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

Whirlwind Fighter Project

Summer 2025 Newsletter

Project News:

A few small updates here – in the last newsletter we spoke about becoming a more fully-fledged charity and an application to HMRC to receive Gift Aid. Well, that application is in – we await their deliberations with bated breath!

When this pops out we will be able to apply for Gift Aid on UK-based payments and donations from when we were granted Charity Commission charity status; those UK taxpayers that have supported us in the recent period please be aware.

The charitable status that we have received has allowed us to approach some organisations – chiefly PayPal – to be granted a discount from their charges.

Oh… and the price of aluminium went up again! Now it's increased by 161% since the beginning of the project. So, we feel doubly justified in laying in stock of this precious metal for the future build effort.

P7056 Club Night

We held a P7056 Club Night via Zoom on 13th July. All current members should have received an invitation. The club night went very well apart from the normal start-up problems. We had 7 members present online so I would like to say thanks to the following for being there, also to Pete Smith who spent nearly 2 hours explaining how we got to where we are today with the tail section.

Members Nigel Merrony, Ed Shepherd, Dave Smith, Nick Jordan, Jeff Beaumont, Michael Coghlan and Thomas Rear as well as Team members all attended.
A recorded copy of the meeting can be found here:

https://us06web.zoom.us/rec/share/UL_K0WxaOdG_alciKTS4lpLCOUouHjTNk4xSaBk1vdKdYx5rOyYUINfDDj6BXPJP.4STSmaWD1tREZYfe?startTime=1752432796000
Passcode: i=w0CiPM

A short discussion was also held on the build of the centre section which supports the fuselage, engine nacelles and undercarriage. There is already quite a bit of thinking going into the planning and

construction of the wing centre section, although that will be a few years hence. The Whirlwind had a fair height to it when it was 'on its legs' which will require of the Museum a bit of real-estate planning, too.

Incidentally, we find that we could have a problem regarding the main undercarriage wheels and tyres. If anyone can offer advice it would be very welcome. The tyre size is 10.6" hubs and the wheel 31.6" Dunlop AH10110 which are as common as hen's teeth.

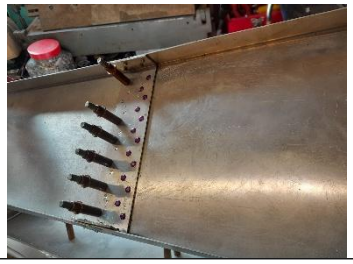
Work has also been progressing with Jamie our 3D printer guru nearing completion of the 2nd Peregrine engine. When that is finished its all hands to rubbing down and smoothing out so that we get a nice finish to the engine as it will be on show to the public.

Build News:

The build is progressing nicely with a great deal of momentum towards completing the tail section which, due to its size, will have to be delivered to the Kent Battle of Britain Museum Trust in two parts. Firstly, the fin plus tail wheel housing section in September is down for delivery and installation soon this year with the upper fin, rudder and horizontal stabilizers following on.

This is not how Westland would have made the tail - but we don't have the luxury of access to an aircraft factory – so a different approach is necessitated. Pete is also now making parts that will not be fitted in September but is green-fitting them to the tail fin section that will be installed soon - to be sure they will go on when their time comes. The staged approach is largely dictated by the procedure we will have to go through to install the tail to the rear fuselage. It will have to be done in two phases in order to get it done, given the need to honour basic practicalities and resources available at the Museum site.

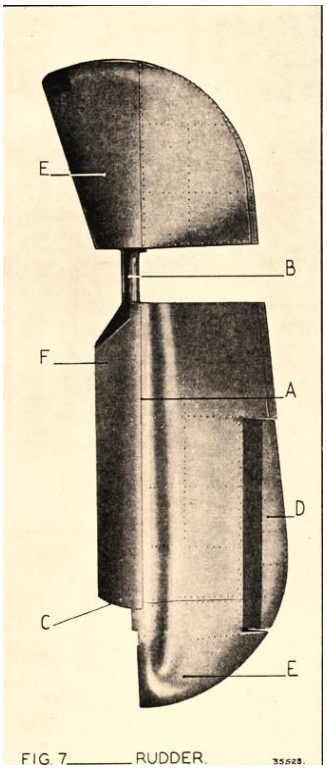
A lot has happened since the last newsletter – the Chief Engineer has made much progress on multiple fronts. The lower rudder nose, for example, has been built up from individual components to the finished article:



Rudder spar cut out – strengthening plates added – trial fit with upper and lower pivot arms. See 2025 Spring newsletter!

Special self-aligning bearings for the rudder.

The rudder nose comprises of internal ribs…. Here seen juxtaposed with the fin itself - with its ribs visible.



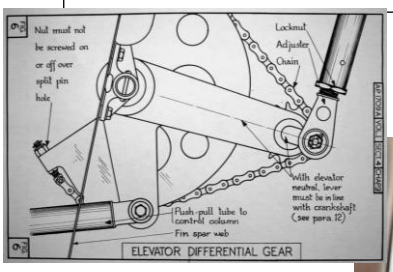
The rudder nose (F) being built up and rivetted to the spar (A - hidden), and onto the rudder post (B).

View from above, with the fin/tail plane connector component partially in view in the foreground.

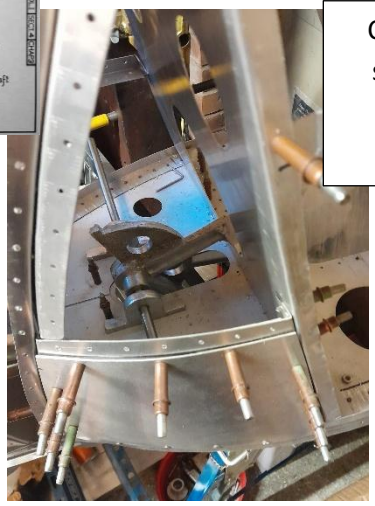
It's long – and this is just the lower rudder nose section.

Rivetted up and pivoting smoothly on the rudder post.

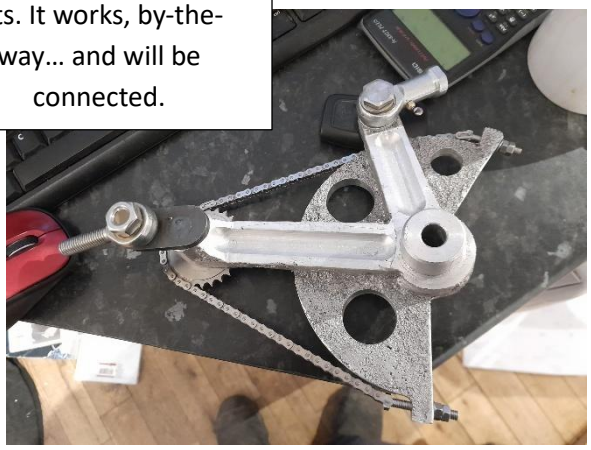
Onto making the patterns for the elevator differential gear castings.



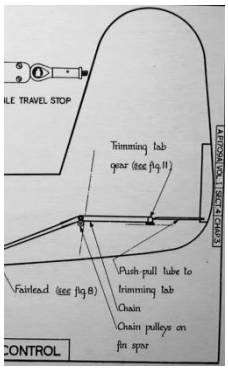
Gear castings - realised in metal and assembled.

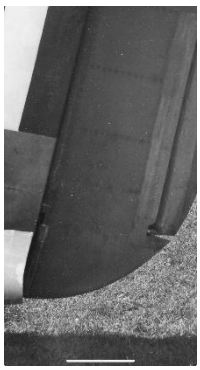


Completed – where it sits. It works, by-the-way… and will be connected.

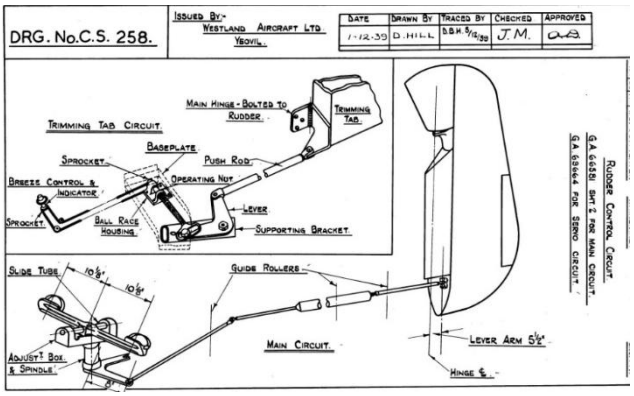


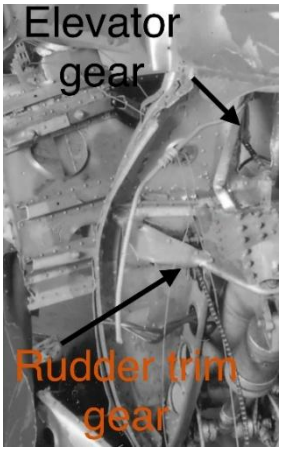
There was had a rudder trim tab discussion – alongside Pete working up components for the aft end of the flight control tail rods – that link the pilot's control column all the way back to the rudder. The rudder trim tab has control mechanisms that fitted inside the lower section of the fin but, crucially, as we have no complete plans, we didn't know exactly where the mechanism sat – to which part of the fin/rudder structure it was attached. There are schematic images in the AP of the control mechanism and a photo from a crashed Whirlwind, so that's what we had to go on in locating the trim tab mechanism. It took a bit of working out - 'Sherlock Holmes-style'.

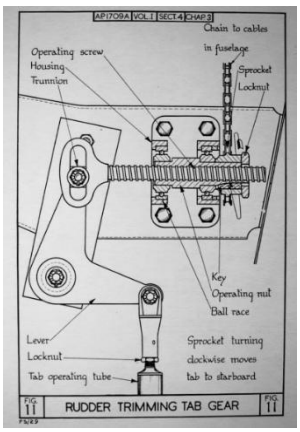




These diagrams and a few photos are pretty much all we have to go on in siting the mechanism – requiring team-wide deduction and ingenuity.

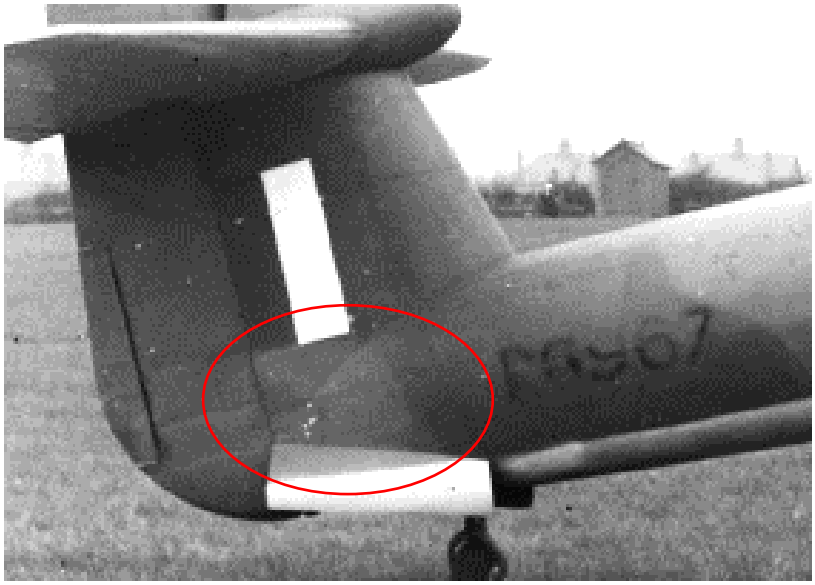


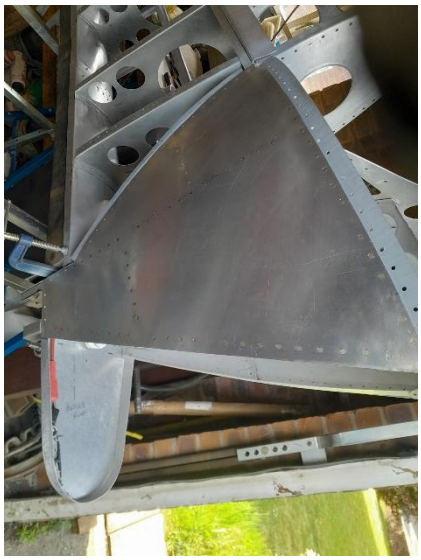




Important element of the mechanism – realised in metal.

Skins need manufacturing too. Here's an image on P6967 where you can see the starboard quarter panel. Port and starboard panels for our build have been through cutting, shaping and the big rivet. Here's the starboard panel in place showing the fin's internal ribs behind and above, with one fin nose rib in view. Image from the workshop rotated for alignment.





Drive chains and cables were used to transfer pilot input to the tail section i.e. so he could fly the plane – and, for the tail, were routed through the rear undercarriage bay.

Detail from the image above of the crashed Whirlwind's u/c bay showing both.

Drive chain and cables for the operating rudder trim tab. The control system comprises a chain/wire/chain combination from the cockpit.

Pete started making the skins for the fin section:

Undercarriage bay doors… some complex curved channels in there. These are test pieces to form the ribs that separate the inner and outer doors. Yes, each rear u/c door is double-skinned.

The use an English wheel was necessitated to form the correct shapes to the u/c door skins. Here they are taking shape:

Laying out…

Much wheeling later…

Fitting better…

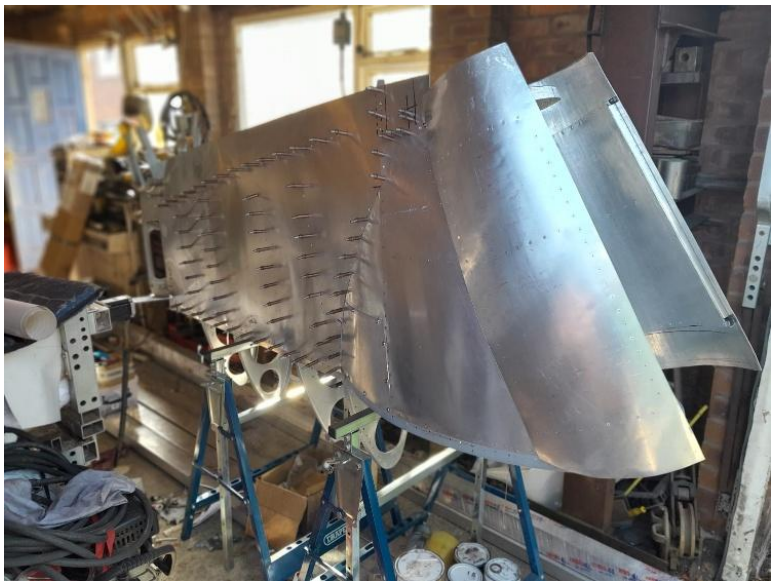
Holes drilled, inter skin channels cleco-ed into place, trimming to be done.

We could go on and on with images of even finer points during this summer's efforts – but I think this is enough. Pete will release one of his fact-packed videos on YouTube presently so you will be able to see moving images and more of the construction process. We will wrap up the build section of this newsletter with some final images below. Pete's completed all the components he wishes to trial-fit to the fin and undercarriage section – so they are awaiting further effort for phase 2 of the tail build.

The installation of tail section part 1 is still planned for the weekend of September 21st – very soon!

Here are some images that Pete released during the Club Night in July:

Lower quadrant view of upright lower section of tailplane. Skins off, skins on – and it's the other way up..



OK, so what is this below? (No, it's not Henry VIII's codpiece or an iron maiden or where Pete likes to sleep at night.)

It's the housing for the rear tailwheel. Those are the completed undercarriage doors – waiting for the final rivet. This is a view only ground crew would have to contend with.

The tail wheel will of course, due to health and safety concerns be locked in the down position. Pete has the doors in working order, though.

Dates for your diary, dear members:

P7056 Club meetings:
8pm, October 12th, 2025.
8pm, January 11th, 2026.
AGM – 26th October. Time TBA.

The AGM will be held at the Kent Battle of Britain Museum, Hawkinge – as a hybrid event. A few Team members will attend in person bur space is limited. Zoom will be utilised to facilitate most members' attendance.

The Whirlwind Fighter Project is registered with the Charity Commission
Charity number 1212316
The Whirlwind Fighter Project is a member of Aviation Heritage UK
Honorary President – Tom Eeles (Group Captain – rtd)
Honorary Vice-President – Jim Munro
The Secretary: Chris Hayward: 57, Bramblefield Lane, Sittingbourne, Kent, ME10 2SX
email: whirlwindfighterproject@outlook.com
www.whirlwindfp.org