

# Waikato Chapter of Sport Aviation Assoc of NZ

*(Dedicated to building, flying - and talking about - **homebuilt aircraft**)*

Newsletter - March 2023

This newsletter is broken into three sections. The 'Of Interest' covers anything not specifically in the 'Currently Building' or 'Been Flying' sections.

Thanks to all the contributions big and small.

Cheers, Tony.

## Of Interest:

- **Dutch AVOG Crash Museum, about a Spitfire: – Bart Burgers**

I have been away to Holland for a number of weeks to look after family matters.

A friend of mine alerted me of the AVOG Crash Museum. These people dig up crashed planes from WW2, they recovered 4 spitfires.

I got in touch with them to see if a visit would be possible as they only open once a month. I told them about my journey and asked the question if it would be possible to have a piece of a 'real' spitfire which I could incorporate into my build.

They not only opened the doors specially for me but allowed me to search among recovered wrecks to find something suitable.

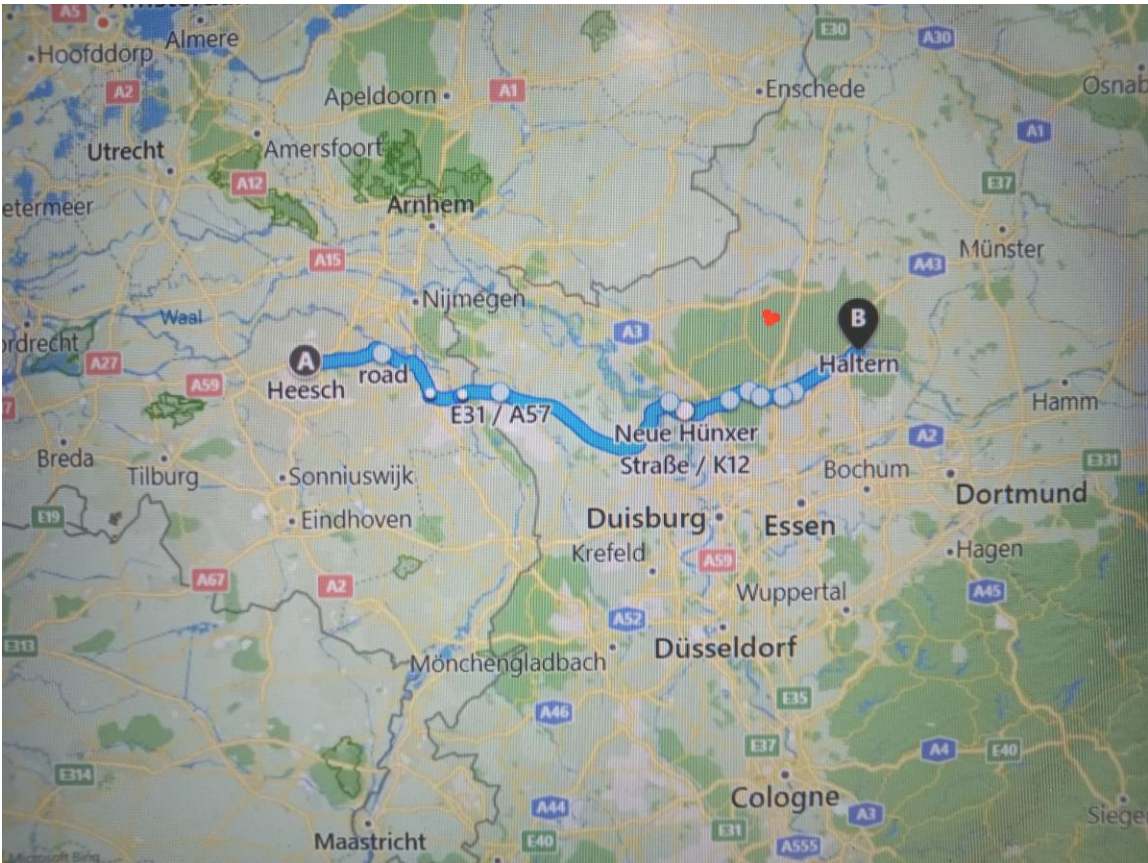
They have so much recovered items (most beyond salvation), that displaying them all would require a museum 4 times bigger.

I found a canopy slider of the MK9 RM906, in very good condition...This is now going to be part of my build..suddenly my build is getting more provenance.

Pictures attached and a small story (in Dutch) of the RM906 flown by Bill Harvey.

Bill Harvey parachuted to safety after his spitfire got damaged by flak fire on 25<sup>th</sup> of February 1945 at 09.20 hours. He landed in a field in Heiden/Borken. He had left his base in Heesh (Holland) at 08.35 hours on a mission that took him in the area of Wesel, Dorsten and Haltern, there aim was railroads and trains and take out any enemy. For this reason, each of the spitfires carried a small bomb.

His spitfire got hit by flak near the railroad station of Heiden. Bill himself landed 4 kilometres away where his spitfire crash landed. (Attached map shows Bill's flight path (blue))



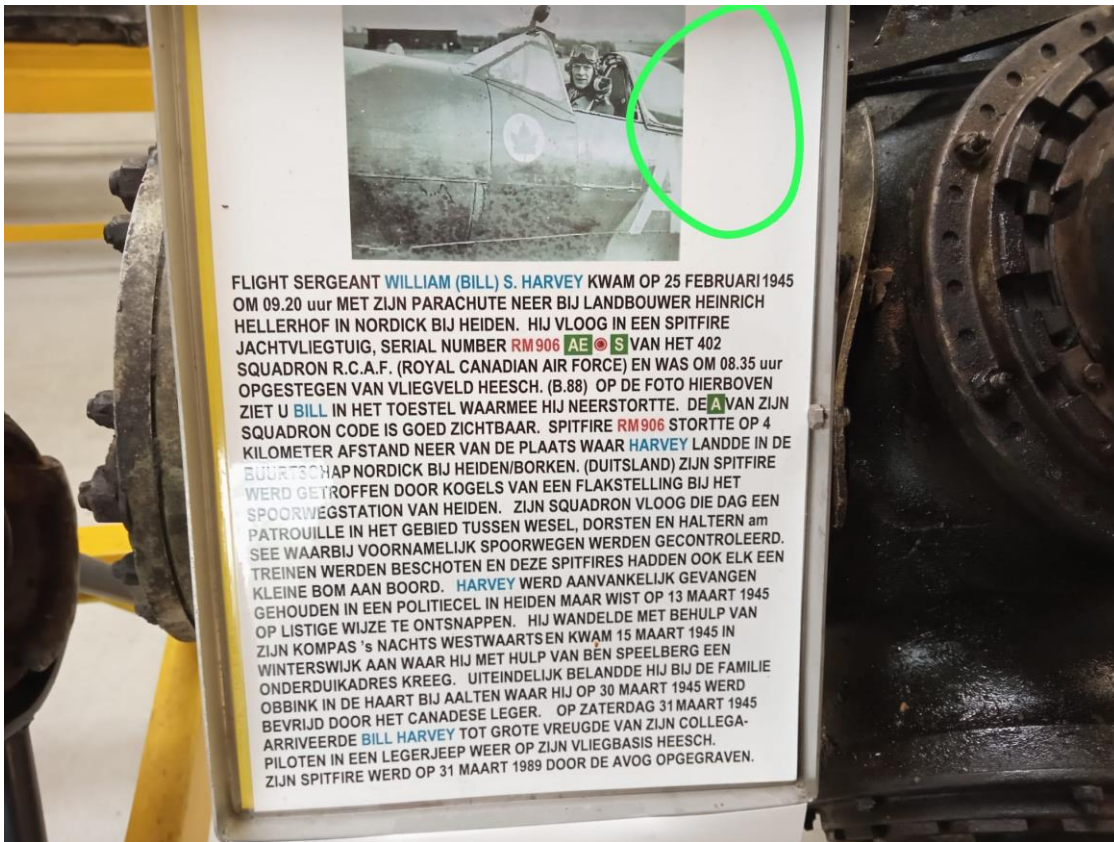
Picture above - and the red marking shows his crash site.)



Picture above shows the Merlin engine and propeller stubs



He was taken prisoner and was taken to the police station in Heiden. On the 13<sup>th</sup> of March he managed to escape in a very clever way. He used his compass and moved only during night time heading west. On 15<sup>th</sup> of March, he reached Winterwijk in Holland and was helped by the local resistance. He found a hiding address in Aalten and on 30<sup>th</sup> of March the Canadian army liberated this part of Holland. On 31<sup>st</sup> of March Bill was reunited with his fellow pilots at the base of Heesh. His spitfire was dug-up on 31<sup>st</sup> of March 1989.



The picture above shown is Bill Harvey in the spitfire (RM906) he crashed with, encircled (green) you see the canopy slider I now have in my possession.

Thank you very much Peter and Jan of the AVOG crash museum.

[www.crashmuseum.nl](http://www.crashmuseum.nl)





After posting my experience in Holland online I got a response from Lee who follows me on my blog. I think this makes a great addition to my article. See next four images...

# City Flier Saved By Amazing Luck

Humor plus determination equals luck.

At least it does in the life of a Vancouver Spitfire pilot, Flt.-Lt. William Stuart Harvey, 25.

A scarred and battered aircraft was no obstacle to his purpose; a German prisoner-of-war camp could not hold him; and even being blown 10 feet in the air when his jeep struck a mine failed to faze him.

"He is just hung all over with horseshoes," said his mother, Mrs. S. L. Harvey, 986 East Twenty-third.

## IN PRISON CAMP

Today Flt.-Lt. Harvey is posted missing on the official RCAF casualty list.

But that was only a temporary arrangement.

A wire his parents received disclosed that the flier is safe but had spent a month in a German prisoner-of-war camp before he could escape to Holland.

He probably was determined to keep the promise to his mother made before he left for overseas.

"Don't every worry, Mom. Your bad penny will turn up home for sure . . . even if it takes till six months after this war."

## SMASHED TRAIN

It was on February 25 that he was missing. That night, alone in his plane, he went out with five other Spitfire pilots under his command on an armed reconnaissance mission.

Flt.-Lt. Harvey spotted a long train loaded with military vehicles and dived down to attack it.

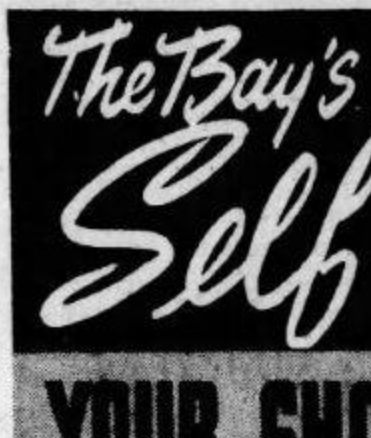
It was strongly defended and Harvey's craft was hit with flak. He climbed after he had pressed his attack successfully and told another pilot he would try to make it to base.

His plane was so badly dam-



FLT.-LT. W. S. HARVEY

At a recent dance in Watford, England, there were 150 more women than men.



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His plane was so badly damaged he was forced to bail out.

## NO REAL FIGHT

His pet complaint, he wrote previously, is that in the 18 months he has been on "ops" he has only seen the Hun four times.

One time he went to the front in a jeep. The jeep struck a mine and blew up. He was blown 10 feet in the air and all he had to show for the incident was an inflamed ear.

One of his first flights was with Sqdn.-Ldr. Lloyd Chadburn, DFC and bar, a Canadian ace Spitfire pilot who was killed last summer. In that trip the group had made a record of 10 enemy planes in 10 minutes.

He attended Charles Dickens School and Vancouver "Tech" and then worked for Consolidated Grocers and Kelly's until the time of his enlistment.

His squadron leader wrote that Bill Harvey has recently been appointed flight commander because of his "skill and experience."

25.2.45	RM 862	F/L L.S. Sleep	Bombing	08:05	09:20	Dive Bombing was carried out from Borselen to Emserich. Five shows were carried out with 27 sorties done in all. First show, led by F/L Sleep took off at 08:05 landed 09:20. One ME 262 was damaged shared by (F/L Sleep and F/L Innes). 6 A/C took part in this operation. 3rd show, led by F/L Sleep took off at 08:35 landed at 09:35. F/L Harvey hit by flak baled out over enemy territory. Third show, led by F/L Sleep & A/C took part in this operation. They took off at 10:25 landed at 12:00. Fourth show, 5 A/C led by F/L Whitaker. Section took off at 11:10 landed at 12:35. Fifth show which completed the day's work was carried out by F/L Moore. 6 A/C made up this section which took off at 12:15 landed at 14:15. The results of the day's operations were in all, 3 rail cuts, 0-2 MXT, 1-2 in loco, 0-3 in TRGS, 1 and a flak tower damaged. D-8.
	RM 804	F/O J.R. Mellon	"	08:05	09:20	
	RM 824	F/O H.D. Nicholson	"	08:05	09:20	
	RM 814	F/L D.R. Drummond	"	08:05	09:20	
	RM 786	F/L E.H. Innes	"	08:05	09:20	
	RM 705	F/L G.B. MacConnell	"	08:05	09:20	
	RM 905	S/L L.A. Moore	"	08:35	09:35	
	RM 902	F/L S.M. Knight	"	08:35	09:35	
	RM 683	F/L D. Sherk	"	08:35	09:35	
	RM 119	F/L W.O. Young	"	08:35	09:35	
	RM 906	F/L D.S. Harvey	"	08:35	Missing	
	RM 737	F/O G.F. Peterson	"	08:35	09:35	
	RM 962	F/L L.S. Sleep	"	10:25	12:00	
	RM 703	F/L J.R. Maurice	"	10:25	12:00	

- 2 -

aircraft taking part in each. The target area was in the Geldern/Krefeld area where enemy rail communications were attacked with the following claims: Seven rail cuts destroyed, one locomotive destroyed, three closed railway coaches damaged. Feb. 23rd - no flying. Feb. 24th - More bombing to Dorsten/Emserich/Wesel area. Also one Armed Recce carried out. Claims for day were: MC - 0-1, Barges - 1-3, Railway cuts - 2. One factory was destroyed. Cloud obscured much of the bombing results but in all 34 bombs were dropped. Feb. 25th - Dive bombing carried out in Borken/Emserich area. Five missions were completed. F/L K.S. Sleep and F/L B.E. Innes shared a damaged ME 262 during the first operation - 08:05/09:20 hours. During the second operation - 08:35/09:35 hours - F/L W.S. Harvey (CAN.J12062) baled out during the attack having been hit by flak and is now missing. The other missions proved routine. During the day 27 bombs were dropped and claims were as follows: three rail cuts destroyed, 0-2 MXT destroyed, 1-2 locomotives 0-3 trgs and HDT damaged. Flak tower was also damaged in target area. Feb. 26th - no flying. Feb. 27th - Weather prevented Armed Recce's but Squadron aircraft did fifteen (sections of two aircraft) patrols in the Nijmegen/Venlo area. All proved uneventful. Feb. 28th - Bombing and Armed Recce's during the day but low cloud prevented damage being observed. Time logged for period: Operational - 181 sorties, 208:35 hrs.

2. Non-operational  
Time logged for period - 10 sorties, 7420 hours.

3. Postings DFC  
CAN.J14003, F/L L.A. Moore, appointed Acting Squadron Ldr. and posted to Squadron as Commander w.e.f. 22.2.45. This officer completed part of his first tour with 402 Squadron. CAN.J14003, F/L D.R. Drummond who completed the whole of his first tour with 402 Squadron was also posted back w.e.f. 22.2.45. CAN.J9815, A/S/L J.B. Lawrence posted to 15 P.F.C. w.e.f. 2.2.45. CAN.J37003, F/O J.V. Sherriff posted to 83 G.S.U. w.e.f. 25.2.45 for further flying training. This pilot has had several 'prangs' on Spitfire XIV E aircraft.

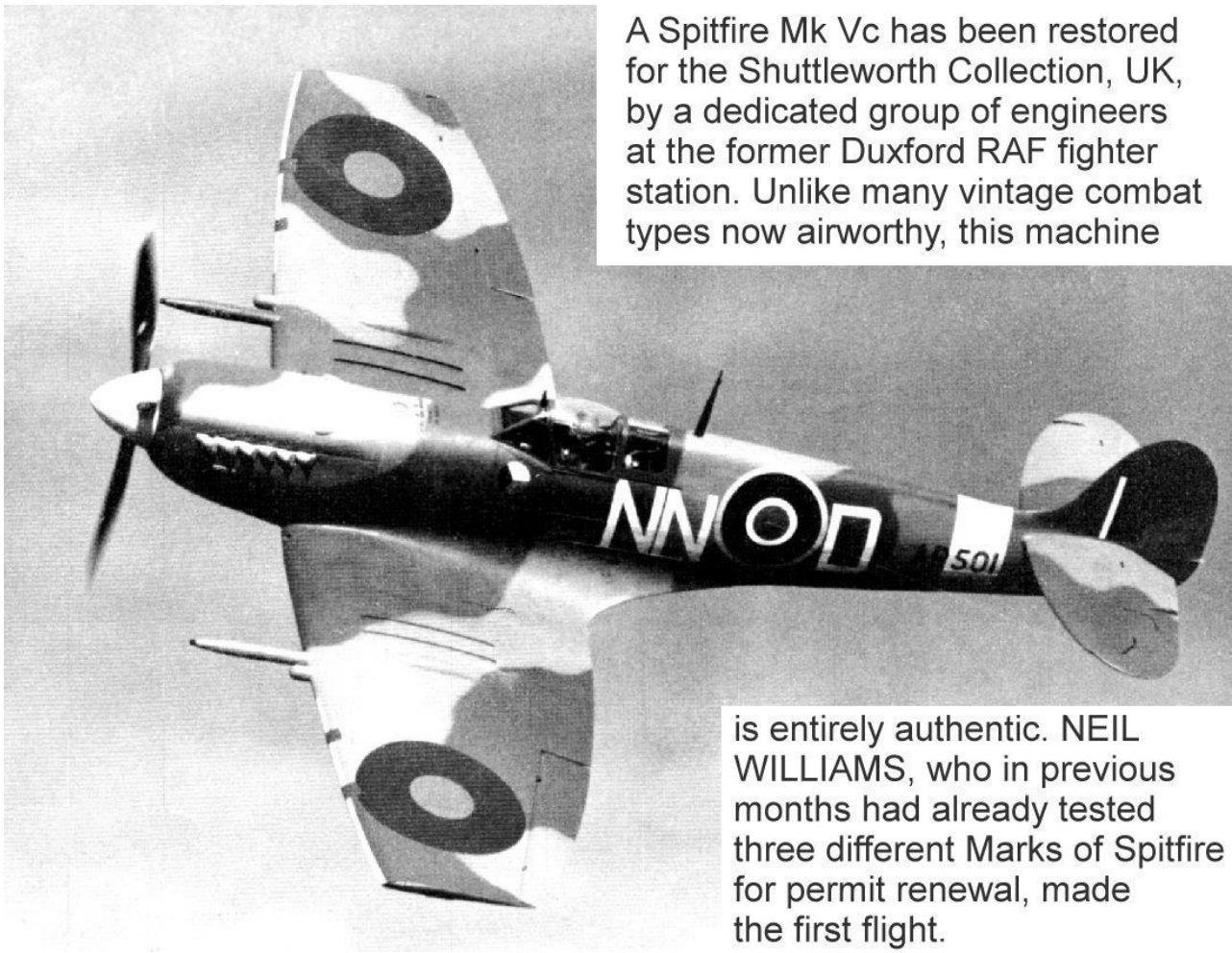
4. Equipment - on strength as at Feb. 26th, 1945.  
Spitfire XIV E - No. on strength - 15. Average serv'ity - 12.

5. Strength as at 23:59 hours, 28.2.45.  

	ATHROW		GROUND CREW	
Officers	RCAP - 23	Total - 23	RCAP - 3	Total - 3
Airmen	RCAP - 111	Total - 111	RCAP - 10	Total - 10
Operational pilots on strength	- 23.			

*A.M. Grosberry*  
(A.M. Grosberry) Flight Lieutenant,  
for Officer Commanding,  
No. 402 Squadron, RCAP.

- **Neil Williams: Restored Spitfire Mk Vc first flight:** – Lynn Williams, designer of Flitzer aircraft pointed me at this article by his late brother Neil, about a Spitfire test flight he performed. I thought it might be of interest – Tony A.



A Spitfire Mk Vc has been restored for the Shuttleworth Collection, UK, by a dedicated group of engineers at the former Duxford RAF fighter station. Unlike many vintage combat types now airworthy, this machine

is entirely authentic. NEIL WILLIAMS, who in previous months had already tested three different Marks of Spitfire for permit renewal, made the first flight.

I SETTLED myself into the cockpit, savouring that smell of petrol, leather, dope. An indefinable awareness that this, indeed, was a real aeroplane. There was no parachute; looking at the proud faces round me I could not bring myself to ask for one. I primed the engine and locked the Ki-gass pump.

'Contact!'

With starter and booster coil pressed, the propeller kicked once and exploded into a blur as the Merlin caught. A puff of blue smoke was snatched away by the slipstream. I could not linger long on the ground - already the radiator temperature was rising fast. As I increased power, four men flung themselves on the tail. The roar of the Merlin rose to a solid wall of noise, beating against the hangars. I throttled back and waved away the chocks.

Slowly, delicately, the Spitfire picked her way round the narrow perimeter track, the Merlin



grumbling contentedly, the brakes hissing spasmodically. I taxied onto the runway and slid the hood shut.

Now I was in a different world. I slowly opened the throttle, and as she started to move, gave her full power. Instantly the tail lifted as she accelerated, poised on tiptoe like a ballet dancer. With a light rudder pressure she leapt down the runway, black smoke arcing outwards past the cockpit. I pressed back on the stick, and immediately responsive, she was airborne. The undercarriage retracted with a solid thump.

I was surprised at her stability. Unlike other Spitfires I did not need a firm grip on the quivering stick . . . she was light on the controls, yet perfectly stable. She wanted speed, and I had to restrain her, to lift the nose skywards: then, as if she had remembered after thirty-four summers, she climbed effortlessly at 3000 feet a minute.

Almost, it seemed, she revelled at being once again in the air. I could scarcely believe the combination of stability and manoeuvrability. I brought myself to the task in hand, my test card recording low damping in roll, high aileron power, low control inertia, precise control, instant response. Yet all the while I sensed the unbounded joy of flight that I was sharing with this wonderful aeroplane.

From low speed to high speed we flew together. She was reluctant to stall, and quick to recover - the test card showed 59 mph. In the dive she was in her element, the controls iron hard under my hand, even the roar of the Merlin muted in that headlong rush. Faster and faster, but she was an old and precious aeroplane: I eased her out at 350 mph. As she pointed her long nose to the sky again the temptation was too much, and with the merest hint of pressure on the stick she rolled effortlessly in the climb.

At last, reluctantly, I took her home. We levelled low over the hurtling runway, arcing up and round in a fighter break while the Merlin crackled its approval. A curving approach, radiator flap open wide to cool that great engine, undercarriage light green, a hiss of air as the flaps came down, and as the broad expanse of asphalt disappeared under the nose I throttled back fully and eased the stick back, flying now with fingertips. Gentle as a thistledown she touched, running straight and true, the wheels taking the weight as she slowed.

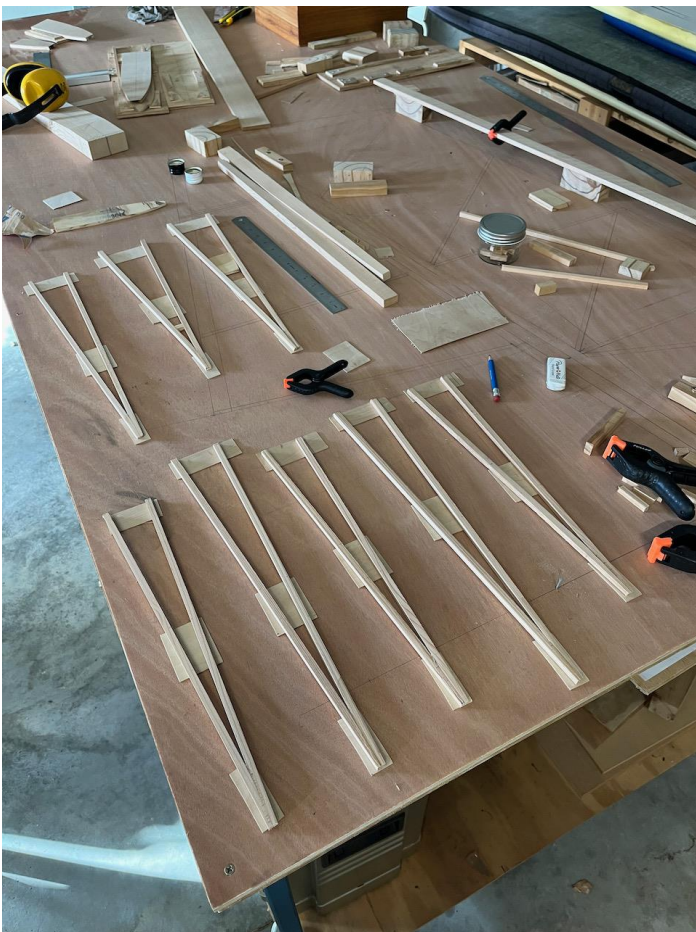
She turned into dispersal, and as I pulled the cutout ring the Merlin gave a final growl, then stopped. I sat there, savouring every detail, the silence heavy and oppressive. People crowded round, their eager faces all posing the same question - How did she fly? And in their expressions one could read an awareness that their relationship with this machine could never be the same again. Like the transition from caterpillar into butterfly, they had worked for two long years on a restoration project - but tonight they would be servicing an aeroplane.

## Currently Building:

- **Gael Arnaud: Corby Starlet:** – I finally got some wood and started to build the empennage of my Corby Starlet.

I made a steam box to help me bend the 1/4x1/4 pieces for the fin profile and glued the rudder elements.

Assemblage of rudder will start soon. Here are are 5 photos showing my progress.  
Cheers, Gael

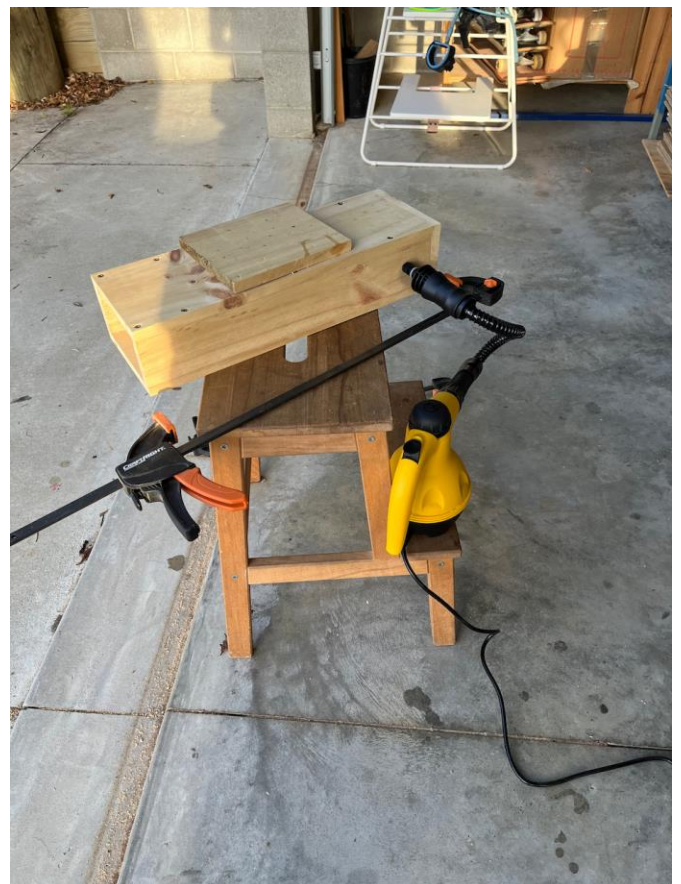


Picture above on left showing rudder ribs under construction, right hand shows rudder trial assembly with ribs braced in position on the rudder spar



Picture above showing gluing of Corby Starlet ribs and some jigs...

Pictures below show jig for holding steamed wood, rudder leading edge ribs, and on the right shows the seaming box and yellow steamer used to seam the wood prior to bending.



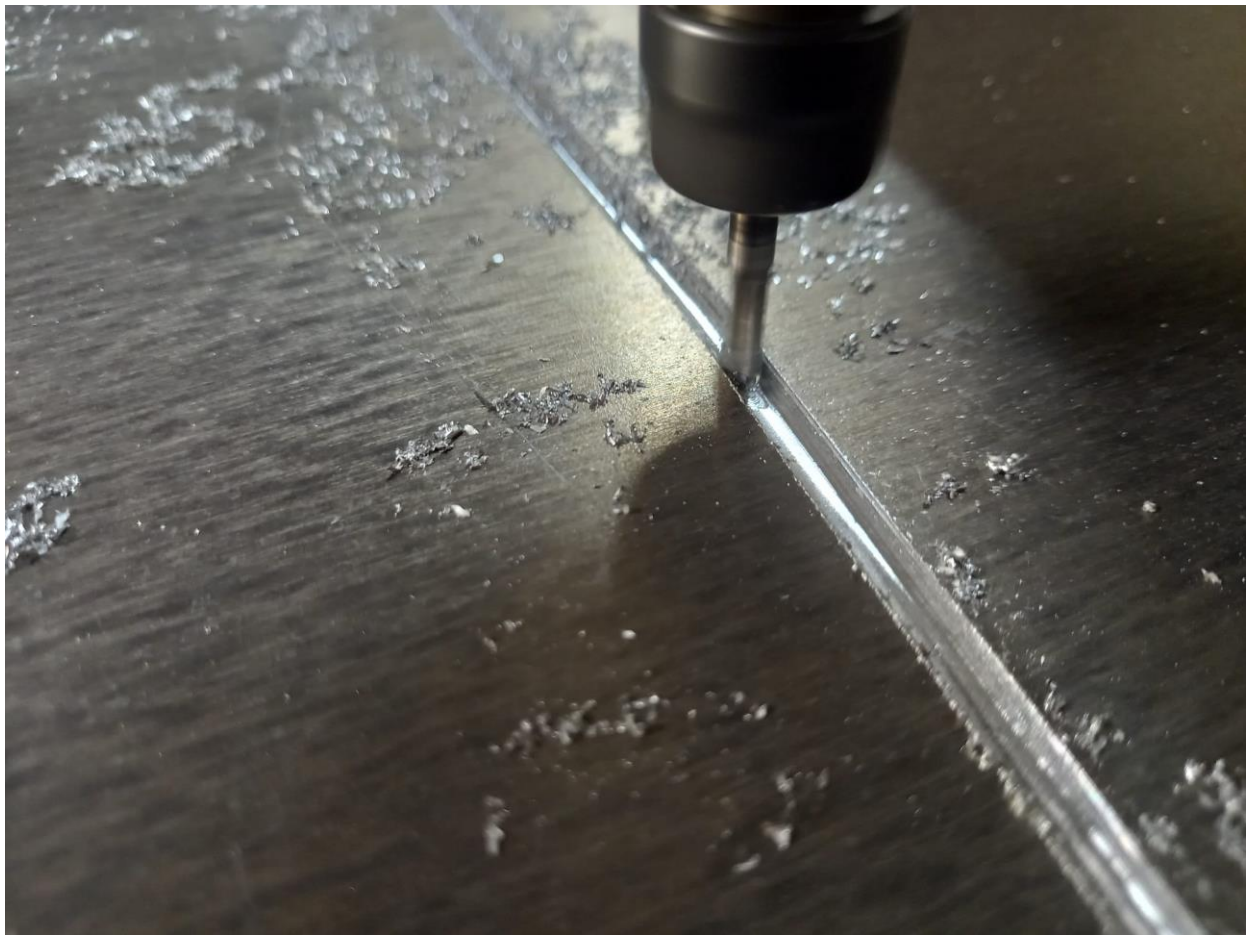
- **Bart Burgers, Pegasus Spitfire MK9 (Full Scale):-** Progress has been steady and going well. I am waiting for more ply to arrive so I can do more work on my right wing. I have started the first steps for my left wing and although I have done one before it still is measuring and measuring to make sure all is ok.

Got to organize another trip to BBS timber in Henderson as I have run out of Oregon pine from Canada.

As a “Woodsman” I am familiar with anything wood, now I have to teach myself to work with metal and alloys. Fortunately I do have a ‘Wee’ bit of help from some nice people of the SAA...thank you all very much.

My CNC router has proved to be a useful tool with this again. I made templates out of MDF first to make sure I was true to the form..

All slowly slowly .....as 2024T3 is not Cheap...Got to be right...



*Above: Machining aluminum on cnc router*



*Above: Right Wing in progress...*



*Above: Wing attachment parts drilled...*



*Above: Wing attachment parts not yet drilled...*



*Above: Attachment Part (bottom) and MDF template (top)*

- **Tony Ashworth: Jodel D18 ZK-OWL:** – I am in the process of swapping out the engine on this aircraft to hopefully reduce weight by about 35kg. I am fitting a direct drive AeroVee VW 2180cc engine, replacing the overweight Subaru EA81 setup which had been modified with a belt redrive configuration. As there is another Jodel D18 with the same AeroVee configuration I have been able to follow the firewall forward arrangement of that aircraft and have had some useful conversations with the owner and separately the original builder. The critical items to pay close attention are 1) the cooling requirements of this large VW engine, and 2) reducing vibration by static and dynamic balancing of prop assy. (Thanks to all my SAA mentors in this project.)



*Picture above showing a completely bare front bulkhead on the Jodel D18. It will soon be covered with a 1/8" ceramic blanket (1200 degrees Celcius heat-proof) then a thin stainless steel plate – mirror finish for good viewing of back of engine – then the welded 4130 grade engine mount and other ancillaries will bolt through both of those to the wooden bulkhead. My Flitzer fuselage is standing vertical resting on right hand side and is a bit neglected until the Jodel is up and flying again.*

*Theoretically 'One project at a time' is the rule for the best chance of completion. I was trying for one flyable, while building the other. It has not really worked out that way... sigh!*

- **Grant Horn: Vans RV6a ZK-RVA (engine work) & Vans RV7a (under construction): –**

RV6a: Who would have thought as a dairy farm owner I would be praying for it to stop raining in the middle of Feb. There has been a bright side to it though as often it was too wet to go to work for the earth moving company I drive for so quite a bit of time has been spent at my aircraft manufacturing facility, as our friend Graeme Browning would call it. Speaking of Graeme, RVA has been grounded for 12 months now because of engine problems. Chris, Graeme's son and owner of RVA, and I have come to an arrangement that will get RVA back to air worthiness. The bottom plugs were fouling with oil while idling. The cylinders are chrome and the rings were never bedded in properly from day one. It is hoped that some cylinder work, new rings, correct oil (W100 and not W100 plus) and the correct running in regime the problems will go away. Time will tell.

RV7a: As I said earlier the wet weather has given me bonus time in the hangar and am working on setting the rudder and brake pedals up at present. The foredeck structure is all set for riveting, the top skin is all prepared but I will do the panel work before that gets riveted on.

The wing skins are still not primed grrr. They are ready to go and once primed there will be a few thousand rivets to set. Ideally I would like an uninterrupted weekend of suitable weather to do this priming. I also need to be well organised to get all 8 skins prepped and primed both sides.

It will be my luck the weather will allow priming to be done next weekend when our flyin to Tokoroa is to take place. Luke Frogley is a new member to our chapter but it seems he has been involved with flying for a while. Whatever, he has taken delivery of a QB Bearhawk. The wings are in the Tokoroa airfield and the fuselage is at his home less than 5 minutes drive from the airfield. This will be a chance for us to meet him and a chance for him to discover who has what skills and or equipment or tooling he can call on. Bruce Cooke has put together a spread sheet of this info but I'm not sure how to access it. Talk to Bruce. I have asked Simon Nicholson, who put Covid to good use and built a 4 place Bearhawk, if he would bring his example to Tokoroa for us all have a good look at the final product. Simon is not a member of our Chapter but has agreed to fly his plane to Tokoroa for our benefit. I still need to confirm that with him. Here's hoping.

I was told by a logging contractor once, there is no such thing as bad weather just inappropriate clothing so my approach this summer has been, just inappropriate activities. This was started pre-covid disruption, but this project has only now managed to come to the top of the queue.

As can be seen there is still some way to go to finish the plug and gives an accurate picture of the final shape for this replacement part. I have, hopefully, got past several



physical mishaps that have slowed down clearing the backlog of "must do " items and look forward to being able to concentrate on this project now..



*Above pic shows RV7a with front fuselage bracing and Canopy rollover protection in place.*



Above picture shows RV7a rudder pedals being assembled – upside down in vice...

- **Dan Harcourt: Rans S-21 reports:** – My S-21 update. Finally on its wheels and outside for a picture! Paint, avionics and engine work next... Dan has sent three pictures as follows:



*Above: side view on it wheels! Nice...*



*Above: Rear of fuse and rudder seal to fuse*



*Picture above: view from the rear with stab fitted, no elevators in place yet.*

## Been Flying:

- **Scott Montagu: Corby Kestral ZK-SJM at Matamata:** – Great to finally get those Hangar doors open to burn some gas...

