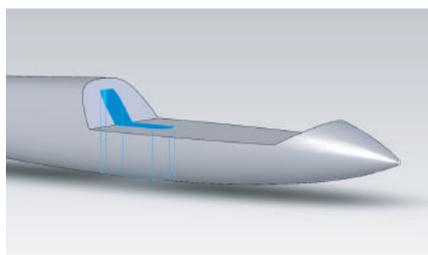
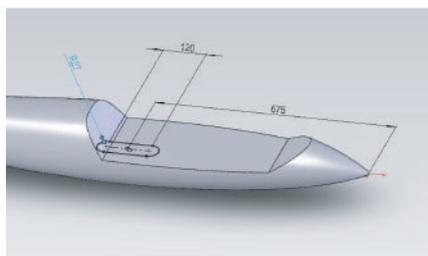
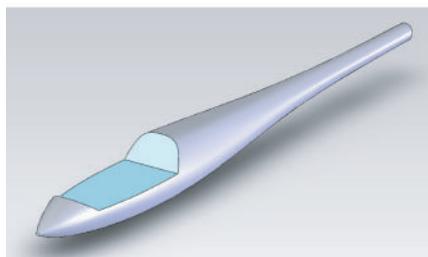
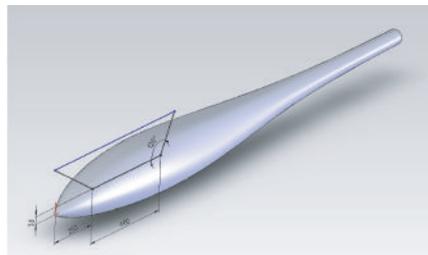
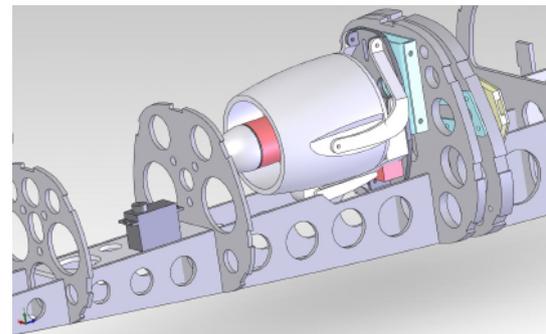
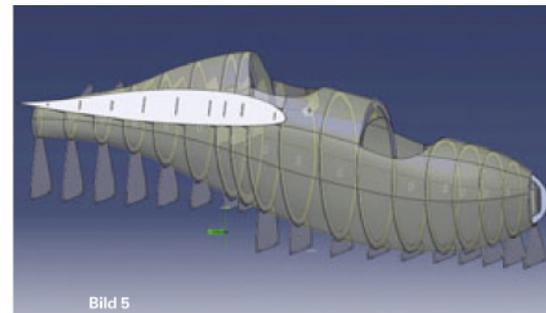


New Technologies Promote Co-operation among Model Aircraft Self-Builders

Since the introduction of new materials more than 20 years ago, digitalisation has also led to significant changes in the technologies for materials processing. Model builders that do not have the latest systems or know-how will seek advice from more experienced fellow enthusiasts. Many of these will also carry out work. This promotes networking among active model builders around the world.

3-view drawings, is determining the fuselage and wing cross-sections. Those with CAD skills are able to develop 3D models and create 3D views. Using this design, frames and ribs can be cut out by hand, machined or laser cut. This is a big help, especially when building complex fuselages.



CNC Computerised Numerical Control

This modern control method allows complex components, including three-dimensional ones, to be produced automatically and with great accuracy. Building model aircraft mainly involves the machining of components from wood or plastic material. These components can be fuselage frames, wing ribs or propeller shapes. Frames and ribs are frequently laser cut or, in case of rigid foam sheets, cut using CNC water jet

CAD Computer Aided Design

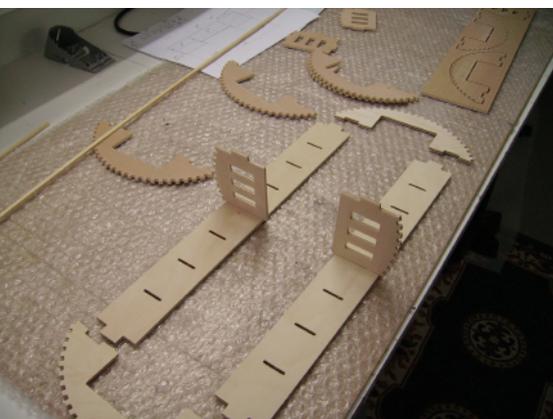
The major challenge when doing self-builds, either from template drawings or



cutting machines. For the model aircraft builder, it may well be worthwhile to pass such jobs to a skilled specialist within or outside the aeromodelling scene.



CNC computerised numerical control machine and parts



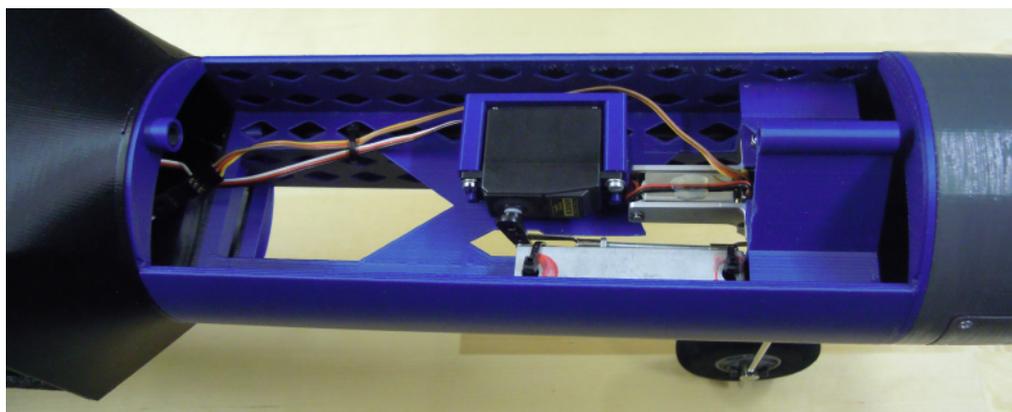
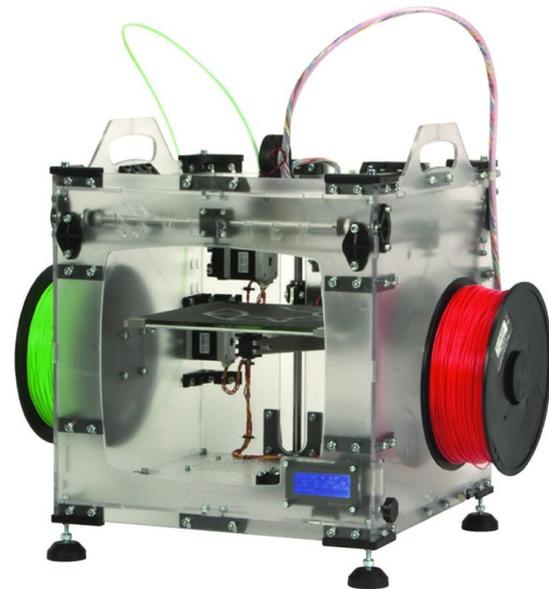
And don't forget 3D printing

Worldwide, 3D printing has developed rapidly over the last few years and has become increasingly established in the hobby world. Components of varying sizes, from special fittings, cockpit instrument panels and dummy engines to casings for electronic

instruments, can be accurately manufactured. Printer programs for entire aircraft models can be downloaded from the world wide web. For individual aircraft segments, such as engine nacelles, nose cones, flaps, etc., the printed prototypes may also be used as master patterns for making GFRP/CFRP moulds.

3D printer →

Out of 3D printer: part of a model aircraft fuselage



Telemetry used correctly

Modern radio control systems have feedback channels which make it possible to transmit selected data to the pilot. This includes important information regarding e.g. battery condition, the quality of incoming control signals, altitude, speed, etc. However, the possibilities for monitoring all this data via the display are very limited as it is too risky for the pilot to take his or her eye off the model for any length of time. Therefore, varying acoustic signals are additionally used. Setting up and programming the RC system with the required sensors is a demanding task which, when attempted for the first time, is best done with the assistance of an experienced friend.

Don't be stuck in the workshop

Passionate model aircraft builders will spend hours and days in their beloved workshop. Individual planning steps and processes will increasingly force them to consider consulting fellow enthusiasts, especially when it comes to design and cutting tasks. Networking among model builders with expertise in other fields is of benefit for everyone as it not only promotes the exchange of experiences and ultimately the quality of workmanship, but also helps form a social network of "friendships around the world".

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