Air Racing is such great fun. As a competition it is relatively easy. Knowing how to tune the engine to last ten laps, no pylon or sideline cuts and not busting the aeroplane landing will get you half way up the finishing order without too much effort. Getting to the pointy end in any pursuit takes experience. Learning from mistakes is part of that. Here are a few of mine.

I have had some absolute crackerjack Texan races at Adelaide and Cootamundra but to date a neck and neck ten lapper with a Golden Era model has eluded me. Managing to get third place in the 1997 final at Adelaide in 1997 with the slowest model was a thrill. A change of prop it was competitive six months later at Yarra Valley. On the pace? Yes. Reliable? No. Rudder hinges kept failing. My F1 pursuits have been interrupted due to a great deal of time spent dealing with and reporting on agendas, which in my view, and others, have been detrimental to attracting and retaining new competitors.

My first racing experience was the 100 Lap Pylon at the DARCS club in Brady Rd Mulgrave (Melbourne) Ten pit stops with one simple rule. The engine had to be stopped and started. A junior entry my 3.5cc Graupner Taxi trainer was slow compared to the other .40 and .60 models. when they had finished the Contest Director asked me to land. I had completed 62 laps. Back in the pits I noticed quite a few models had been moved to clear a pathway. This was due to my consistent landing approaches. Swinging out wide exiting number 3 pylon to line up the Taxi came through the same part of pits each time. At head height. That experience helped me come up with a better landing mousetrap a decade later.

My second experience was racing my 2.5cc Cassutt in the new Quarter Midget class. Model was scratch built from a plan. Engine was a loop scavenged Super Tigre 19. With the 1972 Nationals in Geelong looming I built an El Bandito from a kit for the world beating Schnurle ported Aussie designed and manufactured Taipan 2.5cc engine. More power and faster I only had a few flights before the Nats. Dad gave the model an almighty shove off the start line and it I arrived at Number 1 well before the rest. Banked then yanked it tip stalled and I froze on the up elevator. The rapidly descending orbit completed 360 degrees and proceeded through the pylon flag marshall position at head height. The pack arrived and not one marshall was to be seen. I’d seen them all dive for cover. . The other three competitors were granted a re-run. No spare model I became a spectator.

Two other memorable racing incidents. During a test flying session a competitor walked out behind a QM after it took off. The model torqued to the left. Recovered after a tight a 180 degree turn it hit the chap in the stomach. Luckily just a few and bruises. The other was more disturbing case of red Mist. Holding Dad’s FAI pylon racer on the startline, four engines wailing, the next competitor lost radio. It started working just before his flagged dropped. “Let her Go” yelled the pilot. It flew fifty yards rolled on its back and went in. Another competitor’s prop shed both blades. Stopping the engine was achieved by jamming the spinner into the ground and pushing hard.

A few years later I entered the 100 Lapper with a purpose built Das Little Stick. Dad had designed a Northerner biplane for F3A aerobatics. Its 10 percent thick aerofoil was much thinner than the standard 20% for the Stick so I opted for that. Couldn’t find the plan so I built the rest from memory. Test flight was first thing Sunday morning on the day of the race, after the two hour drive from Geelong. Bloody hell it was really unstable. Turned out I miscalculated the tailplane area. Scrounged every bit of lead and we shoe horned in as many small heavy items that would fit into the nose. CofG on the leading edge with forty odd degrees of elevator throw it flew okay. Landing config was easy. Hold full up elevator and fly it in on throttle. Good to go.

Kraft versus Futaba was part of family life back then and my .OS40 schnurle powered Stick with its thin wing was quicker than Futaba agents’ Tony Cincottta and Jim Davies .60 model. Rounding up their slower plane I learnt another valuable lesson. Sacrificing one or two seconds to ensure separation turned out quicker than passing them through the turn at pylon 1. Having my miniscule tailplane chomped up by their propeller did turn out to be cheaper though. My super light Stick turned into confetti and part of it went down the throat of their Webra 61 engine. They were the Oz agents for Webra. Jim glided back to the strip. Piston and liner destroyed they were out for the day too. When passing or being passed I now ensure I can see daylight above or below.

A few years later I built another Stick. From the plan this time but with the same thin aerofoil. The rules stated the engine had to be stopped as part of the ten pit stops. The model was either carried back to the startline or taxied. Nowhere did it say either of those methods was mandatory. Setting up to approach slow was much better that landing long. That wasted a lot of time. A simple Dubro nose wheel brake would have helped. (Dad was the Dubro agent) Nowhere in the rules was any mention of wheels. Extra speed would be a possibility if one buried the Bridgetones into the fuselage. Futaba Sales Australia were the agents for Goldberg retracts. Kraft Systems Aust had Multicons. Retracts added potential complication and weight but both would not fit into a Little Stick Take off method was not stipulated either. So that lot was open to interpretation. Hence I came up with this concept.

Engine was the OS .40 rear rotor FAI pylon. The latest version had a digital throttle. Otherwise known as a venturi, power was zero or one. Extra speed from retracting the wheels was easy. No undercarriage. Belly landings would shorten the landing roll. Dad was the Oz Agent for MK Products whose biggest tank was 400cc. Which just fitted into the Stick. Run time was fourteen minutes. The plan was do seven pits stops in the first seven laps. Re-fuel then go. A second re-fuel and run to the finish. The only change was landing. The first was a bit long and it skidded along the grass strip. Damien Milk had to run then run back. Hold the nose high shake the clunk back, start the engine and launch. Landing number two I hit the shut off rolling into number two pylon. Rounded number 3 and side slipped it into the long grass just a few yards short of the strip. Repeated that again and again. The starter shook his head and muttered “ this is going to end in tears. It went swimmingly. We broke one Top Flite toothpick wooded racing prop during the second re-fuel and won the event. Some competitors grumbled and the rules were changed next year.

Test flying Dad’s Minuteman FAI Pylon race with a world beating Ranjit Phelan OPS 40 at LDMFA the engine rpm jumped when the quarter wave pipe kicked in. The model had never gone so fast and I had to shut it down. A mere few seconds of aileron flutter almost melted the solder link through the hard nylon servo arm. Phew. Completing the last round without any cuts I had third place in the bag at a Nationals in Sydney That evaporated when the fresh new glo p[ug was a dudd and it couldn’t be changed in time. The previous heat was a re run after someone over rolled rounding the base pylons and recovered a meter or so over my head. A big fright to say the least. .

Tightening up the turn rounding number three pylon in the 1997 Adelaide Golden Era Air race my Hawk Tip stalled. I managed to gather it up just in time and avoided busting the no fly zone. That’s incurs a sideline cut. Over flying the pits meant disqualification. That first event was a big learning curve for all concerned. Including the organisors. When I set the course for Yarra Valley later that year it was offset and angled away to allow much more room for the turn back towards the main straight. After Adelaide 1997 Dad and I did not want anyone standing under the flight path. Pilot callers officials are all behind the safety sideline. Ditto for Cobram and Sandown. An airframe, equipment / pilot failure or the occasional mid air collision experienced at those events ended up where it was supposed to. As per the risk assessment. Safety was not compromised. Failsafe and flying standards set by myself is part of that.

It is easy for nay sayers to slag racing off as dangerous and I’ve had quite a few experiences dealing with too. Being responsible for others flying at the World 50cc Motorcycle Grand Prix and the F1 Air race at Sandown, those ops have been scrutinised after such complaints have been made. Questions by the regulator answered, those events continued. As did being invited back to fly at Victorian major motorsport venues hosting V8 Super Car and World Super Bike events. For three years.

This overview was written to put my air racing agenda out there, up front. If this event is of interest, start with Formula 2. The aeroplane with a 35 cc petrol engine is a cinch to operate and race, while you learn race craft. The engine rules are set to provide an entry level playing field. We won’t bother with engine claiming etc. Tried that at the completion of an event at Cootamundra. . That didn’t work. The person concerned, who had read and understood the rules, refused to remove it to be sent off to be checked. This is much simpler. Less aggro too.

After I have flown a Nemesis with a couple of engines, with telemetry, F2 will have a static rpm limit. Propellers have a pitch range limit of ten to twelves. This provides enough scope to find the best propeller for an OS GT33 ,side or rear exhaust DL 35 or some other brand. This will prevent an experienced pylon competitor going the traditional high rpm two stroke tuning route and blowing you away. Reducing engine RPM via a throttle mix to any switch or function is not allowed. Anyone found with that in F2 will be disqualified from the meeting. Random testing at the end of each race will be done when the engine is at operating temperature. This will be at the Contest Directors discretion. If the RPM limit is exceeded the round will be zeroed. The competitor can race the next round if he or she accepts the invitation to reduce the top end RPM to comply. End point or ATV setting will be recorded. Model memory name/number verified. This gives anyone the best chance to be competitive with experienced racers and the thrill of close racing. Which is how Texan started out.

F2 is sponsored by Futaba Pro Shop purely to attract new competitors into the easy flying entry level category. We’re racing for a trophy in the other categories. The people I invited to race at Sandown were all experienced competitors. Keen to win the thing in front of a crowd was enough. Prize money offered at Sandown wasn’t really needed. It added a little intensity but the main reason was to develop a relationship with sponsors outside the hobby business. Hence the venue that could cope with a large crowd. The future for this event requires it to pay its own way. Covering the cost of trophies and use of a flying field with entry fees is the usual method. Trophies have already been paid for his year. Part of the entry fee income will go towards a donation to the Royal Children’s Hospital Good Friday Appeal.

Sponsors have a right to expect events are conducted safely within rules and regulations. I will not be asking for sponsorship from the hobby business because a closed event represents very little. Any business that previously supported Air Racing with advertising in RCM News magazine is welcome to put up banners and flags. To be considered a big player in the RC sector a sole agency radio system is required. One never knows what the next brand will be but Australian businesses that spend the money to comply with Government regulations have to compete with others that do not. Hence ACMA C Tick and RCM labelled radio systems are a requirement. .

Selling radio equipment without compliance labelling is flouting regulations and vendors risk confiscation and fines. Not an organisors problem, however, in the event of a catastrophic accident, being called to account why it was allowed to fly could be. Using such radio gear is allowed by ACMA and if a competitor wishes to uses a non labelled radio, I would accept the entry if paperwork from an Australian testing station verifies it complies. Cost was for an individual was around $400 the last time I checked. Long range radio systems with variable RF output power will not be accepted at a model aircraft event. Potential financial loss is consideration in modern risk management. As Display Director I will not take on that risk for a racing event.

History shows MAAA membership has had a consistent turnover rate around 20%. Whichever way you care to look at it interest in Aeromodelling is waining. Social media posts the past ten years confirms the number of competition entries have dwindled with it. Take a look. Hardly any new young people. Hardly any specialist shops either.

Racing has the potential to be the best Father and Son, Mother and - Daughter family team entry into competition flying. It was for me. Scale Air Racing started in 1997 and models were built from a kit and from scratch. It’s ARF now. Before I get much older, at age sixty six, I would like to compete against the few top competitors who I know are still interested to race a model they have built themselves. We race for fun, not for sheep stations and I am very mindful of the cost of attending a two day event. Another motivation is to conduct a world class national event. As Contest Director for the Kraft Masters International F3a at Point Cook yonks ago, the importance of applying rules equally remains indelibly stamped.

Ditto for safety. During my RCM News magazine days I never asked a contributor to do something I would not do myself. Getting people to think about operating above minimum standards is of interest to me. Demonstrating that by way of an interesting and fun competition is my way of putting back into the hobby. If this doesn’t answer any questions about having a go or why certain rules are in place, please contact me direct on 0418 662 557. Air Race Rules are published on the website.

Cheers,

Stephen Green

Contest Director

www.speedweekend.melbourne