Soaring Australian Thermals

The Collected Papers of Garry Speight from 1966 to 2015

High Wind, Rough Country & Airspace Limits

By Garry Speight

This 1967 flight in a 13-metre ES59 Arrow still provides me with an anecdote to use in crosscountry briefings. For the outlanding, I was so nearly caught out by the small size of paddocks near towns, and by the wind for landing being different from the wind at height.

Originally published in Australian Gliding, December 1968

This is the story of a flight that was neither long nor successful, but most enjoyable nevertheless. The idea was to fly from the Canberra Gliding Club's field at Gundaroo to Camden Aerodrome, This is only 107 miles in a straight line, but the gorges of the Wollondilly to the north and the Shoalhaven to the south encourage one to stick close to the Hume Highway; this adds about five miles, and the dictates of Air Traffic Control add another three, making 115 miles in all. The terrain is nearly all above 2000 feet, and the base of the control area is at 6000 feet or lower for more than half the distance. In general the country is pretty inhospitable, and "crossing the Blue Mountains" by glider had apparently not been achieved since the flight that Fred Hoinville described in "Halfway to Heaven". Since my flight Allan Yeomans has made the crossing from east to west.

Over the 1967 Christmas holidays our Kookaburra was away at the National Championships, but the Arrow, recently bought from the Barossa Valley Gliding Club, was available, so I set off on December 30th for Gundaroo, with Helmut and Bridget Kaltenthaler very kindly crewing for me. The forecast (which proved accurate) was as follows: Wind NW 25 kt at 3000 feet, NW 35 kt at 5000 feet; cloud 4/8 Cu with showers, increasing Ci and As; temperature 80°-90°. The high wind was rather discouraging, but the convection was obviously strong enough to make it worth trying and there would be a tailwind component of nearly 20 mph. I determined to do two things - stay upwind of the Shoalhaven

gorges and get well upwind of track where the greatest altitude was available near Marulan.

At midday I was strapped in and Bridget was lifting the wing up and down to signal, "take up slack", but we were getting no response. Then Helmut drove up from the winch end. He had rung Canberra tower, 20 miles away, for permission to launch but the controller had not granted it, "There is a dust-storm", he had said, "Visibility is less than 100 yards". "But we're not having a dust-storm", I said, "I told him that", said Helmut, "but he just said 'stand by one hour". For the next 55 minutes I sat with both legs on one side of the control column, holding a wing down, and just waiting while the cloud streets formed and re-formed overhead, I suppose the dust-storm at the airport was generated at the suburban development work in Belconnen.

Finally permission was granted with the stipulation that I must either land or leave the control zone by way of the Yass River Valley before 1400 hrs. The launch took me from 1800 feet to 3400 feet, than a thermal took me, at 400 feet per minute, to 6000 feet at the expense of a three-mile drift down-wind. My prescribed track to clear the control zone was obliquely up-wind, so I had quite a task on my hands. In fact, I finally left the control zone at the limit of my allotted time and only 700 feet above terrain. Four miles in an hour!

The next fifty miles ought to have been easy, what with the base of the control area getting progressively higher and the wind only 45° off track. However, the drift in thermals was astonishing, as the wind speed was approximately 40 mph and my achieved rate of climb averaged only about 300 feet per minute, so that a 3000foot climb entailed a seven-mile drift. "Track" became a wistful hope, a mirage on the western horizon. I had no fixed policy about which way to go when a thermal passed upwards into

High Wind, Rough Country & Airspace Limits



High Wind, Rough Country & Airspace Limits

forbidden airspace. Sometimes I headed directly towards my intended track and at right angles to it, which, in retrospect, seems to be the wisest course when one is much too far downwind, but mainly I was concerned with flying towards active clouds, or towards more hospitable country, I would have benefitted by flying at the maximum permitted rough air speed (85 mph), but, frankly, I was scared to exceed 75 mph in such turbulent conditions.

At three o'clock I was getting an uncomfortably close view of some barely-landable paddocks near Bungonia. When the essential thermal finally turned up I didn't feel much better, for if I worked it I would be carried straight out over the aweinspiring crags and chasms of the Shoalhaven gorge, 2000 feet deep. The variometer hit the "up" stop so up I went. After the first few hundred feet it was clear that I could glide out to open country at any time, but that didn't quite dispel my anxiety as the cliff-top quarries of South Marulan passed below. This time I was able to follow the thermal to cloud-base at 9000 feet, the base of the control area being 1000 feet higher. (This particular bit of uncontrolled airspace has since been seized by the Royal Australian Navy). At this point I was just crossing the Shoalhaven River for the second time, a couple of miles north of 'Tolwing' homestead. I imagined myself landing there, finding nobody home and taking a week to walk out to the coast! As the horizon started to disappear into cloud I set off northwards, refusing to circle until I reached the railway near Wingello. From there to Moss Vale I managed to beat as far upwind as the railway after each thermal. The views from higher altitudes were superb, with the Kangaroo Valley in the foreground and Nowra clearly visible in the distance. I thought of dropping in on the RANGA boys - I could have been on the runway at HMAS Albatross in ten minutes flat, - but that would have muddled up the retrieve.

At Bowral the base of the control area stepped down to 6000 feet from 8000 feet, so here was my last good opportunity to beat into wind before the reduced ceiling forced me to spend a larger part of my time seeking and centering thermals. Unfortunately the "climb ratio" of one in eleven that I was achieving while thermalling was no greater than my glide ratio when flying upwind. Twice my determined dash into wind ended up with a struggle to work the ragged lower fringe of the very same thermal I had made my previous climb in! I reasoned that if I did this often enough I would eventually miss out on the thermal and end up on the ground without achieving a yard of progress, so I gave up and pointed the Arrow straight towards Mittagong aerodrome where, at ten minutes to five, I regained track for the first time since takeoff.

From here on my prospects of success were poor, for the thermals were weakening, my intended track was slightly into wind, and useful fields for landing were decidedly sparse.

I zig-zagged, along, keeping an eye on one possible landing field or another in the populated area near the railway line, and fighting narrow turbulent thermals. One thermal took me directly over the Nepean Dam at 5800 feet. Fifteen minutes later I found myself at 5300 feet just one mile further north. Progress!

A few minutes before six o'clock, as I approached Tahmoor, I passed under yet another step of the control area, making my ceiling 4000 feet. This was the beginning of the end. Camden was in sight too!

It was time to plan a landing. I was about 1,000 feet above the ground and there wasn't a whisper of lift. Two paddocks looked reasonably suitable. But the nearer one seemed to be quite strongly sloping and also had a cow in it, so I cruised over to have a look at the other about a mile away. This one appeared to be large enough, flat enough, smooth enough and free of obstructions. I planned an approach over a patch of forest and directly into wind, but this looked a bit short as I got lower, so I switched to run down the greatest length of

Soaring Australian Thermals

High Wind, Rough Country & Airspace Limits

the field, regardless of the wind. This approach was clear of the trees so I was able to come in quite low. Then there was a long, long float and a seemingly endless landing run, finishing up 30 yards from the far fence.

I got out. There was not a breath of wind. The field was much smaller than I had imagined - I later paced it out as 250 yards long - and the trees were over 100 feet high. I could never have got in on my original approach. I was in the very heart of Tahmoor, between the store, the church, and the turkey-processing works. In fact, I was in the backyard of Denfields' well-known antique furniture cottage on the Hume Highway.

After pegging the glider down I strolled across to the telephone box and rang my wife, Jane, to give my landing report. She told me that Helmut and Bridget were about an hour behind. As I settled down to wait for them a car pulled up and Harold, Mac and Roger Randall, got out. They were on their way home after a few days at the Nationals, of which they gave me up-to-theminute news, It was a real pleasure to have their company and their assistance for de-rigging the Arrow when Helmut and Bridget arrived.

For me this was a very satisfying and memorable flight despite the fact that no conventional attainment-distance, goal, speed or altitude - could be recorded. Perhaps I made a virtue of necessity in handicapping myself with bad weather, bad terrain and crippling altitude restrictions, but in gliding there are no absolute standards, and both the struggle and the achievement are real only to the pilot himself.



The proud owner with his brand new Astir CS, 1977