



# The Reno Air Races

*KiwiFlyer Warbirds Contributor Frank Parker, recently attended the Reno Air Races. At Reno, aircraft don't race the clock; they race each other, up to nine aircraft at a time, wingtip to wingtip, around a marked course at low level, overtaking each other at speeds of up to 500mph. The experience is, to say the least, sensational. Frank tells the story of a week in aviation racing paradise.*

**THE RENO** Air Races would have to rank fairly high on the 'Plane Spotters' bucket list. This is an event which has run for 47 years in which the Promoters, Reno Air Race Association, position themselves as "presenting Authentic Air Racing reminiscent of the Golden Age of Air Racing". This Golden Age captures the 1920's to 1930's and such notable events as the Schneider Trophy of European fame and the Pulitzer and Thompson races of the USA. The Thompson Races best encapsulate the theme of Reno as they were also multiple aircraft pylon races. Out of these halcyon days iconic aircraft such as the Hughes Racer and GB Racer were developed, along with retractable landing

the mid west high desert of the USA is 'The Worlds Biggest Little City' and has an economy based on gambling, a mini Las Vegas if you like. The annual Air Races are



Scenes from Reno 2010 during a week of aviation racing paradise.

gear, wing flaps, supercharging, constant speed propellers and enclosed cockpits. After the 1930's, high speed aircraft fell into the military precinct and so became 'National Secrets'. When the opportunity arose to join a group at Reno this year there was little hesitation in booking the seat. Reno Nevada, (think Lake Tahoe) in one of a myriad of events held in the area. The Races are 'owned' by RARA (Reno Air Race Association) and are very much a commercial venture. Competition is by invitation and qualification and held over a period of five days. There are six classes, starting from Biplanes (think Pitts Specials) through Sports, T-6 (Harvard old chap), Jets, and the celebrated Unlimited Class.

Contributed by Frank Parker

The latter must be piston propeller aircraft and are the reserve of WW II fighters, hence my interest. Each class has up to four subsections (medallion, bronze, silver and gold). A competitor may work from the lower to the upper classes though the week of competition and indeed the prize for the last Gold class placing is higher than the Silver class winner - now that's incentive.

The event is not only 'Racing'. It attracts aficionados from throughout the USA and the world, so the parking lot is an air display on its own. The Heritage park had a DC-2, DH Heron, a number of vintage jet fighters and many other notable types.

The Military park sported a V-22 Osprey, CH-47 Chinook, (hey I am an old chopper driver), C-17 Cargomaster, F-15, F16, F-18, A-10 and Predator drone.

Then the Exotica of the Racing 'Pits', eight P-51s, from stock standard to super modified, two TigerCats, Sea Furies,

Corsair, Yak 3's, Rare-Bear (Bear Cat), and P-40. Also on display but not racing were two P-38 Lightnings, and a (new build) FW 190. Then 20 or more T-6 Texans. After that lot there are the sports class hangars with super modified Lancairs flying at 350+ knots and the class winning Questair which went much faster than it looked - like 375 knots around the course, on an IO 540!!!! If

this is not airplane heaven then what is ?

Then there were trade displays (about a mile of them), T-shirts, posters, art, memorabilia, tarot cards, and of course food, and food, and more food.

The support acts included various numbing aerobatic displays, a daily F-18 handling display and the Canadian Armed Forces 'Snow-Birds Formation Team'.

Our Group was associated with the Thunder Mustang owners group. There were two of these impressive aircraft participating in the Sports class and our association with the group added an extra interest to the weeks events .

So what of the racing; well it's not unlike an auto racing event where each race takes approximately an hour to start, taxi, take off, and position for a running start for 6 to 8 laps of the pylon course. Some races are a procession, others hotly contested as competitors vie for position for the next day as the stakes are rising. With all that there is an amount of 'gamesmanship' or keeping a little in reserve for tomorrow.

The development of the aircraft is impressive. The top T-6 aircraft (which are scrutineered as 'standard') are lapping at 200+ knots, whereas my ex RNZAF machine can manage about 145 'rung out'. I have mentioned the Sports Class where speeds in excess of 375 knots are achieved.

The highly modified unlimited racers are in the 485 knot league. It is reported that 'Strega', a modified P-51 Mustang is using in excess of 80 inches of boost (normal military power is 60 inches). I heard a whisper that one wing is full of fuel and the other 'anti-knock' to prevent detonation, plus water injection. Whatever the recipe this is an impressive deep pocket pursuit.

One of the highlights was a field trip to the 'Valley of Speed' at the back of the course where the top racers fly by (well overhead actually) at variously 50 - 100 feet at full noise and full speed. To coin a phrase 'Effing Awesome'.

The low point of the week, well two; the first when one of the Thunder Mustangs had an engine failure half way through the trophy race while vying for the lead. Unfortunately the pilot was unable to make the runway, ended up in the desert and crash-landed. The aircraft was wrecked but the pilot relatively unscathed. The second, because of unusually strong winds (30+ knots) with an excessive crosswind on both runways the T-6 trophy races and Unlimited Gold race had to be cancelled for the first time in 47 years !

Well I guess that's a reason to go again !

## When things go wrong

**EARLY** in the racing week during a 'sports' class heat I witnessed a lucky escape. The aircraft was just turning on to home straight when we noticed something 'spray' from the engine area.



This was followed by a momentary tortured scream from the engine (reminiscent of a chainsaw) and something (turned out to be the propeller) falling to the ground. The pilot called 'mayday', converted 300+ knots to height (good PPL stuff) and made a perfect forced landing. The problem was ascertained to an imbalance in the propeller which fractured the prop extension shaft (and almost the engine mounts). The 'scream' was the engine going from full power (with a prop) to full RPM without, before it 'haemorrhaged'.

## How to Race

**WHILE** at Reno I was fortunate to meet the 'Chair' of the T-6 (Harvard) Race Committee and asked "How does one get to race at Reno?". Well simple really, get a big pile of money and go for it !!

In reality all pilots must be qualified to race. For beginners this starts with a 'Rookie School' two months prior to racing. Pre entry for the School is a US Commercial Licence plus a 'FAST' formation qualification.

The School includes theory on the racing rules and etiquette, plus practical race circuits with other aircraft.

The School Qualification is valid for two years. If you haven't competed in racing in this time then you must return to School.

For the first time racing, you start in the lowest class category (i.e. Bronze) then must qualify through 'heats' to a higher category.

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