



# A Newbie at the Aerobatics Championship

**"One hell of a good time"**

Contributed by **Kylie Wakelin**

*In March, the NZ Aerobatic Club held their annual National Championships event at Waipukurau. To quote Kylie Wakelin "I had such a good experience competing for the first time at the NZ National Aerobatic Championship this year that I decided to write about it and wondered if KiwiFlyer might be interested in publishing my story?" Yes we would. Thanks Kylie.*

I HAVE NEVER been one of those girls' who does things or gets 'dragged into' something because my boyfriend is doing it. Until this year.

My partner Ivan works as a flying instructor for Classic Flights in Wanaka and being as persuasive as he is, he talked me into getting an aerobatics rating this summer in the C152 Aerobat. During my first aerobatic lesson I thought 'Hmmm this is ... interesting'. There was definitely a lot going on inside and outside of the cockpit, and feeling G's for the first time was a bit strange.

On my third flight I ventured out to have a go on my own and soon forgot about the G's, as I was far too busy concentrating on what I needed to do to pull off a manoeuvre. After more instruction from Ivan, my efforts turned toward trying to perfect the manoeuvres that I enjoyed such as Loops, Half Cuban 8s and Barrel Rolls, as well as continuing to blunder through Snap Rolls and other manoeuvres that I didn't like so much.

The next thing I knew, an NZ Aerobatic Nationals entry form was being thrust under my nose along with this year's sequence for the Primary Category. "You have got to be kidding", I said. "You expect me to go up to Waipukurau and make a complete ass of myself?". Ivan assured me that the Nationals are a really fun time with a good social scene in the evenings. So I nervously agreed to enter justifying it with "just give it a try for fun".

**To Waipukurau**

Ivan and I flew in the Pitts Special S2A sponsored by Classic Flights from Wanaka to Hastings. The weather was good all the way except across Cook Strait where we flew off the radar at 600 feet but had good visual contact with the ferries!

After a nice evening at Bridge Pa with Sean - the owner of the Pitts, it was time to up the stress levels by heading for Waipuk, the box, and the competition. Some entrants had arrived on the

Tuesday and were practicing already, and Ivan was chomping at the bit to get in amongst it.

On landing at Waipuk I could appreciate that Ivan's nerve-racking excitement wasn't only about getting into the box for an unofficial practice. There were Pitts Specials lined up alongside



*Pitts Special FRJ and the author in front of the Central Hawkes Bay Aero Club.*



*The judging panel and others watching the 'Free' sequence.*



*A beautiful site: All the Pitts Specials lined up with the Extra.*

aeroplanes I wasn't yet familiar with such as the ZLIN, EXTRA, Giles and other high performance aerobatic types. About 20 pilots were wandering around excited and chatty. The 5 judges and a few supporters were also circulating and everyone was very friendly and approachable.

The lads from Flight Training Manawatu flew in and delivered FHL, a C152 operated by the school to train pilots in aerobatics. These guys are definitely in the 'GB' club. I took FHL out the next morning to 'find a box' and practice away from the Pro's.

The aerobatic box is (for my class) a 1km cubed invisible box, so it's a matter of going out and flying your sequence over a paddock or between roads that fit the requirements. Entering the box at 3500'AGL, you waggle your wings which signifies to the judges on the ground that you are ready to be judged. Then you commence your manoeuvres, making sure to start each with a clean straight horizontal or vertical line. If you fly out of the box slightly you will get marked down for that manoeuvre. If you make a complete hash of it you can waggle your wings and leave the box, compose yourself and then re-enter, re-waggle and continue being judged. Although you receive a zero for the manoeuvre you screwed up, you do then continue to obtain marks

for the rest of your sequence. If you fail to wing waggle on entry and exiting the box, you get zero for the whole sequence! - I was petrified that I would forget to do this due to fixating on something more technical.

**Practice time**

Due to the eagerness of everyone to have a practice in the box, a roster was put in place with Ian (bless his cotton socks) acting as Starter to give pilots a 15 minute call so that while one pilot was in the box, another would be holding over the lake at 2500'AGL on a common frequency, and a third would be ready to take off as soon

as the first pilot's sequence was complete.

Logistics were very well organised, helped by an operational and safety briefing given each morning and a good de-brief in the evening. It was also due to pilots and others freely giving their time to help out with scribing, judging, starting, etc.

On Thursday afternoon an official practice included 'unofficial' judging so that you could see how you are performing next to your peers. These scores are not used in the competition unless the weather prevents flying on Friday.

**Competition Day**

Friday is the start of official judging. You get a shot at the box in the morning and then again in the afternoon. In Primary, I knew the 'known sequence' (6 manoeuvres) as I had practiced them. The Sportsman, Intermediate and Advanced categories would do a known sequence of 12 manoeuvres which are published one year out, then for the afternoon judging they could do a sequence which they had designed themselves - their 'free sequence' (or the same one as in the morning). This makes things very interesting as some pilots stick to manoeuvres with low 'K Factors' (numerical value) which they can perform very well and other pilots put their neck on the line by designing more difficult sequences which do stand to cost them a lot of points if mucked up!

Friday is a day of nerves, anticipation, camaraderie and the opportunity to appreciate aerobatic displays by NZ's best. In the evening just when you would think you could relax, the judges issue an 'unknown' sequence for each category - something nobody has practiced. Although you don't officially get judged for this when competing in Primary, I was offered the opportunity to have a go and said 'yes why not!' It turned out to include a manoeuvre (1/4 Clover) that I'd never attempted which the Contest Director kindly offered to change for me. I said thanks but I'd like to try anyway.

Imagine 20 pilots walking blindly around waving their hands about above their heads going through the motions of executing a very technical sequence. There wasn't much chatter this evening as everyone pondered their new sequence and for most it was off to bed early! The 'Unknown' is really a fantastic part of the competition. Even the good guys can come out of a manoeuvre and turn 180 degrees in the wrong direction, or put completely the wrong manoeuvre in. One competitor flew an entire sequence beautifully back to front resulting in a big fat and unfortunate zero.

**My turn**

I entered the box and waggled my wings. My pattern was going well and I started the entry to a stall turn which I hadn't practiced for about 6 weeks. I looked out to my left wing tip in the top of the

**Flight Planner 3000** Version 3.5 now available  
Quick & easy flight planning

**New Zealand flight planning made easy!** With Google Earth link

- World coverage and map
- Huge airfields database includes over 200 in New Zealand
- Point & click flight planning
- Controlled airspace & PRD display
- Graphic weight & balance
- Import winds from MetFlight
- Comprehensive flight costing
- All AUS & NZ flight plan formats
- Over 230 sample aircraft supplied
- INVALUABLE - Comprehensive and accurate flight planning for New Zealand
- FLEXIBILITY - Portable licensing option to run on your USB Memory Stick

**\$255**

For more information or to download a working demo visit: [www.champagnepcservices.com.au](http://www.champagnepcservices.com.au)

**Champagne PC SERVICES**  
Prepare to take flight!  
Telephone: 61 419 955 704 Facsimile: 61 8 62678172 Email: [sales@champagnepcservices.com.au](mailto:sales@champagnepcservices.com.au)

**Aircraft Control Cables Manufactured**

**Martin Aviation Services Ltd** 19 Village Way  
ARDMORE AIRPORT  
PAPAKURA STH AUCKLAND  
POBox 88067 Clendon Manurewa

CAA Approved - AM 36375 Part 148

For all swaged or nicopress cables from 1/16" to 3/16"  
Cables and fittings in stock. Same day turnaround - Competitive prices

Hand splicing service available. Piper Cub trim cables a speciality.

Contact John Geary Ph 09 298 6698 Fax 09 298 5225  
Email: [johng@slingshot.co.nz](mailto:johng@slingshot.co.nz)

**Fixed Wing and Helicopter**

**ARAs, W&B, Maintenance and Repair Services including all Fabric and Composite Requirements**

**CENTRAL AERO**  
ENGINEERING  
KEEPING YOU FLYING

Hangar 1, Steele Road Hamilton Airport Phone Paul on 07 843 1200 or 021 743 033  
Email: [paul@centralaero.co.nz](mailto:paul@centralaero.co.nz) [www.centralaero.co.nz](http://www.centralaero.co.nz)

**Personalised helicopter training**

Flying from Wellington International Airport with one of NZ's most seasoned instructors will add vital experience to your helicopter training. You'll also enjoy our personal approach and enthusiastic style...  
... so call now to arrange a trial flight.

**volare**  
fly - experience - enjoy

04 909 7078 0210 774 221 [fly@volare.net.nz](mailto:fly@volare.net.nz) [www.volare.net.nz](http://www.volare.net.nz)  
Volare Aviation Limited, Wellington Airport - Aero Club Building, 246 Coutts Street, Rongotai, Wellington 6022





vertical, through 60 knots applying full left rudder, control column slightly forward and a bit of right aileron, waiting, waiting for my nose to scribe towards that wing tip... Next thing I knew I was toppling and upside down - I had inadvertently entered a tail slide.

I quickly stabilised the aircraft back to straight and level, got my bearings, then waggled my wings to signify to the judges to stop judging while I left the box to gain some height and compose myself - Phew! I re-entered and my next manoeuvre was the 1/4 Clover... I'd decided to turn left as the lake presented such a good reference point. "Just look at the lake and roll towards it". I entered the loop and on the down side rolled left hoping I hadn't completely got this thing wrong (don't want to roll out facing the other way or the ground!). I rolled a quarter turn and there on my nose was the lake. I smiled to myself, proud to have got my first 1/4 Clover bang on.

**The rest of a great few days**

For the rest of the day we sat in the sun watching the guys put on a brilliant display of airmanship, showing how an aeroplane can be flown so precisely and spun and rag-dolled then recovered on exactly the correct heading and altitude. It's a skill I can truly marvel at now that I have begun to learn the precision of aerobatic flight. The technical name for this part of the day is the 'Four Minute Free' where competitors in the advanced and unlimited categories

do what can be classed as a four minute air show. The week ends on Saturday night when we all go out for a meal and receive the results of the past two days.



Kylie Wakelin with her prizes.



Helping to move Dave Cranna's ZLIN.

**Give it a go!**

The reason I decided to put pen to paper is because I am new at this game and I walked away with a trophy for first place and 'the most improved pilot of the competition' award. My boyfriend who zeroed a manoeuvre in his first sequence and thought he'd completely ruined his chances of doing any good, nearly fell off his chair when he won the Intermediate Category and then got Champion of Champions and highest score in the free pattern. Though if we had walked away empty handed it still would have been worth it. The entire week was one hell of a good time and for a newbie like me there was no problem just to show up and be guided by the pilots who have been at the competition before. There was no feeling silly or sitting in the corner being left out.

It would be really good to see many more people like myself - new aerobatic enthusiasts, at the Aerobatic Nationals next year. It is

an excellent opportunity to learn new skills in a supportive environment, not to mention that doing aerobatics has been the best thing I could have done for improving my flying skills and confidence in the cockpit, particularly useful should one ever need to recover from an unexpected unusual attitude.

I think there is an untrue persona associated with aerobatic pilots - that of someone who does stunts and is a reckless adrenaline seeker. All of the pilots I met, (except Ivan who was born a show off) were low-key nice guys who have developed their flying skills over the years to the highest level. Though elite in their game, they are certainly not unapproachable elitists.

Rumour has it I will now have to go up to the Sportsman category. I've been told the only way to get out of going up a category is if you fly in bra and panties, which I guess is one of the advantages of being a woman in a male dominated sport.

There is an annual South Island Aerobatic Open being organised in November to be held at Rangitata Island thanks to Russell Brodie. The event includes a competition as well as an open day where pilots can come and get some aerobatic tuition or just have a go. Visitors are also welcome to just wander around and look at the aeroplanes. See you there - Upside down... or not at all!

# On Show - The Preparation

AT THE TIME of writing, it's a couple of weeks before Easter. This is invariably a high activity time about the NZ Warbirds hangar as various groups sort out the final details for the upcoming Airshow. In varying degrees NZ Warbirds has been involved in these Easter events since 1988, including the first Wanaka 'Show' and the inaugural Classic Fighters Marlborough Show in 2001. These two well established events now share Easter in alternating years. It does save the question, "What will we do for Easter this year?"!

Planning for these events actually starts at least six months earlier when we begin talking with the Organisers over what they may be requiring. This will be dependent on the Organisers 'theme' for their show, what's available throughout NZ (and overseas) and financial resources. The latter is a fact of reality and Organisers can face financial success or failure on the strength of the weather forecast. .

It's hard to believe that the T-28 Trojan, which not too many years ago was one of the few aircraft in the Heavy Metal brigade on the NZ Show circuit, is now an unwanted 'Bridesmaid' to a plethora of WW II Fighters. Who could have imagined a possible line up of four L-39 Albatros jets, a Strikemaster and a pair of Mustangs, Spitfires, Kittyhawks, Yak-3, then add in a Corsair plus other exotica... (That's right folks - a possibility of 10 WWII aircraft). And that's only the 'heavies' - there's also a world class collection of WW I aircraft available and we still haven't considered the General Aviation scene with top line aerobatic displays, the 'Classics', the home-builts, and so the list continues.

Who would have thought that Organisers could have difficulty fitting in three formation aerobatic displays, let alone

all the other offerings? I don't suggest that all the above will be at any one airshow, however it does illustrate the depth of our historic aviation scene in New Zealand.

Back to the topic. There is a lot of organising behind the scenes. Starting with aircraft, the owners need to ensure that maintenance is up to scratch and sufficient flight time available to cover the show. This invariably requires some last minute 'fixes', just what the Engineering Shops want!



P-51 Mustang in airshow mode at Whenuapai. Chris Gee photo.

It's up to the pilots to ensure their aircraft receive final preparations including oil checks, arranging oil at destination (some of these aircraft 'drink' 3 litres per hour), greasing the props, tyre pressures (40psi mains, 60 psi tail - or you will get shimmy), oleos, etc, etc. In fact for our Harvard Fleet we have a 'working bee' the week prior in order to attend to all the 'last minutes', as well as a pre-airshow 'valet'.

Additionally there is accommodation to arrange. We will have been planning this for over 12 months (sometimes two years since the last show!). At this stage it's down to final numbers and for how long. Pilots (and supporters) don't want to be caught without 'digs' and moteliere don't want to be stuck with empty rooms.

**Contributed by Frank Parker**

There are also the 'support' aircraft to plan. NZ Warbirds members generally have the convenience of travel options in the Warbirds Dakota who are often able to arrange an 'Airshow Package'. Additionally the Catalina often has seats available and if you want to take the scenic option, a seat in the DHC Beaver might be available, where you can watch the scenery glide by at a sedate 90knots!

And it wouldn't be a 'Show' without administration. Pilots need to ensure their licences and display ratings are current (often involving a call to yours truly - how can I help!), and ensure that aircraft are appropriately insured. These details are prerequisites to performing at any aviation event.

And we haven't left home yet. This Easter there will be a flotilla of 14 + Warbirds aircraft heading to Omaka from Ardmore to attend and display at Classic Fighters. Some of the Harvard group are planning an early departure to participate in a 'formation clinic' for several days prior to the show.

On the day there will be a flight planning exercise, for example the Harvard has the 'legs' for an Ardmore-Omaka flight but reserves are approaching minimum on arrival, so how's the headwind?, what's the chance of an en-route weather diversion?, how will ATC treat us today?, should we just plan a stop at Wanganui? (good coffee). Of course there will also be groups heading south from North Shore, Tauranga and New Plymouth. Suddenly those fuel pumps at Wanganui can become somewhat crowded!

So come Easter weekend there will be plenty of hangarage available at Ardmore, as we will all be at Omaka. Now who's arranging the weather ?

Cheers, frankly@xtra.co.nz

**Engineering for Aviation**  
 Airport Drive, Palmerston North Ph 64-6 357 1149, Fax 64-6 357 0886

CAA Part 145, 146, 148, 19F, CASA CAR 30, NZS/AS ISO 9001:2000

- Airframe Maintenance & Overhaul
- Engineering Design
- Instrument Overhaul
- Electrical Overhaul
- Engine Maintenance & Overhaul
- Welding, NDT, Cable and Hose Manufacture
- Corrosion Treatment and Aircraft Painting
- Calibration - Tools & Test Equipments

**FIELDAIR**  
 Engineering for Aviation  
 fieldair.co.nz

**Solo Wings**

Service • Support • Sales • Spares  
 ARAs • Restoration and Repair

Your One Stop Shop For:  
 GA - Sport & Recreational Aircraft

2 de Havilland Way, Tauranga Airport  
 Ph/Fax (07) 574-7973 (7 days)  
 Email: info@solowings.co.nz

**ROTAX**  
 AIRCRAFT ENGINES

New Zealand's only authorised Rotax Sales and Service Centre

**NEW ZEALAND WARBIRDS**

Join New Zealand's most colourful aviation fraternity  
 Membership includes subscription to Classic Wings Magazine and the NZ Warbirds Scramble newsletter. Associate Membership \$99. Full Membership \$162.

Name . . . . .

Address . . . . .

Phone . . . . .

Post to: New Zealand Warbirds Association Limited.  
 Ardmore Airfield.  
 PDC 14  
 Papakura

Phone: (09) 298 9207  
 Email: NZWarbirds@paradise.net.nz  
 www.nzwarbirds.org.nz

**BE PART OF THE ACTION!**