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The Introduction to the Modelaircraft World
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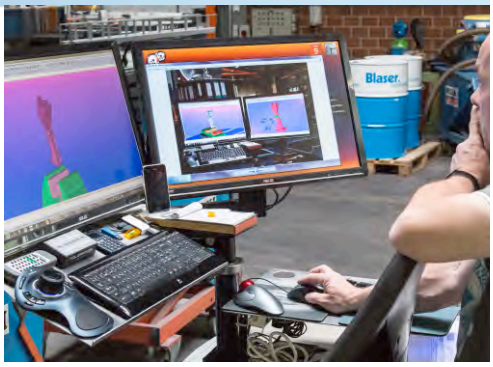
How aeromodelling can boost a career

The realisation that hobby and career can benefit each other is not new. Aeromodelling as a highly technical hobby and demanding sport presents a particularly large number of synergies with career and work. Many remarkable examples can be found in the technical trades and professions, one of which is CNC operator, Rogers.



CAD system showing the strut support of the SR-71 main undercarriage on the screen.

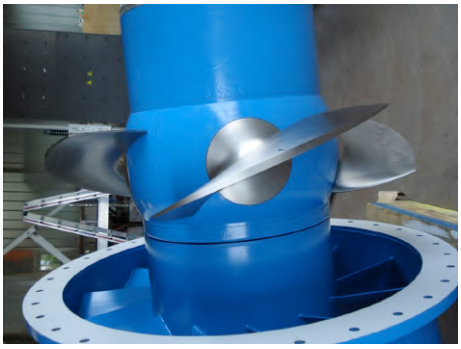
Design and construction of a model airplane provides motivation for learning

When the company that employs Rogers as a CNC operator acquired a completely new machining centre, they supported Rogers through an intensive training course: During working hours he designed and manufactured workpieces such as turbine blades. After work and on weekends he was able to use the same manufacturing process to make components he needed for his model airplane. Creating solid models of workpieces with complex shapes is a very challenging task for any designer. To familiarise himself more with this demanding subject, Rogers designed numerous new assemblies for his SR-71 such as undercarriages, frames, battery holders, etc. – plus a fully equipped transport trailer with custom-made racks. All this work carried out in his free time let Rogers acquire impressive in-depth skills and know-how in a much shorter time than normally expected.

A win-win situation

The benefits of this collaboration for both sides are obvious. The company has gained a qualified employee who is capable of independently carrying out the entire manufacturing process from electronic drawing board to a complete machined workpiece. With this background knowledge, the Kaplan blades for three turbines for a small hydroelectric plant could be manufactured in a short time. Thus, the customer, the company and Rogers benefited from this very special kind of co-operation. And Rogers as an aeromodeller had an ideal opportunity to design the complex mechanical components often required for scale models himself and manufacture them in the highest quality.

Rogers's workplace is a modern five-axis machining centre. This is where he designs and manufactures many Blackbird components in his free time.



Product of profession:
Kaplan turbine for water power

LED rings imitate the afterburners.

Impressive model of the twin-engine SR-71 Blackbird

Product of hobby:
All components for the undercarriage test rig as well as the mounted undercarriage were made using the machining centre

The SR-71, an exceptional aircraft

The SR-71 Blackbird was built in the 1960s by Lockheed in the USA as a fast reconnaissance aircraft and even the original was an exceptional aircraft. The replica is no less special. Rogers's model is over three metres long and weighs nearly 20 kg. It is equipped with two BF-300 turbines that provide the model with a total thrust of 60 kg. LED rings at the outlet simulate the afterburners. This long black flying tube impresses lay persons and experts alike.

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