



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

Whirlwind Fighter Project

Autumn Interim Update 2025

This is just an interim piece on a particular subject; the wing centre section build. As has been mentioned previously - this crucial next phase of the build is taking shape in the mind of our engineer extraordinaire – Pete Smith.

He is currently working through the manufacture of the tailplane, elevators and upper fin – all to be installed up to a year from now.

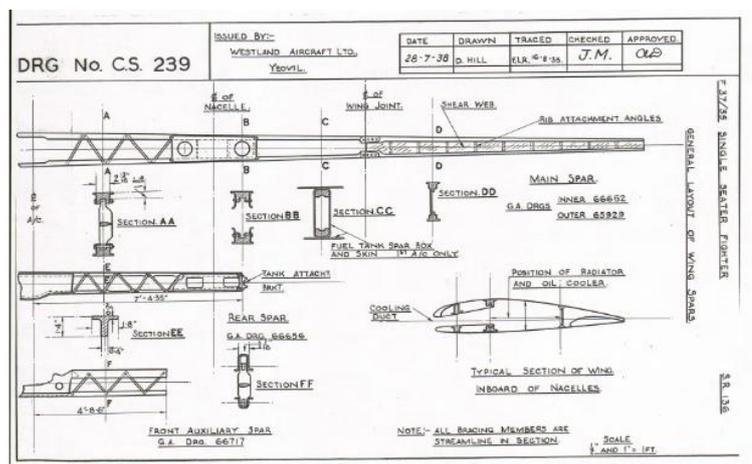
We are updating members on current progress to members who supplied their mobile numbers to be added to the P7056 Build WhatsApp chat. All other members have the same opportunity! Just let me know your numbers – and I'll add you in. Newsletters will follow as before.

However, as to the wing centre section – there have been some uncertainties in the mind of our design authority – Gunnar Olsen - and in Pete's mind concerning the quality of the information we had to hand for the wings. Read on...

Getting it Right - and the Value of Aviation Archaeology.

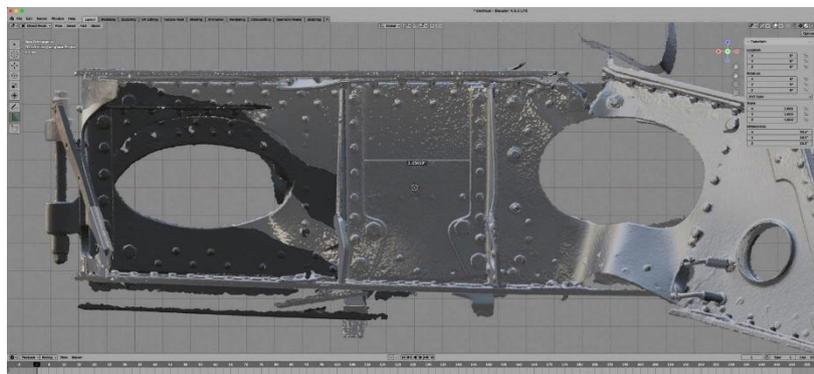
Over ten years ago, renowned rebuilder of Historic aircraft Steve Vizard offered to help the project in any way he could. This included the loan of substantial wreckage from Whirlwind P6966 recovered by Steve, Terry Parsons, Tony Graves, Andy Saunders, Bill Hamblin, John Ellis, and Peter Foot way back in 1979, when Aviation Archaeology was at its peak, though with some questioning its value.

Whilst drawing up the CAD model from surviving Westland drawings, Gunnar Olsen noticed some discrepancies around the wing centre section that couldn't be easily explained. In discussion with Pete Smith, our Chief Engineer, they concluded that the model produced from the drawings, such as the one here, to not be consistent with the information used to build the model for the cockpit and fuselage. There was clearly something amiss.



Fortunately, we had wreckage from P6966, specifically the spars behind the nacelles, and various laser scans of these parts by our 3D printing expert Jamie of Merlins-R-Us (tech that would be unimaginable in 1979) produced results that did not match the drawings.

These scans are very useful and important. Scanned image of a part without a drawing imported to Gunnar's modelling package.



It turned out that the spar depicted in the surviving General Arrangement drawings was an early, superseded design, and by the time of the first production aircraft (which just happened to be P6966) there was a new, slightly different spar. All later drawings have long since disappeared.

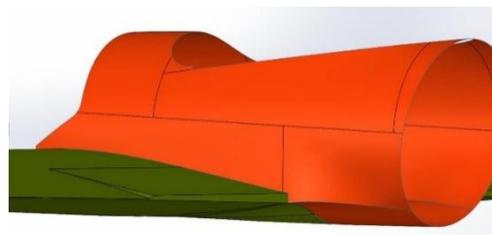
Gunnar has, very recently, gone through the process of updating his model of our Whirlwind with the new dimensions of components as taken from the surviving wreckage of P6966.

While the changes may seem small, it affects how the wing spar is manufactured. A small change in the aerofoil section, for example, changes the spar cross section profile of the four spars. Gunnar has had to re-calculate all these details to rebuild the model. This isn't an operation of a few mouse clicks.

Just to confirm the model changes that were necessary, he's had to import and assemble the scan data, measure it all, change angles so they fit together, re-measure as a confirmation, fit them together into the existing model and see what model changes were then needed. Then it's a matter of finding the correct profiles and changing their profile thickness to match the current scan. Then he was able to start building the model again. The clear benefit is that Gunnar has already gone through the iterative process of actually working out how to build a model already. He didn't have to relearn that procedure. It's still been a few weeks to get these model improved to be more accurate to the production aircraft.

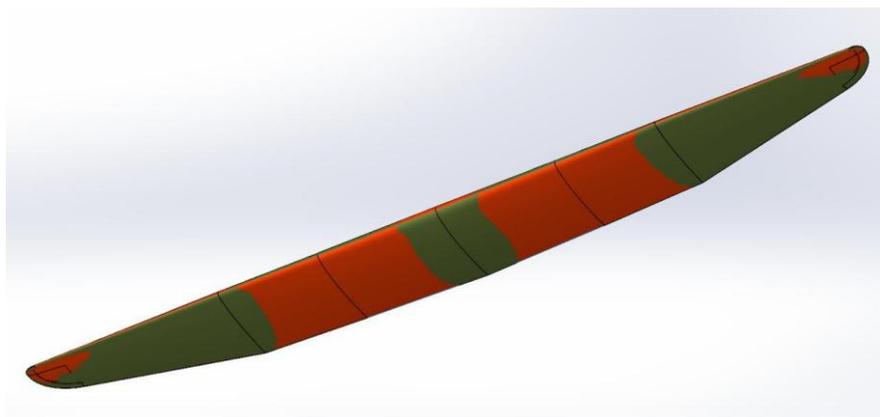
This work has now been incorporated into our overall model. We are confident that the rest of the model is correct from the lack of this kind of discrepancy between sources.

The first image is the actual drawing used to create the first model, the pre-production wing.

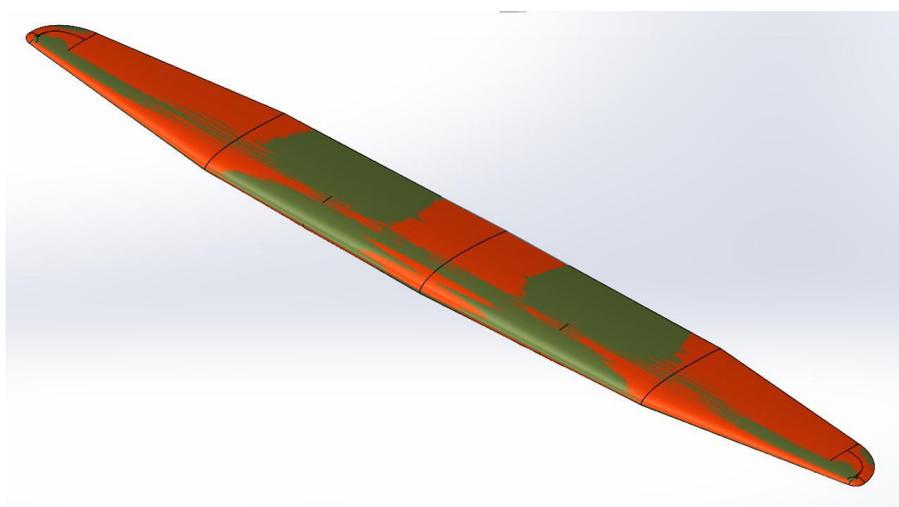


The 3D images show the difference between the original model and the corrected model. The orange areas are the original, the green are the new profiles. This fuselage/wing image shows there has been a small profile change at the wing root intersection. It's really small – but there all the same. The changes in the nacelle areas are more significant.

Lower surface – location of internal changes:



Upper surface– location of internal changes:



Of course, previous model kits and scale drawings have been based on the GAs and APs surviving from Westland and the Air Ministry - so this new information will have the side effect of rendering them all slightly 'wrong' in that the wing profile is slightly 'off' - in the areas that are green in the image above. Our Whirlwind, however, will be 100% accurate.

If ever there was a validation of the practice of Aviation Archaeology, this has to be it.

Pete and Jamie did also get into the inner recesses of the deformed parts of P6966 available to us – and took a number of pictures, and some measurements. Here's some that demonstrate that the strength of the aircraft really lay in the construction of the wing centre section. It was built like a tank.



As stated, work is continuing on the upper tailplane – information and images will follow in a newsletter – or as time permits - for those signed up to WhatsApp.

The project team of the Whirlwind Fighter Project thanks you for your support.

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