



Westland Whirlwind Mk.I, P7056 'Pride of Yeovil'

Whirlwind Fighter Project

Winter Newsletter 2025/6

This newsletter is largely focused on the build of P7056's tailplane and elevators that occurred in November and December of 2025. Following the milestone of the autumn when the tail fin and rear wheel compartment was installed, we are not resting on our laurels!

It has been determined that a further partial install of the complex tail of the aircraft should be carried out before the re-opening of the Museum at Hawkinge – home of our Westland Whirlwind – which is in April 2026.

There are a few reasons for bringing this section's installation forward – chiefly being the workshop has only a certain amount of space and having finished components of the tailplane awaiting install is a risk to those parts and a hindrance to work on the next major phase – the wing centre section.

So, although a major install was planned for November 2026, which would have finished the entire tail in one event – we have decided to split that into two parts for better management at the workshop.

More and detailed build news below...

Project News:

One piece of good news for the project's finances came in the form of a grant from Aviation Heritage UK (AHUK). They had been entrusted with a financial disbursement from the Airbus company – some of which was directed to heritage aviation bodies that Airbus already associations with; but the remainder was to be disbursed as AHUK saw fit. AHUK put out a call to member organisations asking for tenders. We applied – and were pleased to receive £800 in a grant to be used towards tooling for the next phases of our build.

You can read more on this on AHUK's website:

<https://aviationheritageuk.org/ahuk-makes-grants-to-member-organisations/>

Communication with Members.

We are offering communication to members using WhatsApp – it's a one-way method of sending members who sign up some interim news from the Workshop. All these interim updates, and more, are featured in this newsletter below under Build News.

No-one misses out – all members receive all the updates – its just that we offer more timely interim updates via WhatsApp.

Reply to me via email and I'll start the process to add you – but please send me your mobile number.

This newsletter covers the end part of the year 2025; I will put together another one that focuses on the early months of this year – as quite a lot has been achieved in the workshop and this missive would get too long and be overly delayed.

There are already other methods of reviewing our progress – Pete's YouTube channel, for instance:

<https://www.youtube.com/@whirlwindfp>

P7056 Club Night

We held a successful Club Night via Zoom, on the 11th January, 2026. 17 team and project members attended to hear Pete Smith – our engineer extraordinaire – go through current build activities – including an explanation as to how he takes a part from Gunnar's CAD model through steps he needs to create a physical part to be created on his CNC machine.

To watch this recording please follow this link and enter the password:

<https://us06web.zoom.us/rec/share/NuHnyAZ7NKtE3Ec0mpRKbdeCs3u-V9jivWr1Smg7S1GVfHMLeOnMD4r0zCLY8C7T.PYRCGIAIZohzZ9Fd?startTime=1768160572000>

Passcode: +4*iiuzp

I do not decide what the passcode is!

When is the next Club Night? 12th April!

Build News:

Following on will be some text and images, culled from what Pete Smith sends internally to keep the distributed Team informed as to progress and those he displayed at the P7056 Club night.

Pete started work on what I could call phase 2 of the tailplane back in October 2025. Then we had the AGM and other matters to deal with - whereupon he kicked into full tailplane mode in the month of November.

Work on the tailplane continued with spar shear web and doubler plates manufactured and fitted together ready for riveting up. Preliminary work on the tailplane jig started, too.



Pete re-designed the tailplane jig to allow him to use it for the base of the stretch frame needed to manufacture the leading edges - not just of the tailplane but also the wings. The jig's mainframe here was completed and welded up. This allows him to align the brackets and stops for the elevator screens, thence to build the tailplane.



The elevator screens were blanked out of sheet aluminium using the CNC machine. Several hours of rolling, bending, drilling and riveting to go!



Port elevator screen rolled - and looking good.



Elevator screens green-fitted to the tailplane jig.



Onto the ribs for the tailplane.....

CNC in use again - this time to cut out formers and bolsters for the tail plane's ribs.
24 ribs to be made. 20 for the tail plane's nose.



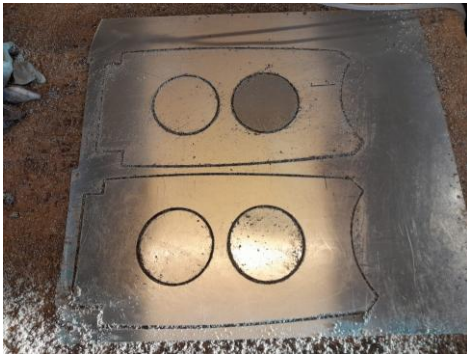
The dies with the extended 'finger' are for special hinge brackets near the ends of the tailplane - for the elevators.



Remember - this is what we're aiming at building....



First of the tail ribs cut out, with lightening holes, port and starboard, formed and trial fitted.



The first pair of many. Lining up where they should be - next step is to make more and the swages to create the flanges for the holes.

Ten inboard tail plane ribs formed and green fitted.



Elevator screens riveted up; new swaging dies for the outer ribs manufactured. Inner rib dies to finish next, then onto 1000+ holes to drill!



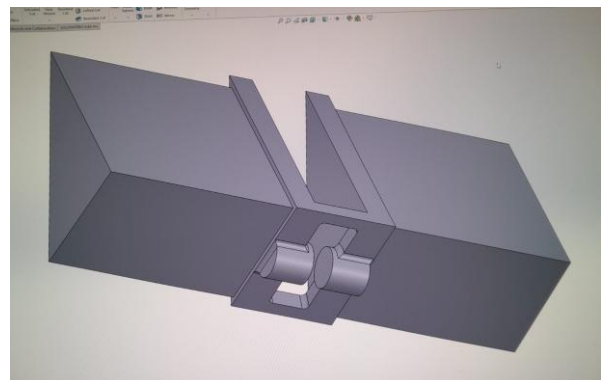
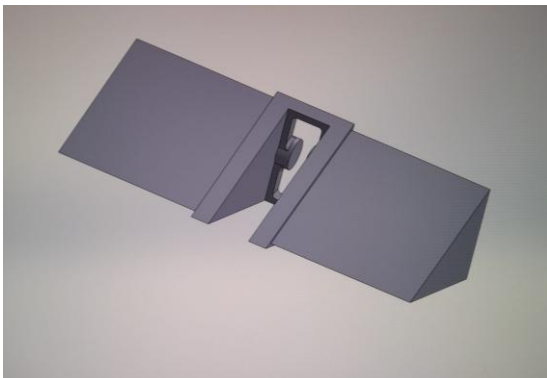
All the ribs finished and cleco'ed to the tail plane.



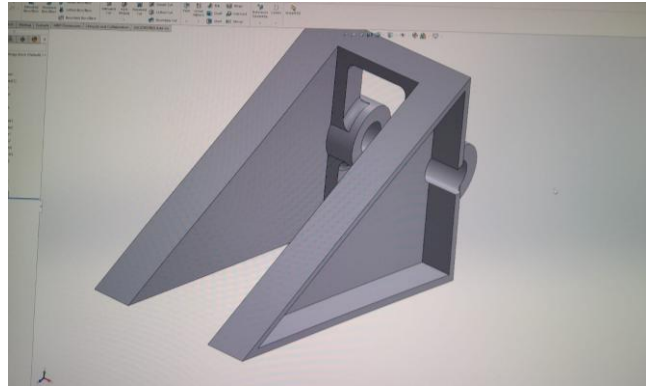
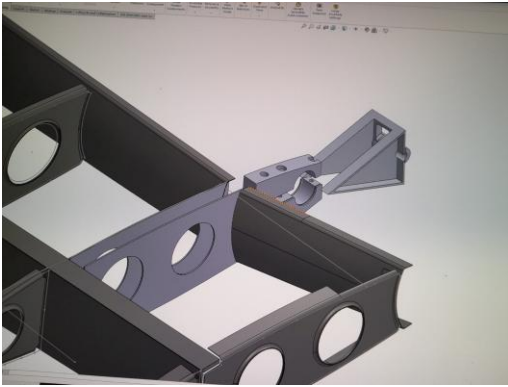
Tail plane spar off the jig. All riveted up. The jig proved its worth - it all stayed straight when removed.



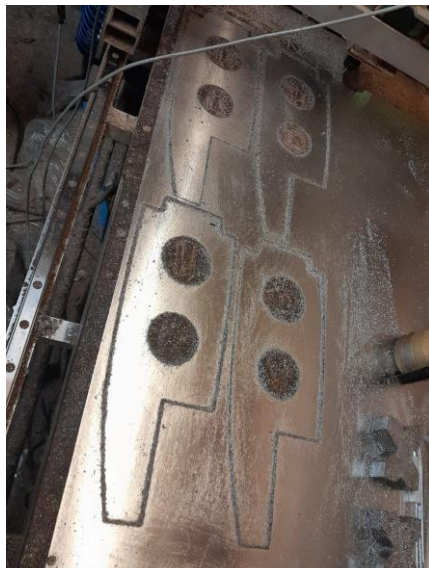
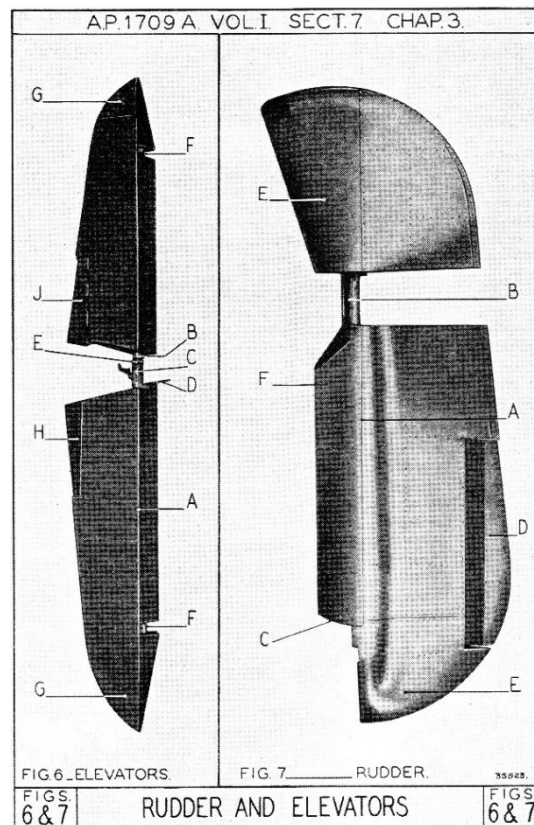
Pete occasionally sets us Smiffy's Dead Hard quiz.
"OK - so what's this going to be then?"
Image off of Pete's computer screen - from his modelling software.



Only one of us got close! It's the balanced split pattern for the elevator hinge blocks!



What it will look like when its cast and where it goes (F).



CNC in use cutting the four tailplane outer hinge ribs for the elevator.



The tailplane nose dies are next off the production line.. and there's progress on a few fronts.

They resulted in a lot of sawdust - creating formers for the nose ribs.

Port and starboard formers for the tail plane nose ribs finalised.



The smaller curved aluminium brackets are the connectors for the tail plane hinge ribs to the elevator screen.

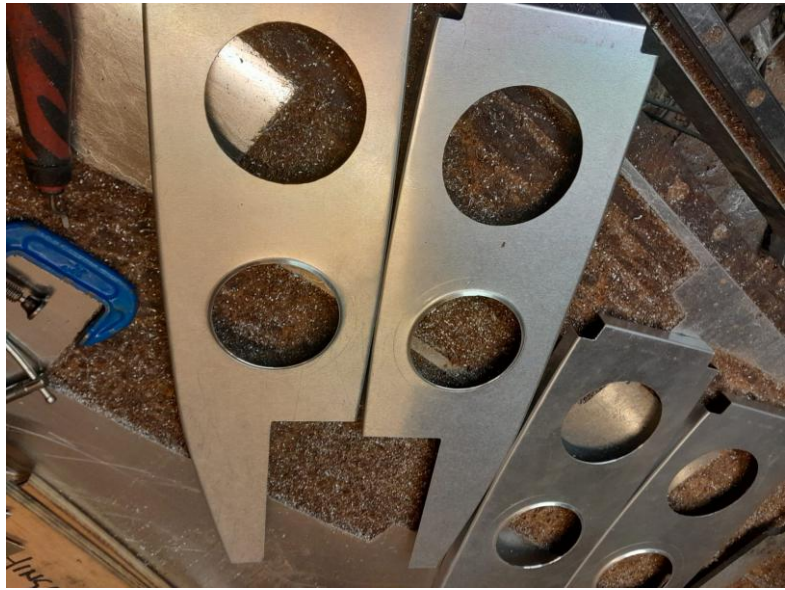


The lightening holes have to be swaged - so Pete cast his own swaging rings.

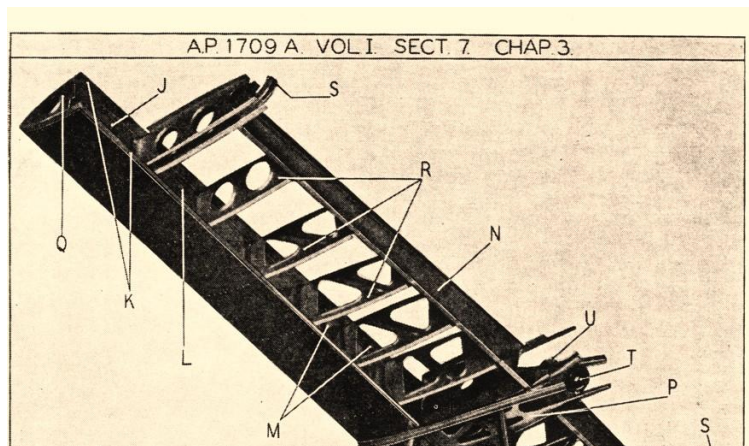
Once made, put to use.



The finished product.



Just as a reminder - this is where all these components are heading.



The sharp-eyed will notice the lightening holes are a different shape. Occasionally we have had to bend to economic sense in building this aircraft! The dies needed to form those triangular shapes, while absolutely accurate to the aircraft, would have cost more than we dare spare.

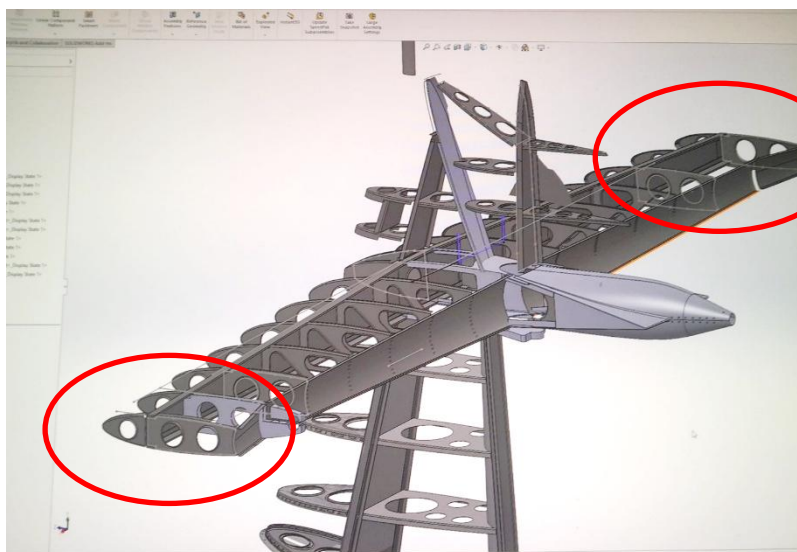
Casting the upper and lower tail plane hinge rib bearing blocks – and where they live.



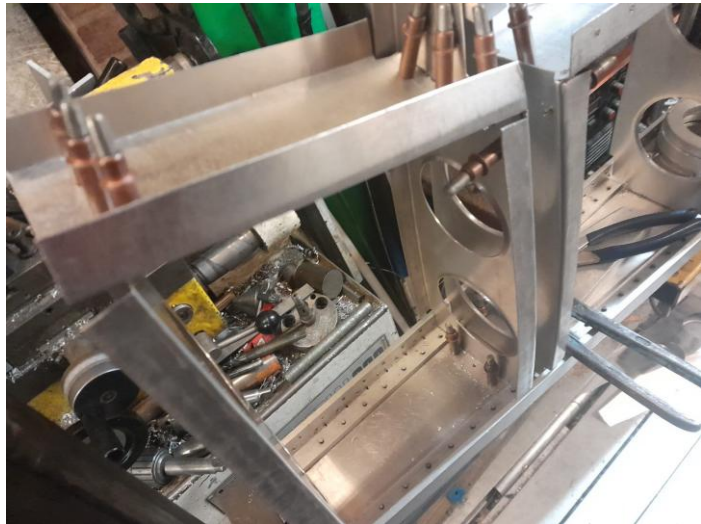
Here's a view along the elevator screen as it develops in the workshop.. with the hinge ribs in situ. One is in the close foreground, the other the far end.



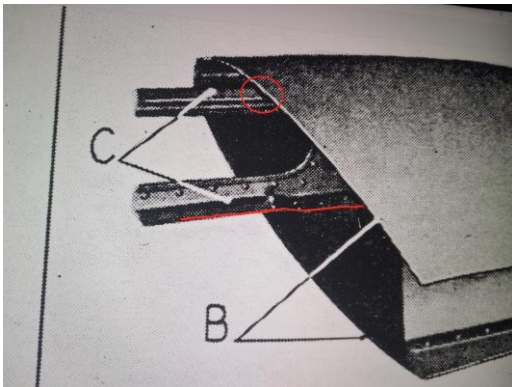
Work carried on along the tailplane towards the tip section..



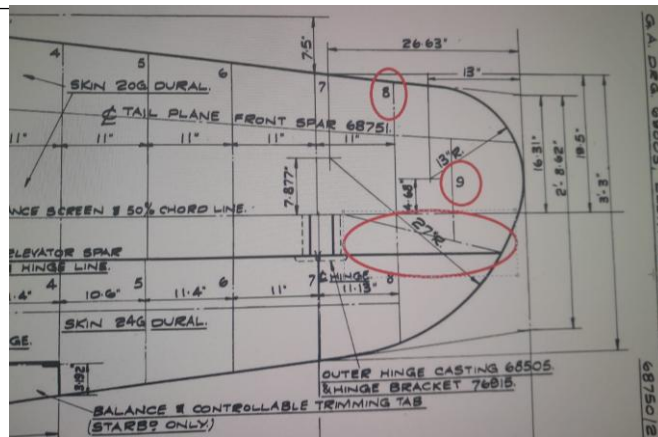
Here's those hinge ribs again – they work in pairs. The tailplane 'flares' out towards the tip attachment.



A discussion was had as to exactly how the tailplane tip connects to the tailplane end spars. Here's the only image from the AP showing the structure.



We are aiming to replicate the tip structure ribs from this sketch diagram – which is pretty much all we have to go on.

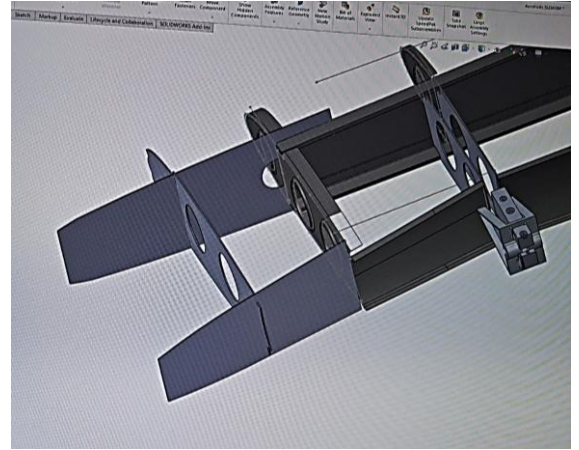
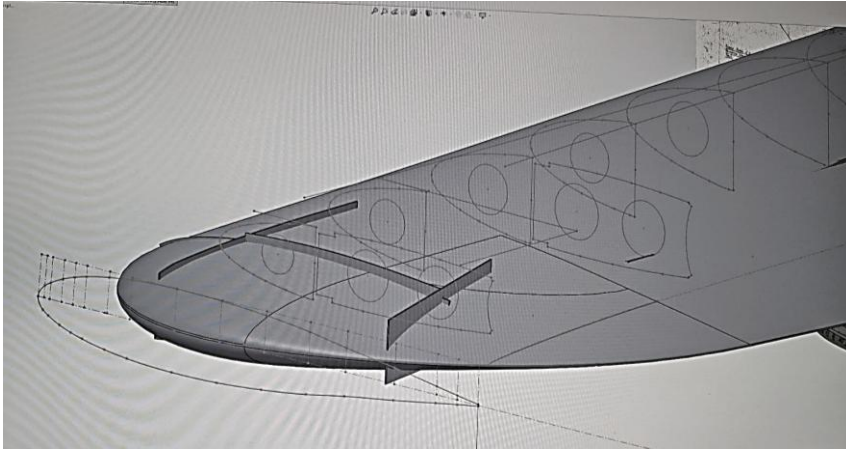


Onwards, ever onwards. CNCing the formers and bolsters for the tail plane tip spar rib.



Over laying Gunnar's skin model on the tail plane, to check the flat components fit to the tips before I finish forming them.

All aligning rather well.



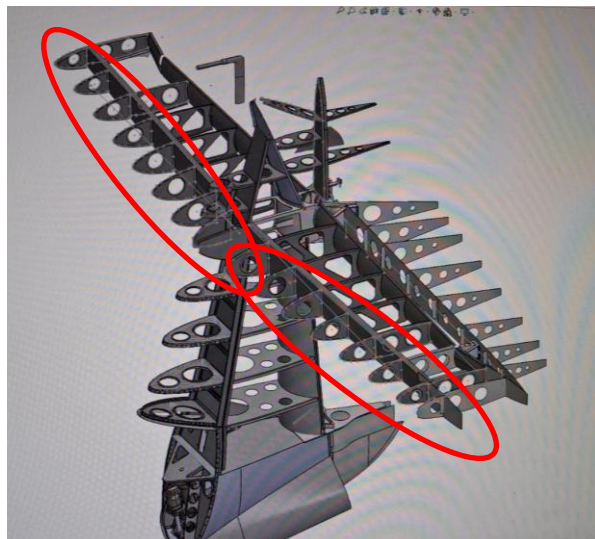
10 tail plane nose ribs, two tail plane tip ribs CNCed ready for forming. Four more to do, and we can rivet it all together ready for the main skins.



Forming the tail plane nose ribs...

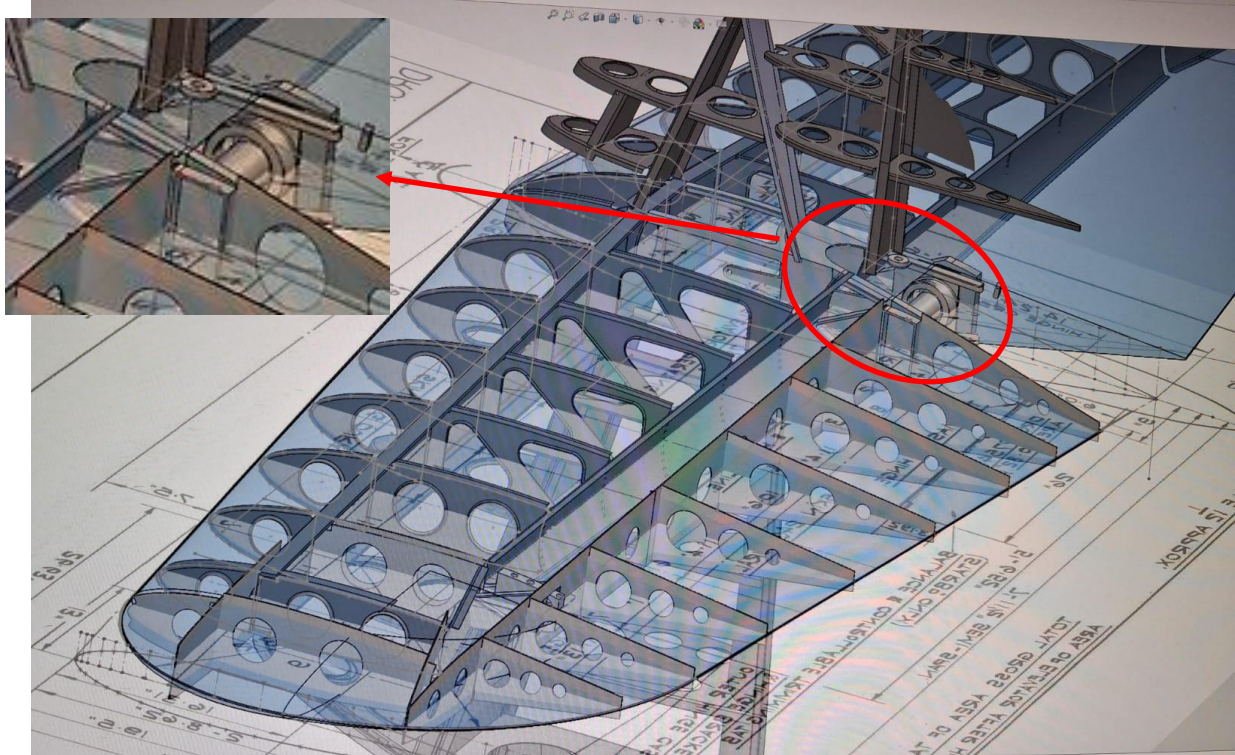


These are the nose ribs on the aircraft.



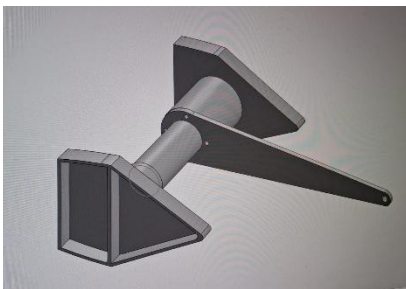
Pete switches attention to casting aluminium - thinking ahead to manufacturing the elevators. The outer hinge arms are made – as part of the tailplane structure, but the inner hinges are cast items.

The elevator hinges are 'buried' in the complex structure of the tail.



So – and to bring this newsletter to a close – Pete spent time in the run up to Christmas 2025 creating the hinge mechanism.

Stages in modelling, casting and machining the hinge elements.....



Resulting in the finished article.... And where it goes.



The install currently planned for March this year will not necessarily include the elevators – but they have to be made and proven to fit the tail elements Pete has in the workshop before those parts go to Hawkinge. It just makes planning a little more complex!

More later... dear esteemed members!

*Peter Lancaster
Membership Secretary
Whirlwind Fighter Project*

February 2026