

Delivering Manufacturing Advancements with BAE Systems Air Sector



Frewer Engineering is proud to have supported FalconWorks®, BAE Systems R&D division in the Air sector, in the development of manufacturing capabilities that keep the UK at the cutting edge of combat air capability.

The Future of Additive Manufacturing

Our cross-functional engineering team investigated the feasibility of novel 3D printing approaches to reduce cost and prioritise pace, adaptability and opportunities for feature consolidation in the manufacturing of airframe components. Using the depth of experience within the Frewer Engineering team, we considered mechanical, process, quality and certification aspects of the additive manufacturing approach, to assess feasibility & propose a roadmap to future applications.

Novel Airframe Materials

Frewer Engineering's analysts conducted research and assessment of composite materials. Combining our expertise, with the knowledge of manufacturing partners and BAE Systems' experts, allowed us to develop a clear understanding of how and where these advanced materials could be utilised in future airframes.

Airframe Manufacturing Strategy

Our multi-disciplined engineers helped develop a future manufacturing strategy. We collated knowledge from experts within Frewer Engineering and BAE Systems, via on-site workshops and reviews with technology leads at BAE Systems, culminating in a road map for technology development.

Impact

Our work supported the continued development of the UK's combat air capability, highlighting how the **pace and agility** of SMEs is key to **keeping this country at the leading-edge** of aerospace manufacturing.

