

# Big country, small plane:

2,400 miles across the Australian outback in Sonex #181



**Whoever said the Sonex is not a 'touring aircraft'? I think I have given my tri-gear Sonex with a Jabiru 2200 engine a serious testing in long distance touring and it has proved more than capable of the mission, keeping pace with the average GA aircraft burning more than double the fuel.**

I finished my tri-gear Jab 2200 powered Sonex early in 2008 and by May 2009 I had nearly 150 hours up. Reviewing all I had done and learnt in the first year I realised that I rarely flew for more than an hour, and always ended up spending more time fiddling around than flying. It was time to go somewhere! I decided on a trip back to some of my favourite locations in the Australian outback, this time by air and not on bone-crunching roads in a four wheel drive. I was further encouraged by reports that the unseasonably heavy rain in the north-eastern corner of Australia had meant the remote expanses of central Australia were alive and green. Running up the eastern seaboard of Australia is the Great Dividing Range and much of the rainfall on the western slopes feeds into one of the world's largest untouched river systems. This river system includes the Diamantina River and the Warburton and Cooper Creeks that take water from Queensland in the north east and channel it inland over thousands of miles of desert to Lake Eyre. These rivers become increasingly braided and broken into hundreds of streams that spread across an area in places known as the Channel Country or the Overflow. The usually dry Lake Eyre, which covers around 5,200 square miles, has filled this year and huge flocks of pelicans and other wildlife were taking advantage of the temporary bounty. Every Aussie school child learns the 1890s poem by Banjo Patterson entitled 'Clancy of the Overflow' in which a

city office worker yearns to swap places with an acquaintance, Clancy, now reported to be droving cattle down the Cooper. This was my own chance for an outback escape.

This is extremely remote territory with almost no human habitation for hundreds of miles. Scattered across the desert and scrub are enormous cattle ranches or stations. The largest is Anna Creek Station near Lake Eyre, and it covers over 9,000 square miles in area. Fortunately most stations have an airstrip for the Royal Flying Doctor Service which services the outback and I was able to plan some of my route around these as possible alternates.

To make such a trip safely in the Sonex I planned to supplement my 55 litres of useable fuel with a further 20 litres. I installed a removable ferry tank on the passenger seat beside me, vented to the outside and with an electric pump to transfer fuel into the main tank.

For those familiar with the Sonex, I connected the transfer hose into the unused connection for the sight gauge at the rear top of the tank via a fuel tap I located on the panel. Quick release valves as used on outboard motor fuel lines were useful in preventing spillage when removing the tank to refill. This modification was duly approved by my Sport Aircraft Association Authorised Person and successfully installed and tested prior to the flight.



It was not difficult to get some fellow adventurers interested in the expedition and so by Saturday morning 4 July 2009 we had an RV7, a Cessna 182 and a Piper Dakota lined up and ready to go with my Sonex. I was on my own and the other eight travellers were spread across the other three aircraft.



It was mid-winter in Melbourne and, not unexpectedly, we were held up and did not finally get away until the following morning, tracking through a gap in the Great Dividing Range at Kilmore north of Melbourne and then north-west to Swan Hill, across the Murray River and on to the isolated mining town of Broken Hill. While my home state of Victoria has been in severe drought for the last 13 years it is still relatively green in our July mid-winter. Soon after passing north over the Murray River and

into Far Western New South Wales the landscape quickly merges into the red sandy soils, sparse dry scrub, drifting sand dunes and dry lake beds that are found right across a large proportion of our country. From Broken Hill we tracked due west across the northern end of the Flinders Ranges to the isolated outpost of Marree.



It had been a big weekend of camel racing in the town of a handful of houses, pub, general store and a disused railway station. Some departing vehicles could be seen for miles as isolated dust clouds following the few narrow dirt roads radiating out from town. Marree pub had once been an important stop over on the Ghan railway that crawled at a snail's pace from Adelaide to Alice Springs. Out the front of the pub was the old truck that had been used since the 1950's by the postman who took several weeks to drive north to Birdsville via the many isolated stations on the Birdsville Track.

Next day it was on to the tiny settlement of William Creek and the centre of a good deal of light aircraft traffic taking paying passengers out over the lake. The pub at William Creek has the most amazing collection of memorabilia attached to every inch of the interior roof and walls, ranging from business cards to bras and knickers.





Outside the pub various bits of aerospace debris have been accumulated from the surrounding desert, originating from the adjacent Woomera rocket range. With full tanks we departed from William Creek and headed north-east to Lake Eyre, then skirted the western and northern sides of the lake which hold the only remaining large expanses of water.



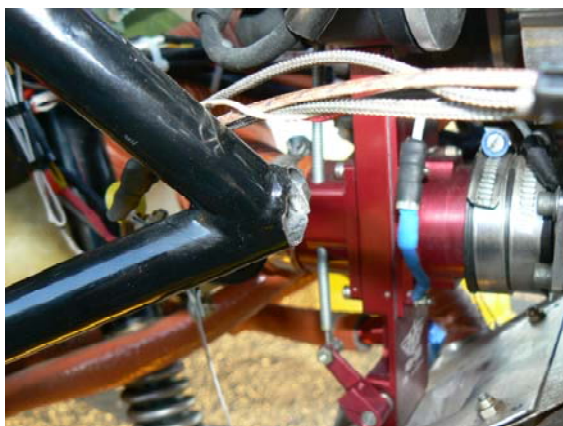
The Warburton Groove at the northern end is a winding stretch of river with pelicans and other water birds in vast abundance. We followed this water course north east and marvelled at the contrast between the rich flood plain of the river and the surrounding red and grey desert sands.





I tracked east to Cowarie Station, then on north to Clifton Hills Station where I transferred my spare fuel from the ferry tank to the mains while passing overhead. These tiny settlements consist of little more than a couple of houses, some outbuildings and cattle yards and a desert airstrip. I came in low over the cattle yard at Clifton Hills and received a friendly but laconic wave from a couple of truckies who had just unloaded a mob of cattle. With the inland bursting into life the pastoralists are re-stocking and making the most of this rare period of good feed. It was a relatively warm day and as I approached Birdsville I struck a fairly severe patch of turbulence. I thought I could have been dreaming it, but I thought I smelt fibreglass for a few seconds. I guessed that the prop hub may have touched the cowl. I made a mental note to have a look at why this might have occurred.

Later that day after safely arriving in Birdsville we pulled the cowl and had a good look. I asked one of my companions to give the prop hub a good yank. As he did so we heard a 'twang'. Looking at the engine mount we discovered, to our horror, that one of the tubes on the lower right engine mount had completely fractured. 'Oh, s\*^#@, what am I going to do now'...over a 1000 miles from home in one of the most isolated locations in Australia.



It was too late to do much that day so the team gathered in the Birdsville pub and we discussed the options. Either we patch it up here and try to keep going, or pull the engine out, continue on home with the engine mount and return with it replaced or repaired sometime in the future. Neither were attractive options, but a call to Kerry and Jeremy at Sonex at 2am local time via our sat phone clarified that they had no history of unexplained breakages in the engine mount and that a repair should be feasible. Several heavy landings

prior to this trip probably caused the crack. More careful attention during periodic maintenance perhaps might have prevented me putting myself in this predicament.

By morning I had a plan, and after breakfast we set to work. Enquires around the town had located a welder,



but he was used to dealing with broken bull bars or suspensions and we decided to not use his services. We had decided that if we could find a bolt or something similar to slip neatly inside the tube this could be a suitable method of repair. Where could we find just the right size rod? Paramedic Shane was wandering around looking at the aircraft. 'Hey, this tail skid looks just the right size'. Sure enough, when we removed the tail skid it was a neat fit inside the damaged tube. Better still, on a trigear Sonex the tail skid extends inside the fuselage and is longer than it really needs to be. We cut the redundant length and reattached the skid, same length, but with a new bolt

holding it in place lower down. After disconnecting the engine and pulling it forward from the mount we could remove the damaged piece, and insert the spare tube. The welder was called upon for the loan of a few tools we had the piece bolted in place and further strengthened with a scrap piece of high tensile steel angle.



As the pelicans circled above the town I decided it was time to do a test flight, and if all proved OK, to head off for Innaminka, across 160 miles of the Strezleki Desert. Within an hour we had test flown, checked the repair and were heading off together again.





This was some of the most inhospitable territory you could imagine but eventually Cooper Creek appeared on the vast horizon ahead. We landed at one of the iconic locations in the Australian Outback, Depot Camp 65 of the explorers Burke and Wills, on the banks of Cooper Creek. In early 1861 the explorers returned, almost at the point of death, after travelling for months from this point to reach the northern coast of Australia, the first crossing south to north. They finally returned to their depot late one afternoon only to find that the support party had given them up for lost and had retreated south to Melbourne, departing the morning of the day they arrived. The very same tree, the legendary Dig Tree, still bears the carved instructions to dig nearby for a cache of supplies.





With a spectacular sunset behind us we headed further east and landed at dusk at Noccundra. This tiny outpost has a pub and a few scattered outbuildings. We tied down at the back of the pub under a huge rising moon and headed to the bar.



The publican was a straight talker. 'You'se 'll be havin' dinner here, there's nowhere else to eat. Dinner will be on the table at 6.30, whether you's are there or not...and it's corned beef.' We sat in readiness in the cosy dining room, and at 6.30 as promised, the cook swung through the low doorway and the hearty plates of meat and vegies were thumped on the table before us.

On the walls of the dinning room were dozens of faded photographs: station owners and their prim wives, family picnics from a former century, a T model Ford being ferried across a swollen river on a punt. The far horizon, sparse vegetation and harsh sunlight a backdrop to each picture.





The following two days saw us heading almost due south. We stopped at White Cliffs and enjoyed some underground hospitality. In this opal mining town most homes are built underground and 92 year old Neve Young, still actively working his claim, invited us in.



Departing White Cliffs the surrounding diggings looked like a moonscape as we headed further south to Ivanhoe. This small town was perhaps not the best choice for our last night. We had booked accommodation but the publican seemed surprised when we called and inquired if he might be able to get someone to pick us up from the airfield. No meals at the pub, so we tried the cafe over the road. As we settled inside and contemplated the comprehensive menu consisting of steak, hamburger or mixed grill, I noticed they were licensed to BYO (Bring Your Own booze, a fine Aussie culinary tradition). Back over in the pub I asked for a couple of bottles of red wine. The publican's eyes flashed to the two locals leaning on the bar. "Hmm...Ted, take a look out in the storeroom, I'm sure I saw some red wine out there'. As I waited the conversation between the two locals went. "Jeez, I can't stand that red wine.""Nar, makes ya jaw drop.""Yer, I hate that white wine as well". "Tastes like vinegar". A couple of nicely vintaged reds were finally located and purchased at a reasonable price. The problem back at the cafe was finding wine glasses, but something suitable was eventually unearthed.

Before departure next morning I took the opportunity to top up my tanks from one of the larger aircraft. With a limited range in the Sonex it certainly makes touring easier in the company of a larger aircraft, avoiding expensive inconveniences such as call out charges at remote locations.



It took several hours heading south before the sparse timber and red dirt eventually turned green as we crossed the Riverina irrigation area north of the Murray. An almost dry Lake Mulwala at Yarrawonga was a surprising sight.



This town is a compulsory stop. Peter McLean's hanger includes a flying school, ultra-light aircraft showroom, cafe and meeting place for aviators, although during our stopover former RAAF pilot Peter was, typically fully occupied, giving a guided tour to a bus load of elderly locals.

It was with some sense of relief that I lined up on final to runway 17 Tyabb at the end of a very eventful trip, and enjoyed a debrief in the comfort of the Peninsula Aero Club with the rest of the crew.

I carried a tent, sleeping bag and camp mattress, just in case our schedule changed, but they were not required. The Sonex has ample room as a comfortable tourer for one person, two if you keep the luggage to a bare minimum. I have 1 inch 'conforfoam' on my seat and found this extremely comfortable even on the longest legs of around 3 hours. The whole trip took a little over 23 hours in the air over five consecutive days and I averaged 16 litres per hour with an average speed of 93 knots.

The most important thing to make sure you have on a trip like this is a group of friends to enjoy it with. Not only did I benefit from the practical knowledge and experience of several accomplished 'bush mechanics'

when I really needed it, I learnt a great deal about planning and good decision-making from the other pilots in our party who were significantly more experienced than myself. I also had a timely reminder about being thorough in my pre-flight inspection of critical areas of the aircraft, such as the engine mount, before a major trip.



The Sonex is a simple aircraft to build and fly, but the combination of low fuel burn and respectable cruise speed make it ideal for this kind of trip. I cant wait for the next opportunity to 'go bush'.

Stuart Trist

Sonex #181

Melbourne, Australia