli as a landing spot. Captains Pearson and Quintal spoke at the 1991 SSA Convention in Albuquerque about their experiences. Pearson was, at the time, still employed and flying for Air Canada, and occasionally flying his Blanik L-13 sailplane on the weekends; he has since retired to raise horses. Maurice Quintal is now an A-320 Pilot for Air Canada, and will soon be captaining 767's; including Aircraft #604. Copyright 1997 WHN

An amusing side-note to the Gimli story is that after Flight 143 had landed safely, a group of Air Canada mechanics were dispatched to drive down and begin effecting repair. They piled into a van with all their tools. They reportedly ran out of fuel en-route, finding themselves stranded somewhere in the backwoods of Manitoba

The "Amazing Coincidences" of Gimli:

- Pilot had extensive glider experience, co-owned a Blanik L-13 sailplane
- Co-Pilot had once been stationed at Gimli, was familiar with it.
- Wpeg ATC had old style radar which allowed them to track the 767 once the transponder stopped working
- Sports car club had fire extinguishers galore, Jaws of Life
- ER Physician Colin Nesbit was in a Cessna performing a preflight at end of 32R
- Air Canada mechanics driving a van to Gimli to begin repairs of #604 ran out of gas in the back roads of Manitoba.
- One of the few people in Manitoba who owned a video camera (rare in those days) was at Gimli that day. In a classic case of being in the right place at the wrong time, he left the airfield approximately 30 minutes before it landed because he needed to run into town to get some parts for his go-kart.

Wade H. Nelson is a freelance writer living in Durango Colorado, which he calls "The last of the great ski towns." He is available for aviation writing assignments and may be reached at wade727 (at) wadenelson. com

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Published in Soaring Magazine

(found on <http://www.wadenelson.com/gimli.html>)

LETTER FROM NEW ZEALAND

Anthony Buck

Hello all,

S'pose its about time to let you know what we've been up to.

The first thing to hit us was the sun, or should I say our feet, ever had sunburnt feet? Well, you don't want it!

Our first mission was to find a car, so we did. After spending hours looking through trade and exchange we found something that looked promising, a 1988 Toyota Corona 2.0 litre beast (turns out it's the sporty model too!).

And off we went, first to the most dangerous beach in the country Piha. All good fun! I didn't know body boarding could be so tiring!

We then headed over to the Auckland Gliding club where we met a nice chap with a Duo, who was insistent that we go for a flight, which of course we couldn't refuse. We both had a couple of hours and covered 150ish km. Nice way to start the trip!

The next thing was to head north, we stayed on a couple of beaches and attempted to fish, with not a lot of success! We ended up in a small town called Russel, fishing off the pier to catch dinner, again with no success. At about 11 o'clock at night a guy wandered on to the pier and started chatting to us, it turned out he owned the local fishing shop, not only that, but he also had a small camping ground which was rather handy as we were about ready to sleep in the car. The day after he offered us a ride on his fishing charter, so like the cheapskates we are we accepted! We caught dinner and had a lovely day bobbing around in some of the most beautiful scenery in the world. That night we had a feast of snapper, marlin, lobster, mussels...

Good, eh!

We then drove to the world's best fish and chip shop, which was truly fantastic (if you're ever in the Monganui area pop in!) followed by a 200 mile drive up to the cape and back to Auckland.

Our next trip was down the West coast (the more ragged of the two) and we ended up in the surfing town of Raglan, the home of the surfing university. Then one of the most beautiful drives through the valleys to New Plymouth. When we got there the sun was going down and in the distance we could see some lingering cloud over what we thought were some small hills. The morning revealed a 9000ft mountain covered in snow whilst we got sunburnt and eaten alive by sand flies (they are worst than Scottish midges)

On the map it said that this mountain (Taranaki) had ski fields, accessible by road, why not? We ascended through cloud and as we got higher the peak came into view. We got to the top just in time, and when we got back to the car we were faced with what looked like smoke coming from the engine (\$#!?!!!!). – It turned out to be a blown radiator hose, not clever when you're driving an automatic and you're stuck near the top of a mountain. Matt managed to hitch a ride down to the town and I was left on top of the mountain wondering what to do, so, I sat down, looked at the view and waited, and waited, and after a bit more of that, Matt eventually came back, with a slightly too long piece of radiator hose which we hacked and made fit (and it's still in one piece!)

It was time to move on. We decided to head down to Wellington to the gliding club (paying for rough ground to sleep on was getting a little annoying). It was dark when we arrived and we met a fellow young glider pilot called Luke (the only young person in the club). The following night we decided to go out on the town in Wellington, not a bad move considering it was rugby 7's final night. The streets were packed with smiling happy people many of which had been up for several days. We got extremely drunk and partied until 6 in the morning and then stumbled to the train.

We decided that Wellington was where we wanted to settle so we headed back to Auckland to pick up the rest of our junk. On the way up we stumbled upon Mata Mata gliding club where there was a competition going on so we stayed and helped out. On the last day they had a strong ridge day and I bought Matt a flight for his birthday. We met a lovely lady who offered to put us up, more importantly she introduced us to her beautiful daughter who also offered to put us up, the choice was obvious! So unintentionally we stayed about a week in Hamilton, exploring and going out. While we were there we were invited to go water skiing, and I managed to get up and ski for about 5 minutes before losing my balance and being dunked in the eel-infested waters. We also had a go at biscuiting, which consists of being dragged behind the boat on an inflatable ring and knocking into each other at high speed.

The time came to head south and we arrived back in Paraparaumu a few days ago.

The fleet here consists of Twin Astirs, a Janus, PW5's (now known as the flying seed) and a Libelle. We had our check flights yesterday and I nearly connected with wave, even so had a lovely flight.

The airfield is located near the sea and just of the coast is an island which in the right weather conditions produces wave over the airfield, in the other direction is a ridge that runs around 400km+ up and down the country. We reckon 1000k is on!

We both flew the PW5's today and had some fun. We are going to be flying at a gliding competition on the other side of the ridge next week.

Hope all is well wherever you all are, and never eat yellow snow! He he...

Next report.....whenever!

Ant

P.S.

"word up detroit" -M Robain 22/02/2005