

Last spring I interrupted the Graecalis build to concentrate on other things: fixing and flying, mostly. Now it is winter again, it is time to resume in the hope that some time in the New Year, the beastie will take to the air. First thing was to decide what to do about the elevator, which was underpowered with a single DS6125e servo. I finally decided to power it with two, and split the elevator. This will take two channels but there are plenty to spare on the receiver. It will take careful setting up too, but it will introduce some redundancy. I haven't cut the elevator in two yet. Fortunately the push rods clear the fuselage, and the wiring works.

I also decided to rebuild the rudder hinge so that it is shrouded in the fin. This meant moving the hinges into the fin post, and the tubes into the rudder. Here's the fin post being glued in place...





Here's the rudder with tubes installed. I spent a lot of time getting the angles right, but the finished product looks OK. The shroud allows about 40° movement each way. I had to redrill the top part of the rudder to accommodate the hinge rod. The top part isn't fixed yet and it all needs finishing.



Having atoned for past errors, it's time to get on with the build. Some holes are needed to accommodate wing joiners and incidence pins. I've drilled the joiner holes a little oversize so that adjustments can readily be made.



The joiner tubes in place. I have checked them against the tailplane for squareness in two dimensions, and all looks well so far.





Looks OK inside, too. I had hoped that I'd be able to bond the joiner tubes to the crutch, and here you see it. Spot on! (Nothing is glued in place yet.) Note the coat of primer on the crutch.

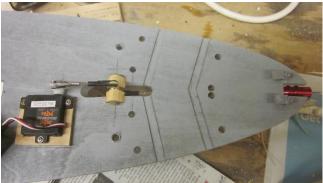
First trial fit of starboard wing (or is that port?)



Must get in touch with Stefano to check what the suggested wing and tail incidences are! At this point I also noticed that there is a gap of about an inch at the trailing edge of the wing, so that the hole for the rear incidence pin will be covered by the fairing!



Stefano has confirmed the incidences: Wing about 0.8°, tailplane zero. The front incidence pin hole is OK, then, and the rear one can be drilled correctly in the fairing facing.



the completed linkage. The servo, crank and the two pushrods will be easily accessible through the canopy aperture. The underside is a little less elegant looking, but I shall probably tidy it up before the crutch is glued in place.

Time to think about the sequence in which the final assembly will be made. The remaining jobs on the wings are independent of anything that has to be done on the fuselage, so the big question is do I finish the fuselage wing joiner tube installation before installing the crutch or vice versa? Whichever way round it is, the crutch will be located in the nose by the aerotow tube, so that needs to be finished off. So.... Here is





....and just a final check that the battery/nose weight plate still fits.

Finally, here's the aerotow in place. The actuator rod needs a little trimming...

