Supporting the evolution of military flying training as a service

Over the last 15 years military flying training has increasingly relied on the support of industry service providers. Where is that heading and how is that driving the development of AERALIS?

An interview with Dean Taylor, Head of Sales at AERALIS

Being there at the start of new projects is a recurring theme in Dean's career. During his time at Rolls-Royce, where he managed the Defence Business Development team, he was involved from the outset in projects such as F-35 and A400M. He initiated Rolls' involvement in what became AirTanker and through that project learnt what it takes to design large-scale military aircraft service provision, something then employed to good effect in winning the bid to deliver the availability service for 3 new aircraft types within the UK Military Flying Training System. All great preparation for AERALIS.

Q: Approaches to industry involvement in military pilot training vary across the world, can you give us an overview?

A: There's a wide range of approaches - from nations who design their own training and purchase, operate and maintain the aircraft themselves - perhaps the traditional model in the market - to a range of contracted flying training services that have developed, largely over the last 15 years.

Q: How has the outsourcing of flying training developed?

A: Service provision models really started to develop in around 2005 with a growth in contracting; this has evolved and features different approaches because different Air Forces want to operate and procure in different ways, based on their own priorities. It's not "one size fits all".

What we see though is an overall trend. Service provision typically started off with services focused on aircraft availability, with elementary, basic and advanced trainers contracted separately.

This has moved on in two ways. Firstly, a fuller service is now often required, integrating instructors, simulators etc. Secondly, the fragmentation that the first wave of contractorisation often introduced is being removed and the outsourced service now includes all training from first flight to being ready to join an Operational Conversion Unit.

A flying training system combining
A and B variants reduces pilot
training time and delivers over
30% through-life cost saving

Q: With these developments in flying training services, how does that affect the way you are designing a new training aircraft?

A: It's a great opportunity! When the full pilot training capability is contracted out as a service, it helps shine a light on what's needed to optimize the full system; and of course, industry's solutions then benefit everyone, whether they outsource training or not.

As well as designing our system to train pilots to operate a whole new generation of combat aircraft, this is an era when budgets are tighter than ever and there's also a big focus on the time it takes to train a student, so all of these factors have driven the AERALIS approach to what we offer to service providers.

And because a lot of our team have designed and implemented training systems for service providers, we know what helps those companies win business and deliver to their customers – so, for instance, we are also building in all of the things that minimize fleet sizes, keep the aircraft in the air and make dealing with the aircraft manufacturer – us – easy and responsive.

**Q: What are the differences to how this is done today?**

A: The big headline is that service providers and Air Forces will be able to train people quicker and at a greatly reduced cost – analysis says over 30% - because we have a single aircraft type that spans the length of the training course, and enables download of training from OCUs. Today, you need to buy and operate at least two aircraft types. That's a huge step change.

But you can also look beyond that – the way our training system integrates ground-based and airborne training as well as delivering advanced maintenance solutions etc., it's all enabled and revolutionised by designing in the digital era. And because we have that digital foundation, we can work with our customers to exploit a whole new opportunity to constantly improve their total system, which means we will be forming some quite different – and much more beneficial - relationships.

When you put that all together, you start to see what is so disruptive about AERALIS and what it can help our customers do. Outsourced services and military flying training is going to keep evolving.
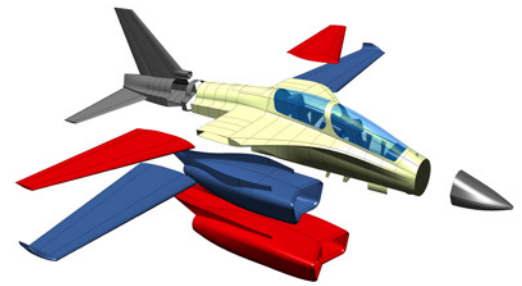
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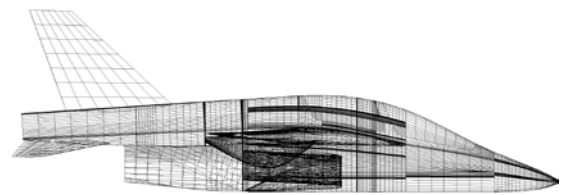
Digital Twin

Global fleet data exploitation for operational optimisation

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