

Recreational Pilot e-zine

From The President Rodger Ward

I hope you have all had a pleasant Easter break sharing some nice flying and enjoying aviation with like-minded colleagues.

Elsewhere in this e-zine you will find an article regarding microlight accident statistics. This was prompted by a request from a member who recently had guests from overseas who mentioned their accident rate and wondered how ours compared. It would appear ours is better than theirs. Safety and serious accidents are always at the top of my mind.

A perfect safety record reminds me of " it aint over until the fat lady sings" For those that don't know this saying came from a late night TV show in the States many years ago where Kate Smith, a rather large lady who sang very well, would always sing the last item before the station shut down for the night.

I am sorry to say that as far as a perfect safety record goes in my view Kate aint going to sing. Perfect safety is like El Dorado. We must continually strive to make things better. Our job is to get Kate onto the stage and inch her slowly towards the microphone. The moment we relax our guard thinking we have got it hacked sure as eggs are eggs some alligator will jump out of the swamp and bite our bum ! We must continually look for the small things that need fixing before they become big ones or bad press.

Any poor airmanship you see and ignore is effectively condoned by you and you have lowered yourself to that standard. CAA would certainly prefer we look after ourselves under their framework and I am sure the vast majority of members would agree. Generally we are doing this quite well.

I am just a poorboy, though my story's seldom told....(Simon & Garfunkel) Stuart Parker/Waikato

The two main ingredients required to build a plane are skill and persistence. I am short on both of those.

A few years back after I wore out and bent up my trusty old trike, I had a first try at a DIY plane. I chose the Legal Eagle- a sweet looking little tail-dragger powered by a half VW. But after getting about halfway through tacking up the 4130 fuse, I had a a critical look at my skills and decided I wouldn't trust an airframe I had welded. And after looking at all the bits that go into a wooden wing, I had a critical look



at my persistence and decided I would be in geriatric care long before the wing ever got finished.

Back to the drawing board.

A mate and I got interested in a tail-less box-wing design called the Sunny. An interesting concept but with no detailed plans. I corresponded with the designer/builder and got plenty of useful info, but decided it was probably not the best choice for a first build- I needed more experience building from plans before getting into a project that required design and construction technique decisions. Best kept as a



number 2 project after cutting my teeth on a more connect-the-dots project.

As a trike and B22 pilot/maintainer, I was happy playing with bits of tube joined by gussets, blind rivets and bolts, and covered with fabric. I could understand that, I could do it. No fancy tools required, just a hacksaw, file, drill and riveting tool.

Eventually I came across the Poorboy PB-1 design. A basic single place rag-and-tube pusher with performance similar to a B20/22. Plans for \$50 from Jim Hartung in North Dakota. He had built a variety of aircraft, and picked the best and simplest ideas from them to come up with this design. Two flying and at that stage three under construction.



5/10 for looks, but 9/10 for 'I can build that!'.

First up was the **tail feathers**. Tube and gusset, blind rivets, easy and quick.

Wings next. Simple ladder construction, ribs fixed by tabs to the LE and TE spars, with a box section each end to take the fabric tension. I deviated from plans by adding a simple bow tip.

Then the **A frame and cage**. A bit more work here- tube ends have 4130 tube inserts, flattened into a tab and welded around the tab edges. No holes flogging out here!



The **cockpit area** forward of the A frame was not pretty (hence the 5/10 for looks), so I resurrected the pod, wheels and spats off my old trike, tizzied them up, and used them. Got to be at least an 8 now??

Engine is a used but good 503 ex Phil Budding's S-9.

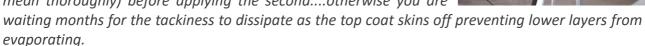
Prop is the Ivo off my trike, converted to 2-blades.

Panel is an MGL Xtreme that fell off my stock shelf- overkill for this plane, but all you need in one instrument and so simple to install.



Covering is Ceconite light using Stewart Systems Ecobond cementno fumes and it sticks like the proverbial. Laced to the ribs- actually quite an enjoyable task.

Paint is (ahem) bog standard acrylic latex house paint, thinned with Floetrol. *Warning- make sure the first coat is thoroughly dry (and I mean thoroughly) before applying the second....otherwise you are*



Struts are streamlined yacht spreader extrusion from Hall Spars in Whangaparaoa. A mate said with my colour scheme it will look like a giant bumble-bee so **ZK-BEE** it is!

630 hours later over 2 years and it is ready to fly! Yes, cheaper to buy a second hand B20/22 and be in the air immediately, but....this is **my** baby! Now, about that Sunny design.....



Flight report next month.



DC3 Flight Peter Mullooly/ZK-LPJ

On Sunday 20th March the day dawned with a light sprinkling of rain and overcast skies. Wind around 15 knots coming from the north-east.



I was allocated 20 seats on the last DC3 Scenic flight for this summer. After a few emails to our members the list was eventually full. Departure time from Whakatane being 10am. We all met up at the terminal and were allocated our boarding passes. Several of us were very fortunate to be allocated to first class!!! I felt sorry for those in cattle class who paid the same as us!!! Oh well being up front did have some privileges I supposeclose to the cockpit which we all were allowed to enter and see what the other two get up to.





That's Pilots Keith Mitchell and Craig Emeny, our lovely hostess Kathy Sando who was attired in the period uniform of the times. We also had period music piped throughout the aircraft- certainly took you back in time. A brief summary of the aircraft's past history was outlined to us-

- named POWHAITERE;
- was built in 1944 as C-47B-30-DK originally as number 16387
- renumbered as 33135 when it was discovered that several numbers had been duplicated;
- used extensively in military exercises and in Gisborne for fertilizer spreading.
- Further history of this aircraft can be had by googling on the net.

After back-tracking runway 09 we lined up and with power applied to the two Wright Pratt and Whitney R1830 engines with 1200hp each we thundered down the runway and were airborne. We climbed out and headed in a southerly direction to 1500 feet to give the pilots time to settle the aircraft and set the trim. We then banked and flew over the Whakatane township and headed out over Whale Island to White Island.



Fortunately for us this all the bad weather was out to the west so the day saw reasonable visibility for us to get good views or the Raurimu islands as well as the Volkner rocks. We circled White island so everyone had a good chance to get some good pics of the island and view the current activity as it is at present. We then made our heading to the Ohiwa harbour entrance turning onto a westerly heading and tracking the coast, Ohope beach making a downwind heading for runway 09, over Thornton then finals making a very smooth landing and experiencing that familiar tail drop that all tail wheel aircraft do.



All in all a fantastic flight enjoyed by all. DC3 POWHAITERE will return this same day to Auckland and we will see her again come this October when some more great scenic flights may be had. **Defect report- RANS S6 rudder cables**

Defect Details		
Microlight type/model	Rans S6 ZK- COJ	٦
Total Time in Service (hrs)	220 km	
Defect area	Airframe/Engine/Controls/Flying surfaces/Undercarriage/etc	
	during annual permit to fly inspection both rudder cables found with broken wire strands where cables exit through the fabric side skin before attaching to rudder horn.	
Describe the defect		
Describe the affect on	330 hrs of flying with damaged rudder cables	4
airworthiness		11
Domodial	replace cables	
Remedial action taken		//

Common Frequency Zones Bill Penman/RAANZ OPS

The current round of Airspace reviews will result in some control zones being reduced in size and a number of new CFZ's introduced to enhance safety in uncontrolled airspace. There is some concern from CAA and some CFZ users that the amount of extraneous chatter on the CFZ frequencies is getting out of hand.

Industry asked for CFZ to be introduced to reduce confusion as to what frequency aircraft should be on and to enhance safety and situational awareness. Most pilots were using 119.1 MHz which was creating an enormous amount of RTF clutter and confusion. FISCOM frequencies do not allow pilot to pilot queries but are still available for weather and NOTAM updates etc.

By definition a CFZ is non-mandatory airspace and advisory in nature, i.e. airspace not designated under Part 71, used in New Zealand only and described in AIPNZ ENR 5.3, Section 5. CFZs are established to encourage pilots to use a single VHF frequency allocated for the zone.

Pilot reports are to provide other users with situation awareness. The reports should be concise and accurate. e.g. position, altitude and intentions relevant to prominent reporting points or features at entry. If required pilot to pilot communication to establish mutual awareness for enhanced safety and to prevent collisions is the name of the game.

Some CFZ's are quite large with a number of airfields and well used routes in them. Irrelevant chatter can compromise safety and if necessary should be carried out on a separate chatter frequency. **128.95 MHz** is published in the AIP FISCOM Chart (GEN 3.4 pgs 17/18) as an official chat frequency. I know there are others out there, although not official, but are better than passing the time of day on a CFZ frequency.

Air-to-air Communications

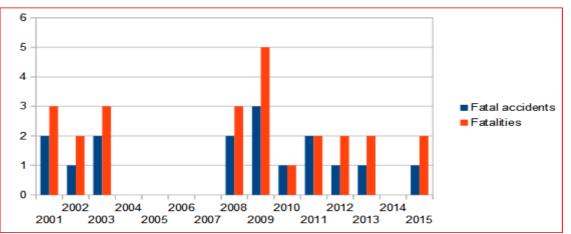
3.3.14 In the Asia and Pacific regions the frequency 123.45 MHz is available for exclusive use as an air-to-air communications channel over remote and oceanic areas out of range of aeronautical ground stations to exchange necessary operational information and to facilitate the resolution of operational problems.

3.3.15 The aircraft to aircraft chat frequency within the New Zealand FIR is 128.95 MHz. In uncontrolled airspace, if not within an MBZ/CFZ, operate on the appropriate FISCOM frequency.

Fly safe.

Microlight fatal accident stats A personal opinion

Following up a query from some visiting French pilots abut NZ microlight fatal accident stats compared with those in France, I trawled through the CAA fatal accident reports since 2000. The stats are encouraging but also sobering.



16 years, 16 fatal accidents, 25 fatalities- that's 1 accident, 1.5 deaths per year on average.

The stats will be lumpy because of the low numbers- a single accident can suddenly double the occurrence for that year. **But here's the thing- a single accident averted can make a fatality-free year!.** It is interesting to note the quiet period 2004-2007.....4 years with no fatalities. How come? If we could identify a specific reason we could learn from that.

Now regarding accident rates. Assuming about 1500 microlight pilots (probably ballpark extrapolating from RAANZ membership and 1090 microlights on the CAA register), that is a fatality rate of 0.1% per year. The French experience is over 2.5 times that at 0.27% (40 fatalities per year with 15,000 pilots).

The two encouraging take-aways from this are-

- We are doing better than the French.
- We had a 4 year period with no fatalities- we can do it again, but we need to understand the reason (if indeed there is one).

But there is also a sobering side to it all. My personal (and very subjective) assessment of these accidents puts 11 accidents with 17 fatalities down to pilot decision making- medically unfit, unauthorised flight, hot-dogging, flight into IMC, poor decisions.

- Perhaps 5 accidents/8 fatalities due to events beyond the pilot's control- unfortunate
- At least 11 accidents/17 fatalities due to pilot actions and decisions- foolhardy

You may disagree with me- have a look through the accident reports on the CAA website and make your own assessment.

The big take-away from this is- **you/me as the pilot have the biggest influence on accident rate**. Our decisions and actions before and during the flight are the direct cause in at least 2 out of 3 accidents.

Want a zero fatality year, a zero fatality period? There's no magic bullet- Its up to us.

Aero Performance Props

APP have taken over the manufacture of Brent Thompson's props- same design, same build, same prop.

If you ever have to replace a Thompson with an APP prop you will still need to go through mod approval (in this case a formality if they are identical spec) and get your Flight Permit updated to reflect the change. A change from any other prop to an APP prop will of course require full mod approval and Permit update.

Gary Williams

From: Sent: To: Cc: Subject: David Gill [David.Gill@caa.govt.nz] Monday, 21 March 2016 9:06 a.m. Gary Williams Peter Gill; Gary Leach RE: Gary Williams - Aero Performance Propellers

Hi Gary

Thank you for the additional information. On the basis of your continuing the processes established with a good history by Brent Thompson we will accept APP propellers for installation on microlights in New Zealand. (They still need to have the appropriate modification design approval.) For manufacture of type certificated propellers for fitting to Standard Category aircraft you would need to get a Part 148 Manufacturing Organisation certificate. Best regards

David Gill

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Membership changes

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