De Havilland Hornet build, part 11

An Update

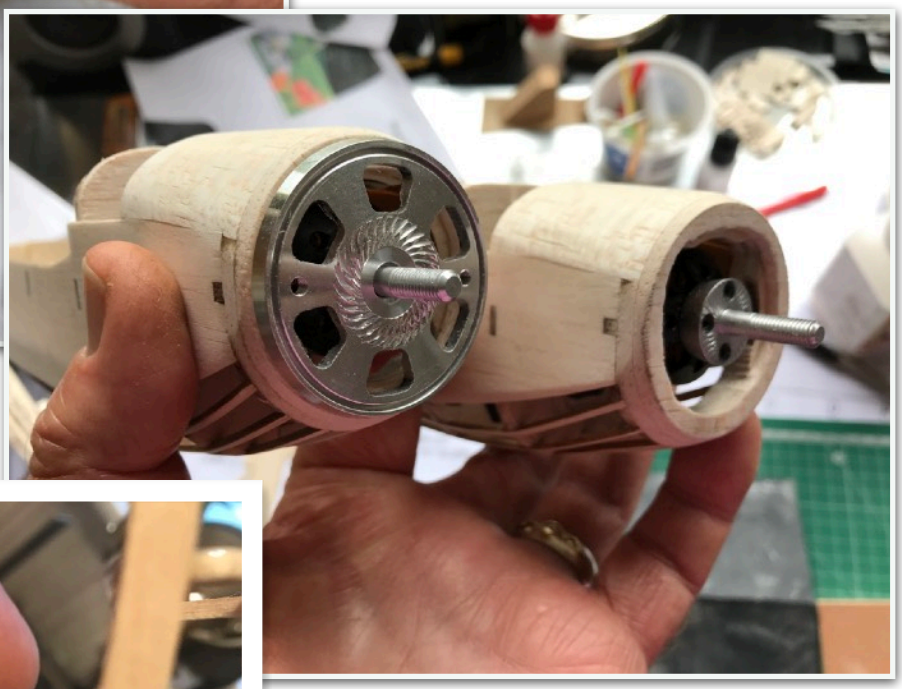
Back in July 2020 I posted report 10…and very soon gave up.

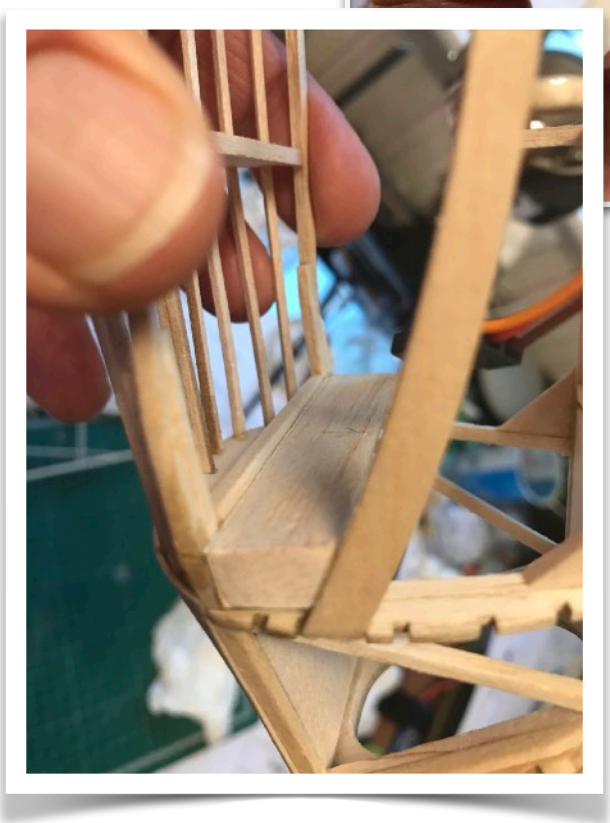
Inspired by Dave Gregson's Beaufighter (see photos under the Flying Sites/Rougham menu) I made another start in October 2022.

In that last report, I was concerned with frame flexibility and I settled on tissue covering for relative strength. I was already struggling with how the half dozen constructed parts could be attached together and covered (slot through wing, with uncertain incidence, with a huge nacelle on each side of the fuselage). Battery fitment was also uncertain - there is surprisingly little fuselage space and for access I was trying to make adequate room through the nose, or make a hatch around the canopy.

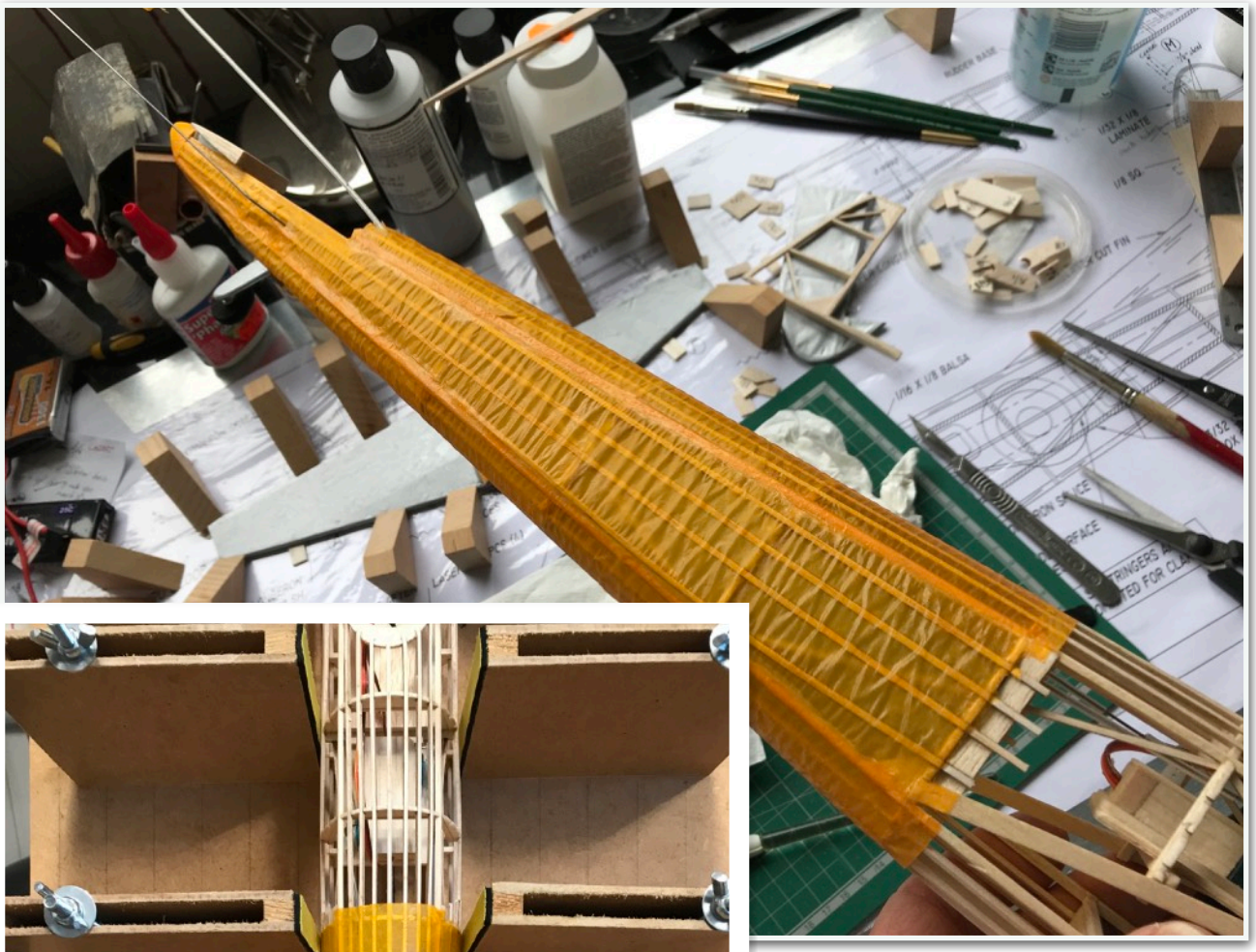
This is one of the last pictures published in part 10:

I did a little more woodwork after that, to mount the motors and seat the wing



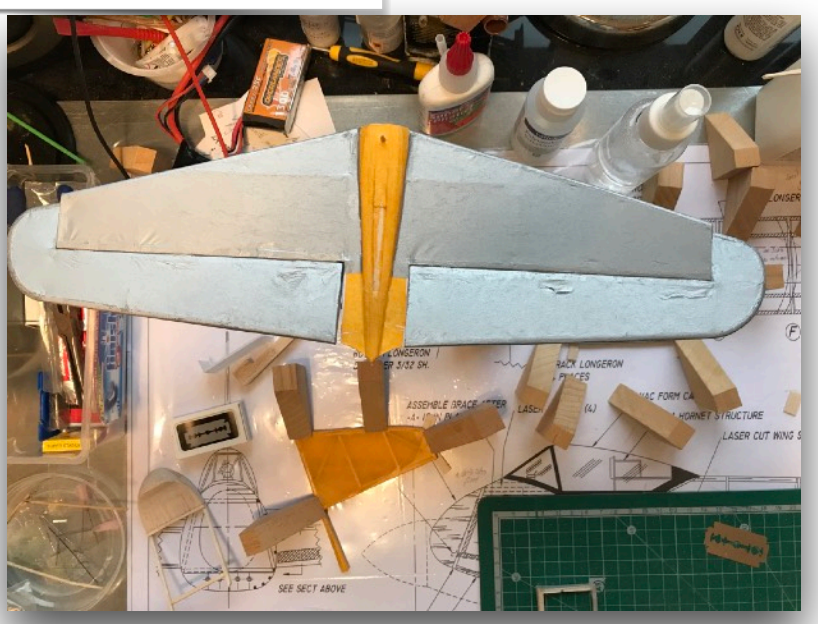


But it was the tissue that caused us to break up. The yellow was pathetic. Wet, it fell apart when applied. Applied dry it was reluctant to shrink tight, though with enough effort and time some semblance of adequate was possible. On solid surfaces I could only apply it pre-stretched and doped (EzeDope) - yet even then it was prone to tearing.



But the silver! Absolute rubbish.

This doesn't look so bad in the picture. But the silver tissue is coated, and will not absorb water once attached. It could only be applied damp. But it can't be shrunk or doped after application, remains soft and it dents freely when handled. Pointless for structural strength too.



In the intervening years I have used some as loose wrapping for presents…

I tried to find replacement silver, but to no avail and at this point put the model away.

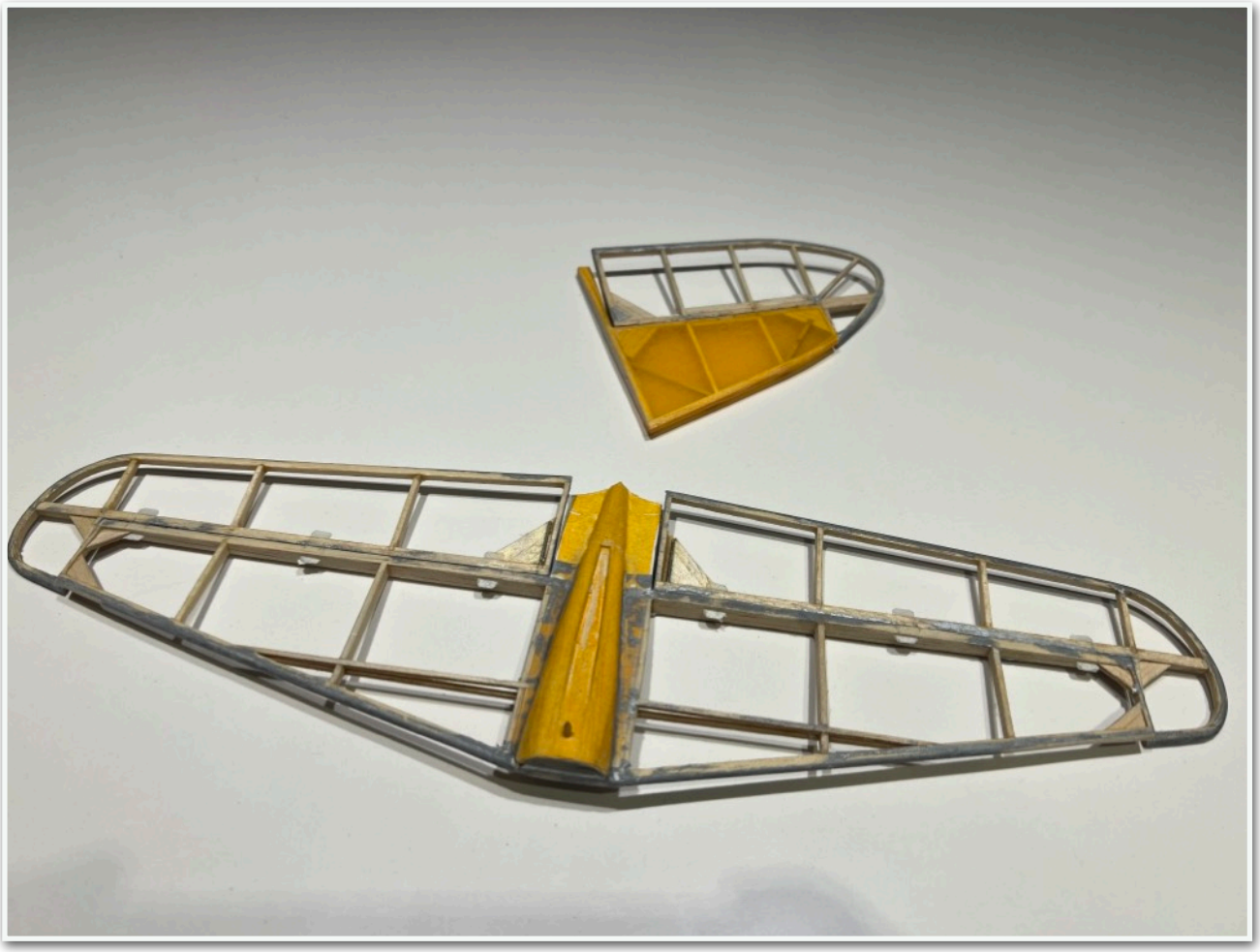
(As a footnote, thanks to Al at Al's Hobbies, I have since acquired one pack of West Wings silver tissue - the last in a UK shop and far too valuable for this project!)

That was then this is now

Inspired by Dave's Beaufighter, with it's very similar configuration and, frankly, a superb solution to wing attachment, I got the kit of parts out for examination.

Because of the modifications I had made to what was designed as a free flight rubber twin; because I had packed the thing away in disgust; and despite my notes, it took a stupid amount of time to work out where I had got to and what was to be done.

Regardless. The silver tissue was stripped and surfaces prepped for Solite silver.



Despite being inspired by the novel (to me) split fuselage construction of the Beaufighter, I eventually discounted this approach. The Hornet is only 34" wingspan, so dismantling for storage is not so critical. The model is designed to fly at maybe 170g. Mine will weigh more like 600g, with all the extra weight in the wing area and forward.

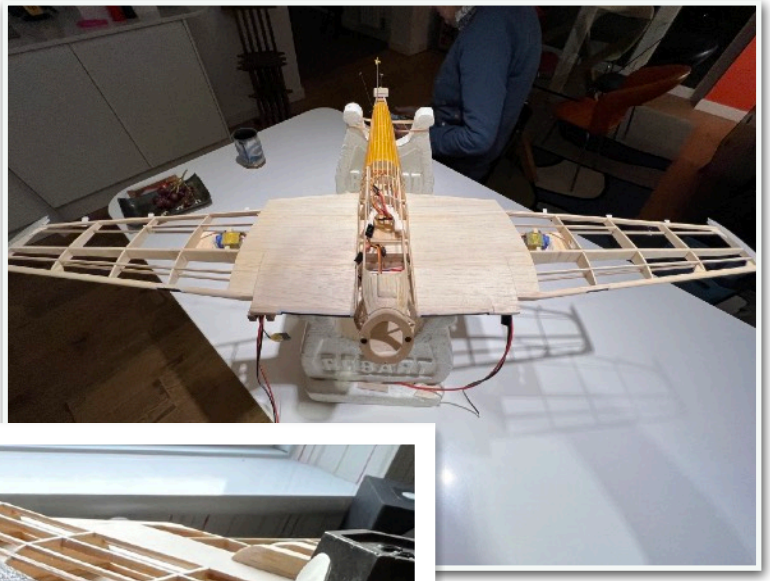
I'm no engineer, but splitting the body above the wing trailing edge and below the wing leading edge didn't look sensible without major strengthening. That was not feasible above the wing where I had already installed the Rx and tail servos preventing practical access into the fuselage.

I may have felt differently if the servo tray and Rx platform had been installed across the join into the fuselage.

Ironically, I later needed to strengthen the belly pan to take a battery.

Either way, decision made, I set about slotting the the wing through and attaching both nacelles.

Wing attached

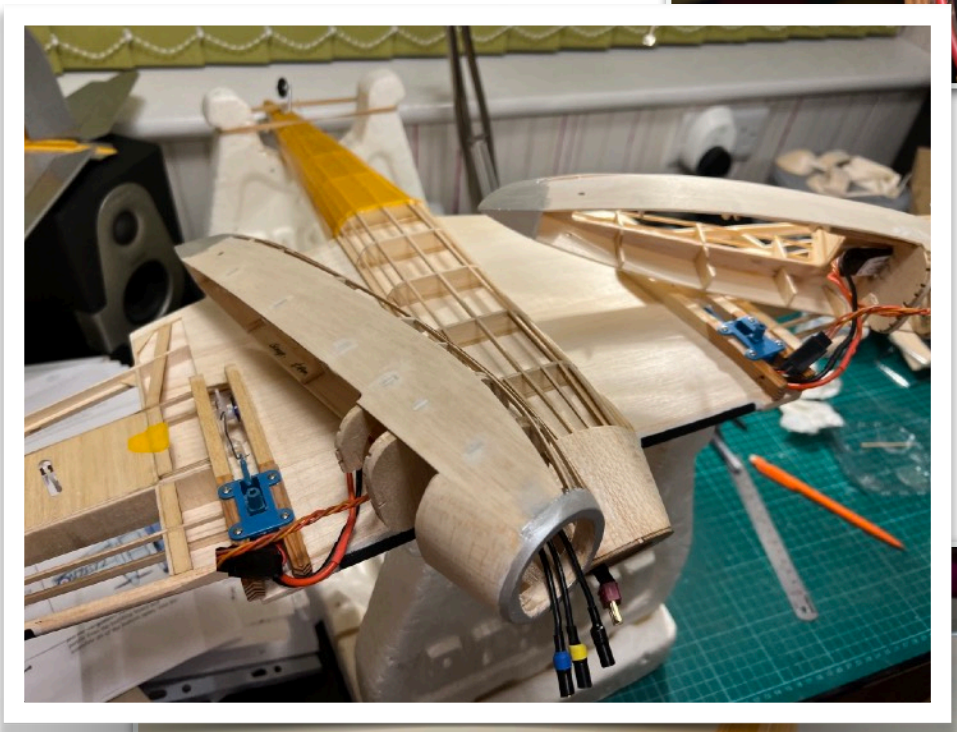


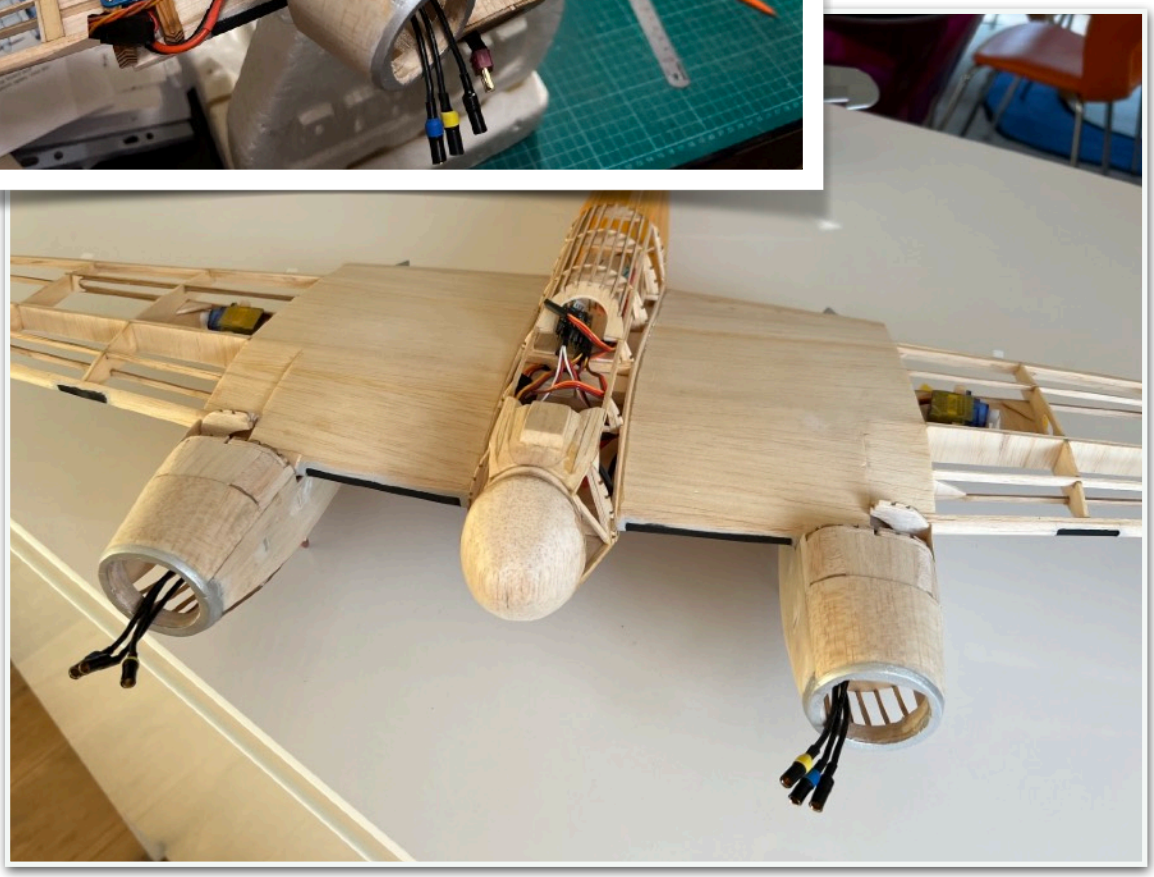
2nd nacelle and gear support added

Best guess at incidence, maintained by a support block

The aim now was to be able to establish where battery placement would secure a correct CofG.

Nacelles attachment - with motor wiring adjusted to length and tested and the nacelles and supports fettled endlessly, the nacelles were epoxy'd to the lower wing sheeting (as designed, the originals weigh nothing and are simply glued where their vertical sheeting meets the occasional wing spar!).





That left the wheels as an important balance element. I had bought some beautiful, lightweight and sprung aluminium jobs from Banggood…

Except that the servos - built into the wing, beneath the nacelles, obviously - were not up to retracting them. So, basic wire struts and even lighter tyres.

Meanwhile prepping for the daunting task of covering a pre-constructed model.

This really is the gift that keeps on giving!