Waikato Chapter of Sport Aviation Assoc (SAA) of NZ

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

Newsletter - May 2025

A big thanks to all our contributors.... Keep those pictures rolling, they make it very interesting.

This is the first newsletter with a combined section from Bay of Plenty (BoP) Chapter. Hope you all enjoy it. Just one contribution from BoP this time, hopefully I will do a better job next time of finding out what everyone is up to and getting some more pics and news.

Best, Tony

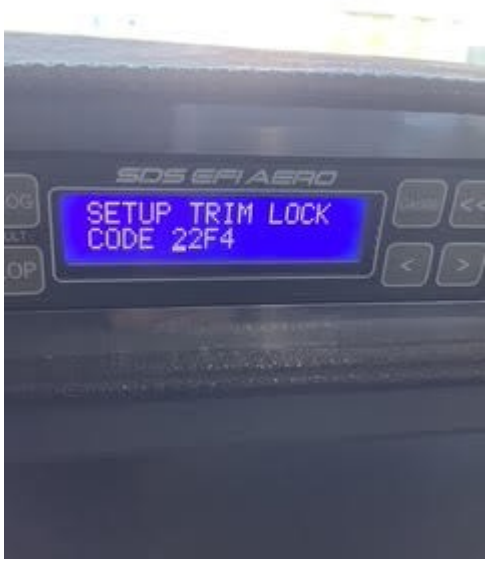
Currently Building:

Egmont Stegen, Sonex with Fuel Injected AeroVee (ZK-VMS) reports:-

Here is a bit of an update on the Sonex AeroVee powered with Simple Digital Systems (SDS) aero ECU. I reconfigured the injector drivers on the circuit board, this now enables me to individually set Lean or Rich on each cylinder and also set all four lean or rich as a batch. This adjustment can be made while flying through the display pane. I then reassembled and installed the ECU, gave the engine a quick run before it was time to head for home.

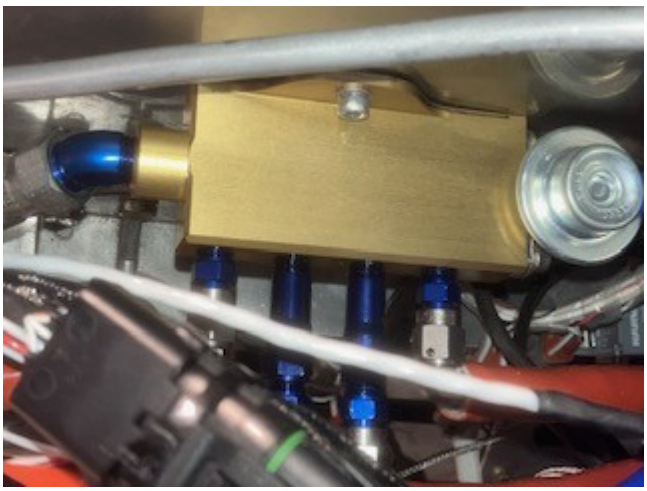
Below Left: Sonex on ground at Matamata. Right: SDS Engine Control Unit.

Below Left: Top off the SDS box, Right: ECU Cockpit display pane and controls buttons.



Below: Showing a view of top of engine with air intakes going to fuel injected cylinders. This quite different from a normal aspirated AeroVee setup. It runs noticeably smoother.

Below Left: Left Cyl bank Fuel Injectors (2) above Aluminum Rocker Cover. Right: Fuel Injection pump with 4 outputs (1 per cylinder, and input on Left.)



Below: View of Instrument Panel with Upper panel of SDS display and buttons.

Russ Ward, Stampe Biplane reports:- Here are a few photos. I've just finished up a 3 month (estimated) project which took almost 4 years out of my life. So it's time to get into it big time. I have a bit of fabric work to do on the fuselage and an aileron to rebuilt and cover.
Below Left & Right: Great Fuse progress...

Below: Rudder, Fin, Elevator behind. Right: Aileron covering in progress. Lower: Wing Panels.

Grant Horn, Vans RV7A (ZK-DRV) reports:-

Under the heading: ‘Flaps’ in the RV7A constructors manual, the second line says "The flaps are the easiest control surfaces on the RV-7/7A to build". I have my doubts that the author has ever tried to rivet these things together. See the photos of how much room my hand has inside one, and I'm not even got a bucking bar in there yet. Necessity is the mother of invention, they say. It took some trial and luckily not much error I found the best solution was a piece of bar worked well - 200mm of 50 x 12 S/S flat bar - to be precise. I am more than happy with the result. One flap is complete now and I expect the second one will be done in a fraction of the time now that I have a proven plan sorted.

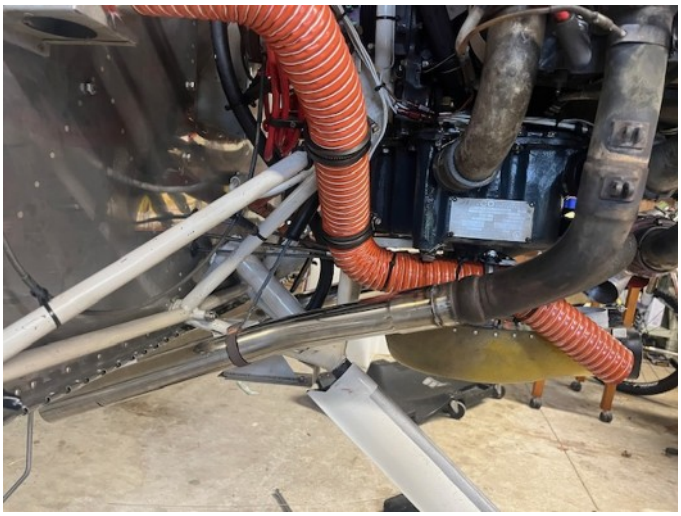
Below Left & Right: Tricky to get your hand in, let alone hold a bucking bar with one hand then rivet from outside with other hand without losing position.

Center: Completed Flap looking good ready for next step.

Case Groot, Vans RV-6A (ZK-RVC) reports:-

Case emailed in two photos showing a crack he found in his exhaust tailpipe during a recent 100 hour inspection. He has replaced both the lower tailpipe tubes (right and left sides) with new 304 Stainless tubes, rather than repairing.

Left Pic: shows new stainless tailpipe with firewall on LHS.
Right Pic: shows the same on the pilot's side, with firewall on RHS.



Right: note crack in old pipe found during 100 hr inspection. Pencil to show the scale.

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

Being just about 65% on the way to completion of my build (most of the wings and canopy has been done) I need to concentrate on some expensive parts. Still working on the front window frame, which proves a bit trickier than anticipated. I tried to construct it out of one piece of alloy but that proves to be near enough impossible…. got to think this over again I think.

My instrument panel is waiting for installation and the dials to be fitted, but an overhaul is needed for all the parts first, apparently no person in NZ can do that and I am looking overseas for expertise to get this done. Good thing is that I am currently in Holland and have taken the opportunity to investigate a bit more on this subject. Holland is a good place for all of this as the WW2 aviation is very much alive, and like in New Zealand they all very happy to help.

My main focus at this stage is the landing gear. The original Spitfire landing gear is very hard to come by and most of the time 80 years old gear is not airworthy. Fortunately, the landing gear of a Boeing Stearman is near enough to the same dimensions as that of a spitfire. Although the Stearman has non-retractable undercarriage, with a small modification and the help of mounting knuckles - *to be fabricated* - this landing gear can be made retractable.

There are plenty of Stearman parts available over the world, but in my search here in New Zealand I have found none. There are two types of Stearman gear legs, the Bendix brand and the Haliburton brand. My drawings call for the Haliburton which is used by Frank Deeth in Australia for his Spitfire build based on the same plans. The hunt for several parts is still ongoing.

Below: Stearman/Haliburton Landing Gear Leg

- **Paul Waterhouse: Pietenpol AirCamper ZK-BZY repair, reports**: – Paul, sent an updated photo and says *succinctly* as always... 'BZY running short on excuses '

  Below: in hangar looking pretty together, the yellow and green are a Classic look! Note the prop tips match too.

- **Bruce Cooke – Jodel D.18 (ZK-JAC) – reports:**

  I've been moving house over the last month so haven't had a lot of time for ‘Jodelling’, but I have acquired some Kunzelman strobes which will be going on at some point, and I have also been CAD modelling the radio and transponder structural installation for Mod approval - the drawing package runs to 12 A3 sheets! probably overkill, but as a professional technical designer, its how I do things!

  Below: Bruce’s JAC parked in front of OWL at last Waikato SAA fly-in at Matamata.

- **Tony Ashworth – Jodel D.18 (ZK-OWL) – reports:** Still working on instrument panel. Now have master switch working, all switches/circuit breakers installed and both MGL instruments working, including a software update giving the compass rose display from a remote sender.

  Center Pic: Panel wired up and working, Note compass rose view above the slip gauge. The white gauge above the ASI is an AoA/LRI, yet to the its colour background added.

Bay Of Plenty Chapter News:

Paul Blackmore, Bolkow Junior (ZK-CJF) – reports:

CJF has been sold and is now in the hands of Michael Crymble, based in the Far North. Mike is known to many as the announcer at the Tauranga airshow and is also the new owner of Mandeville Airfield near Gore.

The decision to sell CJF was made to allow more time to focus on gliding and to complete the RV project. We wish Mike all the best with CJF.