

Waikato Chapter of Sport Aviation Assoc (SAA) of NZ

*(Dedicated to building, flying, designing, modifying - and talking about - **amateur-built aircraft**)*

Newsletter - August 2026

Thanks to all our contributors, some interesting progress and adventures going on.

Re future Newsletters: I have decided to take a break from the Newsletter next year and let someone else put their mark on it. If you want to have a go, its only 4 newsletters for the year and if you don't want to continue after that, I will take it back for the following year. I am happy to give as much help as required so please someone who isn't currently on committee put your hand up for a try. I think you will enjoy it as long as you can handle a word processor on a computer.

Cheers, Tony

Grant Horn, Committee News: The club AGM will be at Alan Falconer's place on Saturday 5th September. You can fly or drive, but strip is fairly short, so talk to Alan first for details. Bruce Cooke (Secretary) will send out the formal AGM notice with the address, time and details via email shortly...

Some Interesting Snippits:

From a Rolls Royce article on their Jet engine hot section turbine blades:

"Each one of the 68 blades inside the engine – about 10cm long – endures the force of a double-decker bus on its end, while generating the same power as a Formula One car. All that happens at nearly 1,800 degrees C, well above the melting point of steel and enough to turn sand in the air into shards of glass."

From a Youtube Oshkosh seminar by Barnaby Wainfan, Aircraft Designer

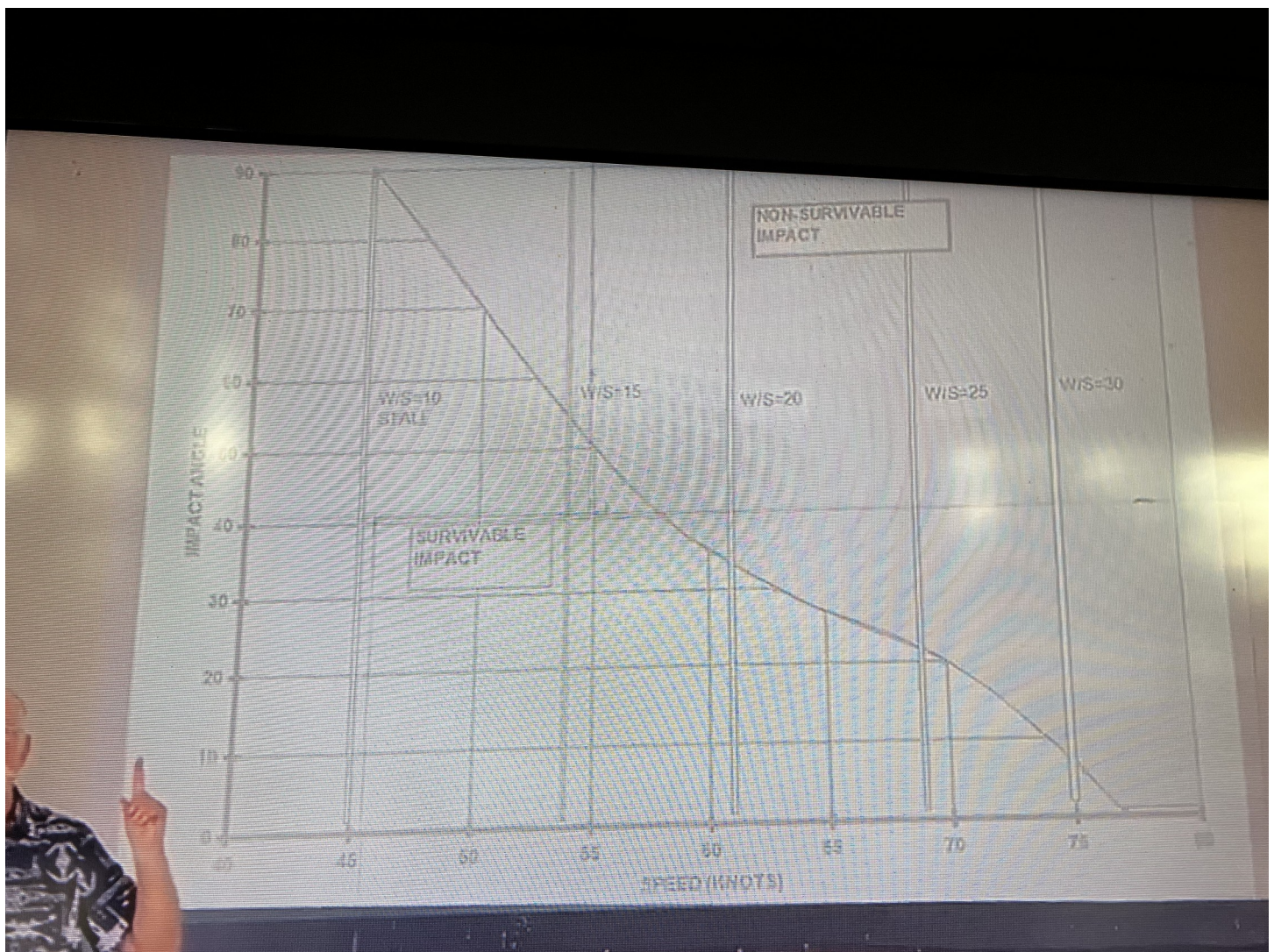
The next page shows a graph about "how not to hit the ground". The Vertical Axis shows angle of impact from zero to 90 degrees. The Horizontal Axis show speed in Knots. Above the diagonal line, its not survivable, below you should be ok, as long as you don't hit a wall etc.

Basically this should be compulsory viewing when starting out a lecture on Force Landings, in my opinion.

Interesting to note, At microlight glide speeds (45 knots x 1.3) if you bring the speed right back and just slowly descend into the ground avoiding anything hard you should be fine. At GA speeds (up to 61 knots stall x 1.3) it is a bit more risky but keep the glide going all the way to the ground and try and avoid above a 30 degree impact. It assumes the ground is not smooth...

He describes a Piper Cub as almost impossible to kill yourself in based on this graph. The lecture is 1hr on turning design ideas & concepts into practical designs. Worth a watch...

Graph of Impact damage to aircraft based on speed and angle of hitting the ground.



If you want to watch the 1hr Youtube video, search for 'Oshkosh Wainfan'...

Been Flying:

Three pictures taken by Nick Gambirazzi from his Rans S-7 ZK-NJG recently. He is flying into Chris Holmes Airstrip.

Below: Approach on left base (I think), airfield just above spinner, behind line of trees



Below: short finals



Below, on the ground...

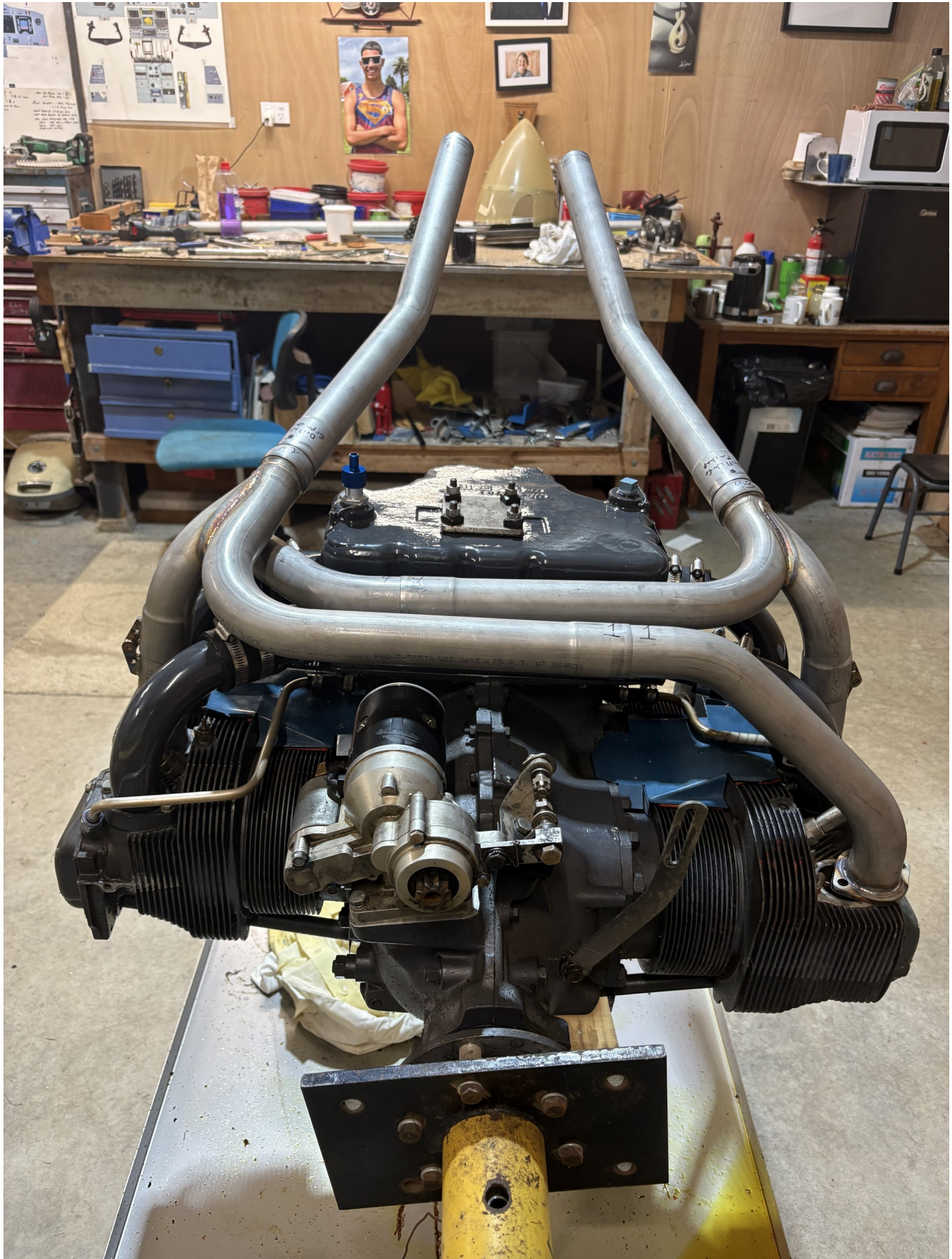


Grant Horn, Building Vans RV7A, ZK-DRV reports:-

Vans say to fit exhaust system to engine before starting to fit the cowls. It took a while but finally my Vetterman exhaust system has arrived. I ordered it through Aircraft Spruce and I must say they kept me informed all the time it was on back order right through to when it was dispatched. Then Fedx were just as good in letting me know where it was on its journey all the way to my home address, including the time it was delivered. My only complaint was the cost of it all. Having said that ,as you can see by the photos, it is quite complicated and with very tight tolerances it would be a massive headache to make one as good. Anyway , I have it and am pleased to be able to fit it and make progress. Hopefully next newsletter will see the cowls fitted.

See pics next two pages...

Below: Flight Engine - Lycoming O-320 upside down, with new exhaust pipes being fitted...



Below: RV7A with spare engine setup for cowl fitting work next...



Bart Burgers, Pegasus Spitfire MK9 (Full Scale) reports:-

Good morning from your foreign correspondent writing from Holland.

Progress on my spitfire has been very dim, just for the mere fact that its still in New Zealand, in a container, ready to be shipped..more or less.

Our home in Kinloch has not been sold yet due to various issues, furniture still present in the house. I am not shipping an almost half empty container.

Preparation work for the arrival of Pegasus has been steady. My hangar is almost ready apart from the doors (16mtrs wide) and 3 phase electricity to be added, future proofing the hangar for electric planes. On a good note my under carriage from the USA has arrived in Holland and is now stored with a good friend for the time being.

I have met several people who I only knew by name and WhatsApp accounts and have established a great rapport with all of these people. Every one seems to be eager to see Pegasus arriving. I already have my own call sign PH-LJB.

This last Saturday I was invited to fly with an RV7 and I was totally flabbergasted with this machine..what a beast in a small package..we did barrel rolls, looping's, hammerheads you name - it was exhilarating.

It took them 4 years to build her from a kit-set....

We will keep you posted on progress.

Now over and out from a very warm Holland.

Three pictures on next pg's...



Above: Fuse going into the Container



Above: Fuse on its way out of hangar... Slightly reminds me of Grant and I building our hangar using a tractor to lift the portal frames up. Needs must!

Below: Bart enjoying a RV7 flight in Holland...



Pete Kirby, Zenith CH601, ZK-JHX reports:-

So... I bought a 26yo Zenair 601UL :)

My (our) first plane... I'd wanted one for many years and circumstances came about where there was one available locally after Colin Williams, life member of Matamata Aero Club passed. We approached the family and waited a year as probate 'discussions' happened and last December, Colin's Betty-Lily was ours.

Now this is the tough bit... I don't want this write-up to be a moan-session or sound like I'm putting the builder down or in any way ungrateful for what we bought. But it's just a bit of awareness for any new aircraft owner of a pre-loved machine.

History.

Colin finished 'Betty-Lily', the 601UL + 80hp Rotax in 1999 at the young age of 70 and flew it (with a safety pilot) until 94. That alone is awesome!

I believe he had flown for years and as an engineer and farmer, he knew a lot about a lot of things. But this doesn't necessarily mean that engineering thinking was kept up to date, or understood new techniques or standards.

Colin re-engined the 601 with the 100hp 912ULS in 2006 but due to him being a busy retired bloke (motorcycles, fabricating a yacht and family etc.), the hours on Betty-Lily were low. The aircraft has a very basic panel – all second-hand instruments with some nearly 60 years old. No heater... but for me, this was perfect. We had \$ put aside for any hidden surprises or sudden upgrades that appear to be needed.

Colin was an IA and inspected his own machine right until his final years. We found proof that he'd regularly done the oil etc and ADs were current. I will note that in the very beginning of this probate period, the annual was performed by a very experienced engineer with serious Zenair construction as well as engine experience – and I was extremely thankful to Wayne Richmond for his guidance to me that day. I went home with a long list of “it's ok but you really should look at tidying-up this and that”. During the probate period, I (with the family's blessing) performed regular ground-runs on the aircraft to maintain engine condition. That's when I was able to have a good look about, before we became owners and did some flying.

Little discoveries...

Firstly the name change, where Betty-Lily became Kermit. If anyone knows me... I'm a bit of a Muppet lol.

I'm a comms engineer not an mechanical engineer but the process and compliance techniques are similar. I also have great engineer friends to peer-review my ideas. After watching hours of maintenance videos by good Rotax support firms, I became more aware of what to look for. I had been told that Betty-Lily always used a little coolant... ‘but it's ok’. So the first step was to wash the inside of the cowl – possibly the first time in a really long time. The engine run showed two small green stripes. Excellent, I then checked all the hoses clamps. Nearly all were slightly loose, so that was an easy find but you needed to want to look! Next being a Zenair, was replacing the front bungee, being a very common failure point if not managed (definitely on Wayne's list). Again, research made it a relatively simple process for one person. But it's amazing what else you see lying on the ground looking up into the engine. The perfect time check that nothing is rubbing that shouldn't be, or that the lagging is still intact around those hot exhausts.

Vacuuming inside the fuselage... 26 years of dirt and ‘stuff’. No better way to inspect an airframe!

I invited others to look all over it as everyone's experiences are different and it's great how little improvements get suggested. Best-practice stuff, or ‘we've done this to ours’ statements. At the annual, the comment that the engine wasn't up to the rev-level on the ground like a Rotax should be – we only got to 4700. I checked the rev counter for calibration first, before re-pitching an over-pitched prop. The factory pitch gauge came with the plane and Colin had placed a pencil mark above the factory marks – where he wanted it! I suspect he had decided that an engine shouldn't run at 5000-5200 in the air and he flew it everywhere at about 4400. So after re-pitching the engine to 5200 static, I now have a plane and engine flying at what the factory recommends for normal operation. All changed were peer-reviewed by an IA. Remember, if you feel you need to add pitch to go faster, you probably bought the wrong plane or engine lol.

When Kermit needed the first 50 hour check, I said I wanted to do a 200... just to be sure. Yes we found things that needed sorting – never just assume that everything, whether documented or not, was done to the full extent that it should have been in the past.

So... 7 months later, we've done over 75 hours. We've been over all the high N.I. mountains, over to Great Barrier Is. and all over the central N.I. I'm lucky that my partner enjoys this exploring. I am lucky that Kermit is hangered 3 minutes away in Te Kowhai, making those little maintenance changes or thought-sessions so easy.

The aging instruments are getting a refresh this winter as well as some other tidying. No, I've not put a heater in yet. Thank you Rachel, my awesome partner and JHX partner.

Thanks to all the helpers and peer-reviewers... Egmont, Andrew, Kevin, John M, Wayne R and the late Noel Bailey.

Below: Over Mt. Taranaki (Taranaki Maunga), Nice Pic! Using a selfi boom with software to make it invisible I think...



Below: with Colin Williams family with JHX at Matamata...

