e-Go aeroplanes



Newsletter April/May 2010

Prototype wing

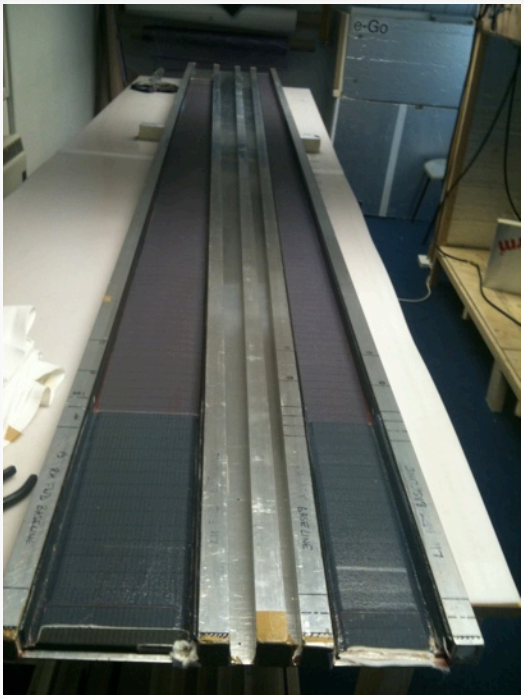
We made some final adjustments to the spar root design and build process. Some excellent advice from Rob Martin, a local carbon fibre specialist, has ensured that we can now build them faster and with a better finish. The spars for the prototype are all complete.

We've also worked hard on the accuracy of the CNC hot-wire cutting of the cores, with good results. We're finishing them off, plus the ribs for the two wings. Then on with the assembly of the prototype wings.

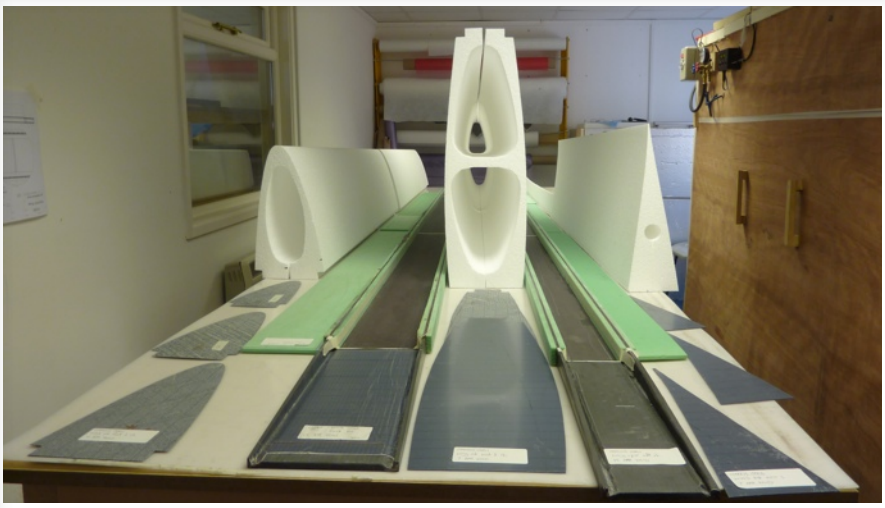
More students join the team

Shortly after Simon Kober returned to Switzerland to do his National Service, we've signed up two further students to work on the e-Go project and to learn about the aircraft business.

Jordan Pelovitz is from the US Virgin Islands, and currently a student at the Rochester Institute of Technology in New York State, where he's studying industrial design. He's going to spend this summer on the cockpit design, starting with sketched ideas, graduating to a computer-based 3D model and hopefully leading to a new cockpit mockup that will be extended into a flight simulator.



Prototype spars with the modified root design (in the mould tool).



This is what goes into the ultra-light wing; components for the first prototype wing.

Phil Seeney, a very experienced local industrial designer, is mentoring Jordan on this project. We're already doing trans-Atlantic brainstorming sessions and the sketches are flowing in. Some exciting ideas are emerging.

Matthew Reynolds is a student of Aeronautical Engineering at Belfast in Northern Ireland, where he's completing the third year of his four year course. He'll work with us for the next year on many aspects of the design, build and test of the prototype, and should see it through from early fabrication to flight test.

All valuable, rewarding experience for them and a great contribution to the project for us.

We already have big contributions to the build work, mainly from Mike Gregory (with us most days), Roger Peirse (usually one day a week, when he's not working) and Mike Dixon (over for a week from Swindon when he can).

This great community is accelerating the programme and providing a lot of fun and satisfaction for those involved.

Lola Cars keep e-Go's engine cool.

Lola Cars International Ltd have kindly offered to help us get the cooling right on the wankel engine that we're planning to install. They have lots of experience of designing high speed cars, of course, and use a suite of Computational Fluid Dynamic (CFD) programs to analyse the flow through the cooling system in 3D. This ensures good cooling whilst minimising drag.

Phil Tiller, Senior Aerodynamicist at Lola Cars, will be working with us. He's based just up the road at Huntingdon. We're preparing data from our SolidWorks model of the fuselage aft end and engine installation to pass to Phil.

The engine should be almost invisible in the e-Go. The wankel is a compact package (no big cylinders sticking out). As it's water cooled, we can put the radiator(s) where we like; probably in the aft lower wing root, fed by NACA ducts.

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