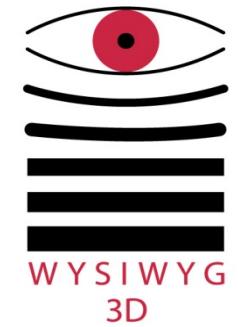


Aeronautical - Seabird



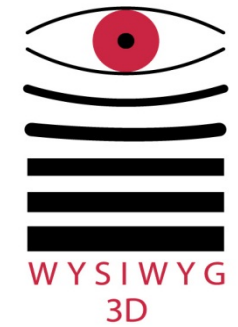
The generation of “As - Built” 3D cad model and drawings can be a painful process, especially for an aircraft that has very few straight lines, such as the Seabird. Wysiyg 3D was approached initially to scan the fibre-glass components of the engine cowling and the wing to fuse cowling. It became obvious that scanning the entire airframe would be a fantastic benefit to the design office.

Utilising the Surphaser IR_X portable scanner the entire fuselage was scanned at sub-millimetre resolution, including the Perspex panels. The scan data was then imported into Geomagic Studio for segmentation and surfacing.

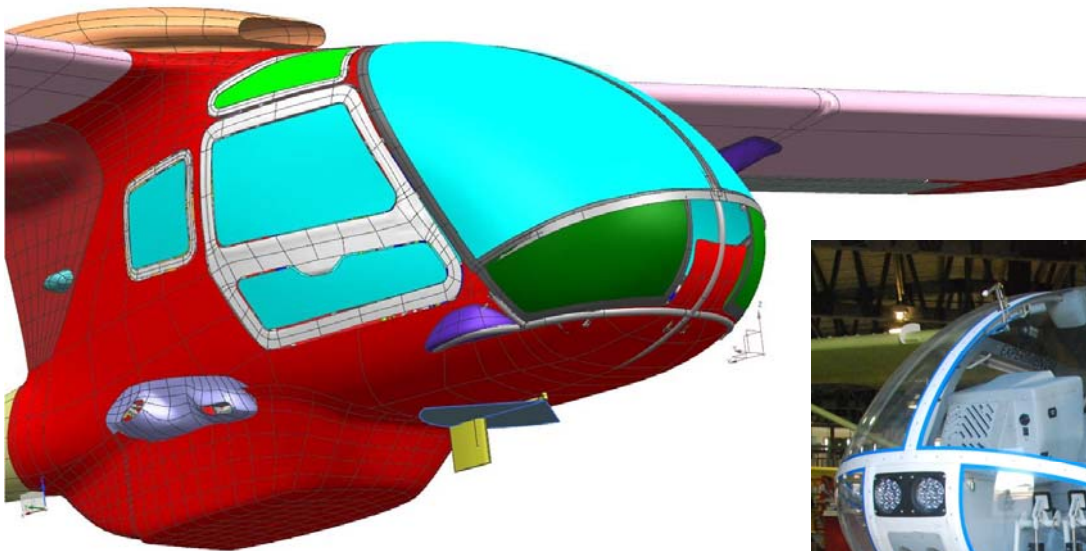
The scan data was aligned to the existing cad of the tail boom and space frame and then surfaced as Iges Nurbs surfaces. Onsite scanning was completed in one and a half days with processing taking a further 7 to 8 days.



Aeronautical - Seabird



Iges Model imported into Customers CAD System.



Above is the surfaced scan data rendered in Seabird's UG system. Segmentation can be seen by the different colours of each panel. This model will be used for the generation of shop drawings, corrective action in manufacturing, livery design, and future design improvements.

Scan data as Point Cloud



Completed CAD Model