

<u>P7056 Club</u>

Home of the Westland Whirlwind Fighter

Newsletter Christmas/Winter 2020

Well... it's certainly been an interesting year for the Project!

It's had its ups and downs... and they continue. Please read on – there is good news for the progress of the build, and the source of such progress shows you just never know what's going to turn up!

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Mike Eastman, who was our Chairman from the very beginning of this project, has had to stand down due to personal reasons and his place is being taken by Tom Eeles. Tom is the son of S/Ldr Henry Eeles - the first CO of 263 Whirlwind Squadron, and who delivered P6966 to Grangemouth on 6th July 1940.

Mike is standing down from the 31st December 2020 and Tom will take over the following day 1st January 2021.

The WFP team would like to take this opportunity to thank Mike for all the work he has put into the project over the past years, because without him it may not exist. He will still be standing ready to help make parts if needs be.

Please take a moment to check out Mike's aircraft group on the internet: <u>https://aircraftrestorationgroup.webs.com/</u>

And on Facebook:

https://www.facebook.com/Aircraft-Restoration-Group-1613873188864206/

We also take this opportunity to welcome Tom into the P7056 Club and we look forward to working with him to complete this project. Tom has been a keen proponent of the Whirlwind over the years.

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As you all know our fuselage build has now been with Airframe Assemblies for the past 18 months or so and the manufacture of the skins is now 50% complete. All that is left to do (!) is to make the bottom half skins and then pin and rivet it all to the frames. Easy to say! To this end they have estimated that it will cost another £40K on top of the £12K that we have already paid out. That figure includes them re-making fuselage frames... which Mike Eastman has already made. We are looking to reduce the workload, thus the cost, by moving the fuselage assembly elsewhere and using Mike's frames.

I have emailed AA and advised them that this amount will take a while to raise and would they please keep all our metal work in their store till we advise them otherwise.

We have been able to clear our outstanding invoice with AA so that now gives us a free hand.

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We had several plans afoot for project visits in 2020 which all had to be postponed, but hopefully next year will bring us better times so that we can get out and about again.

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You may remember from a previous newsletter that we had been trying to get our hands on a Whirlwind armoured windscreen which had evaded us. Well I am pleased to say that we are now the proud owners of said windscreen.



Thanks to Tony Dyer for parting with it.

One of the plans for next year is a quarterly informal on-line meeting via Zoom which will be open to all paid-up members.

This idea was suggested by Charles Shepherd after the last AGM.

I had been looking at some way to get members of the project more involved and treat it like a proper club (P7056 Club) and even if the AGM did have its technical moments it sounded like an idea that we should pursue, so I put it to the team and the idea was accepted. The first one will be on Sunday the 24th January 2021 at 20:00hrs. Unfortunately, you will have to bring your own drinks as the Club Bar will be closed – haha!

Peter Lancaster, Jim Munro and I made a visit to the Kent Battle of Britain Trust at Hawkinge and delivered a large number of instruments and other parts, including the windscreen. This collection will eventually build up to be the biggest exhibition of Whirlwind parts in the world.

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Chris and Peter along with David Brocklehurst and some of his volunteers at the Kent Battle of Britain Museum.

http://www.kbobm.org/

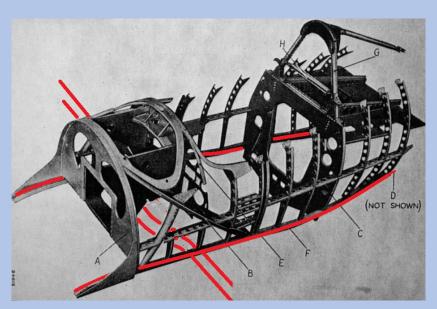
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WFP Member Pete Smith Kicks Off the Second Stage

One of our members Pete Smith has been looking at the forming of the cockpit spars for the project and I thought you may be interested in seeing how he is getting on.

The next phase of the build, the cockpit section, is off to a head start thanks to member Peter Smith, a retired engineer with the tools (a small machining, fabrication and pattern workshop). He has the skills, experience and willingness to bend metal into awkward shapes and an eye for the possible. At last year's AGM he offered his help with manufacture in a general sense, and at an on-line meeting this year this crystallised rapidly into two crucial components that had always loomed as a challenge.

Using Gunnar Olsen's extensive CAD work, Pete is taking 45ft long steel extrusions and shaping them at the awkward and varying angles to form the skewed T-sections of the upper and lower rear spar. He is also bending them into the lower-fuselage profile that they assume as they pass through the centre section.



Cockpit section assembly with Pete's fabrications in red

He is also taking U-shaped extrusions and shaping the even more complex lower cockpit section longerons. These describe the junction between the upper surface of the wing and the fuselage side, and then the (hotly disputed but now known) shape of the flanks of the fuselage before attaching to 'frame 10', which we already have, built by Airframe Assemblies as the front-most bulkhead of the rear fuselage.

Between them, these define the geometry of the centre section and cockpit and will, when assembled, provide the basis of the cockpit section assembly in a very real sense.

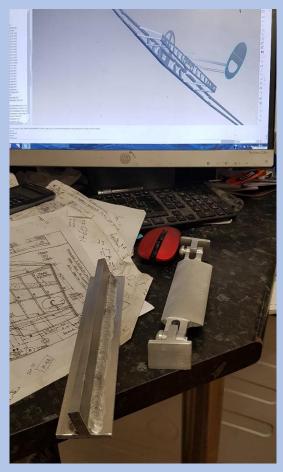
I hand over to Peter Smith...

"Hi guys. Well, bit of a shock result, please see photo.

Again, only a 12 inch piece but the result is very promising. I only welded it free hand, with no guide rail, no pre-heat and no clamping jig and a full heat quench to see what would happen under the worst welding conditions. Result - no distortion. To quote Herr Goering, I could have eaten my hat. The top T is 50mm not the 32mm required as that is what I have in the shop, the down leg is correct. However, both sections are commercially available so no issue there. Not sure I fancy welding a 48ft bead for both spars but if needs must!!!

There is still the issue of forming the bottom curvature and bending the spars to the correct angles, my 80 ton press will certainly move it, but it would need some control blocks manufacturing to keep the alignments I suspect.

My only concern is that I would need Gunnar's drawing to work to. As I stated to Chris and Gunnar your drawings must be the standard. I only say this as there is some ambiguity in the available drawings and



information as to the angle of taper for the top and bottom spars.

In answer to Matt's question about the longerons, I have done some work on this aspect too. There is a commercially available U section that fits the requirement, it would require the two legs reducing to bring them down to the 1.15" in the blueprint drawing, however the depth of the boom in that drawing is wrong, so again a conversation with Gunnar is required. I think it fairly easy to form the aerofoil curve in a roller box and the transition to the horizontal in my draw bender, the lozenge form at the end of the booms to meet bulkhead 10 will be more of a challenge and will require some press tooling to achieve."

Pete has now offered to work on and build the fuselage cockpit section as above. He has already put together a proposed build sequence. He, Matt B and Gunnar are cooperating closely to fine-tune the build effort for the cockpit section.

This is all very encouraging. There is much activity and planning going on behind the scenes...

Big thanks to Pete!

The next newsletter is due out in the spring so I look forward to putting that together in the New Year, and reporting on progress.

If anyone, has anything they would like included in it, please let me know. Don't forget this is your club for all things Whirlwind.

We have a Christmas Raffle up on the site shop page – great prizes are available!

https://www.whirlwindfighterproject.co.uk/shop/

Scroll to the bottom...

Wishing you all a Happy Christmas and a prosperous New Year.

Keep well and safe.

Secretary – Chris Hayward.

Follow us on Facebook: <u>https://www.facebook.com/merlinai57/</u> Help the project via GoFundMe: <u>https://www.gofundme.com/f/4rr2z-whirlwind-fighter-project</u>

Member of the Aviation Heritage UK. Charity number EW37349 Secretary. C J M Hayward, 57 Bramblefield Lane, Sittingbourne, Kent, ME10 2SX whirlwindfighterproject@outlook.com Website- whirlwindfighterproject.co.uk