





Flexible, affordable, on-demand defence capability

AERALIS® continues to blaze a trail in defence aviation – transforming the sector using open architecture digital aircraft design to commoditise the economics of air force fleets. And we’re building a pioneering modular light jet system that enables on-demand capability for defence aviation operations.

As you’ll read in the following pages, the drivers for our vision are pressing, and the benefits of our solution numerous and wide-reaching for everyone involved: for trainee aircrews, for air forces and those charged with our defence, for the defence supply chain and for taxpayers.

As ever, we welcome each and every one of you to learn more about our groundbreaking company and the changes for good that we are delivering.

Join us on our journey to transform the future of defence aviation.



Tristan Crawford
CEO and founder

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Redefining the future of air force fleets



For generations, air forces have faced the challenge of operating an ever-growing mix of single point aircraft designs, each having its own logistics support, management and training burden, and locking air forces into a platform for decades. This 'traditional' approach also hinders air forces' abilities to cost-effectively adopt emerging technologies and capabilities in a tactically-useful timeframe, or deliver to net zero commitments.



TRAINING & OPERATIONAL SUPPORT AIRCRAFT MUST KEEP PACE

Deliver a system that is able to evolve in step with advancements in front line platforms and systems, and the tactical requirements of future air forces – instead of locking air forces into another single-point capability for years to come.



NEW AIRCRAFT MUST BE MORE AFFORDABLE

Break the cost curve for new defence platforms, which has seen exponential rises in investment required for each new generation of single-point aircraft. This cost curve is unsustainable.



CAPABILITY MUST BE FLEXIBLE AND ON-DEMAND

Rethink how air forces procure and manage capability, to address bottlenecks in training programmes and poor availability of operational support platforms. Increase fleet situational awareness and effect continuous improvement through an integrated digital enterprise.



PLATFORMS MUST SUPPORT NET ZERO IMPERATIVES

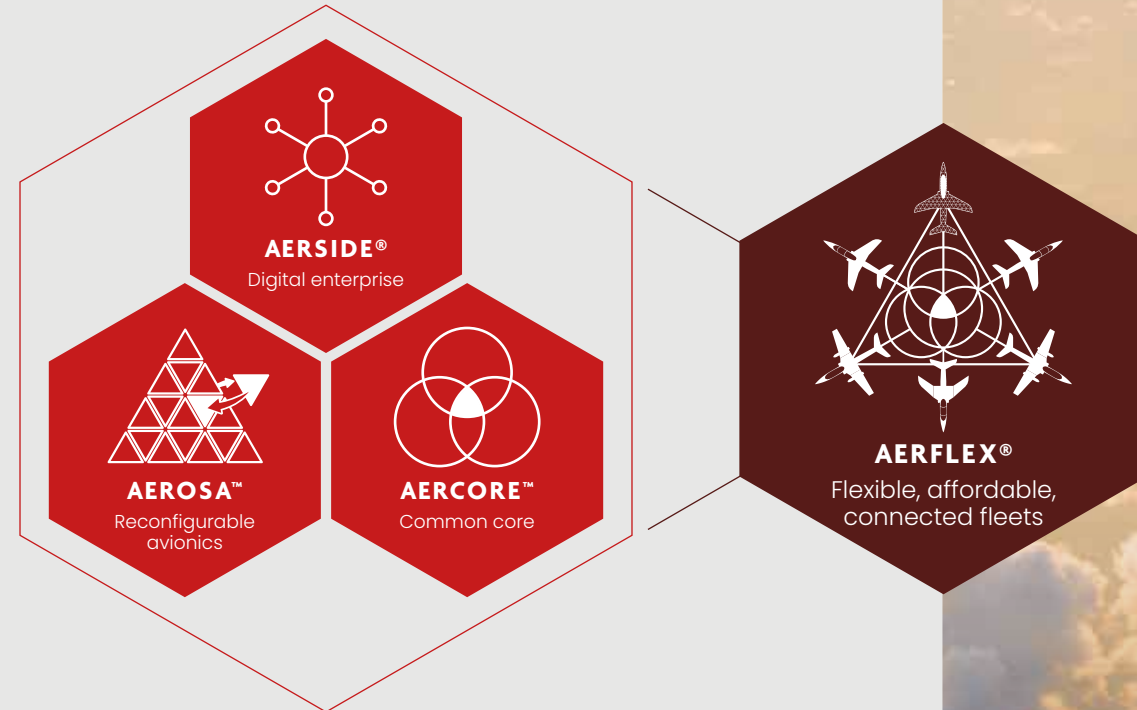
Design with net zero imperatives considered from the start to stay relevant to the needs of the environment as well air forces; create a solution that can readily adopt emerging propulsion technologies and powerplants, and consider material impact through-life.

AERSYSTEM

AERALIS® produces three principle products, which combine in AERSYSTEM™:

Our Smart Integrated Digital Enterprise (AERSIDE®), which centralises and leverages

data throughout the design, engineering, manufacturing, synthetic and operational flying of all AERALIS® aircraft, creating inherent digital twinning at platform, fleet and enterprise levels.



Our Open Systems Architecture (AEROSA™) – reconfigurable avionics allowing the interchange of system components without the need for re-certification of the whole system. This enables modularity of sensor loadouts as well as easier adoption of new

technologies in the future.

And AERCORE™ – the modular aircraft system, combining a common fuselage with an array of module suites to create role-specific whole aircraft configurations.

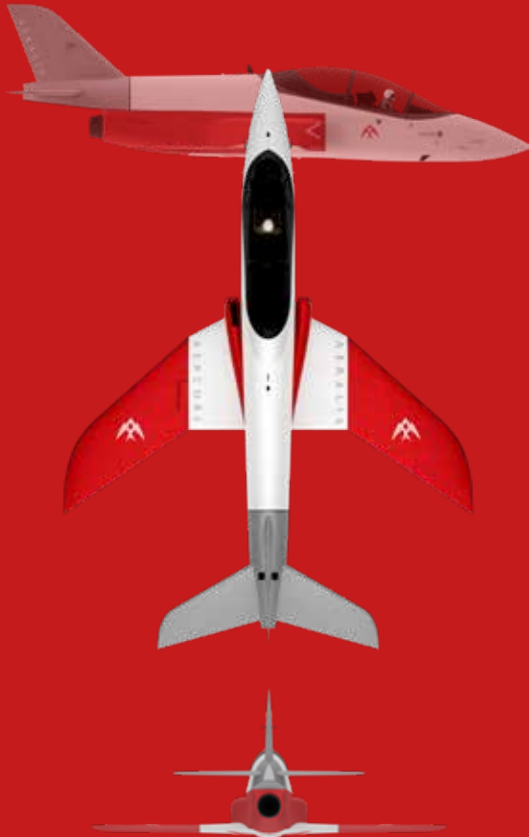
Transforming
fleet availability
and capability at
>60% through-life
cost reduction

Meet the future of air force fleets

The AERCORE™ system centres around a Common Core Fuselage (CCF) - shared by all AERALIS® aircraft. Mission-specific capabilities and performance are achieved with the addition of module suites, including cockpit, wings, engine nacelle and empennage. This is further augmented with AEROSA™ flexible avionics.

This groundbreaking approach to air force fleet provision boasts 85% commonality across all configurations of the AERCORE™ system, dramatically simplifying procurement, certification, support, maintenance and training.

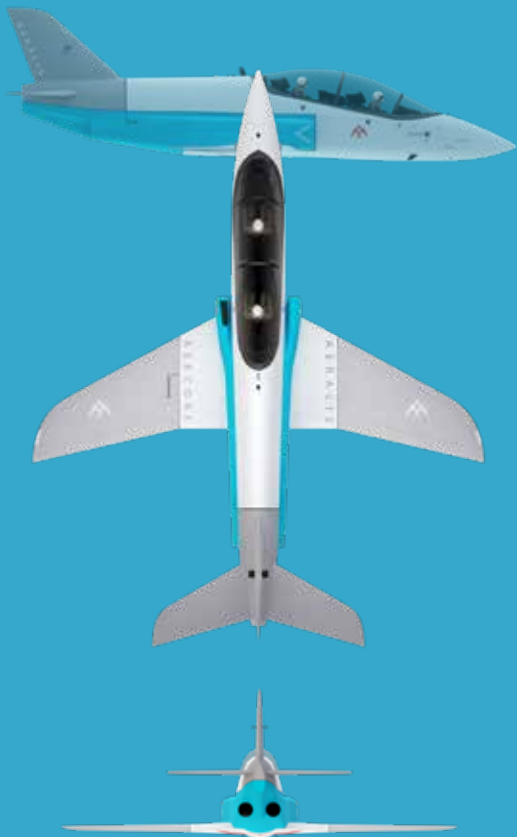
TACTICAL AGGRESSOR | SURROGATE



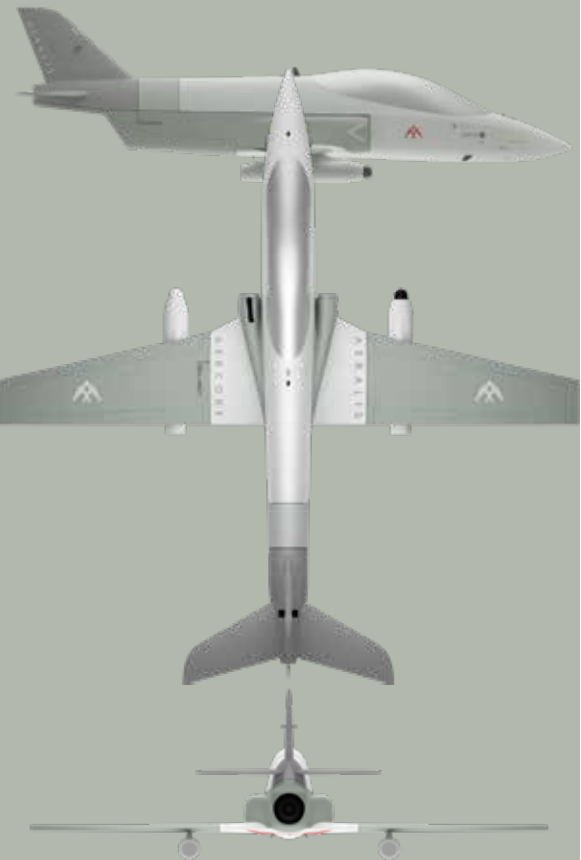
TRAINER SINGLE ENGINE

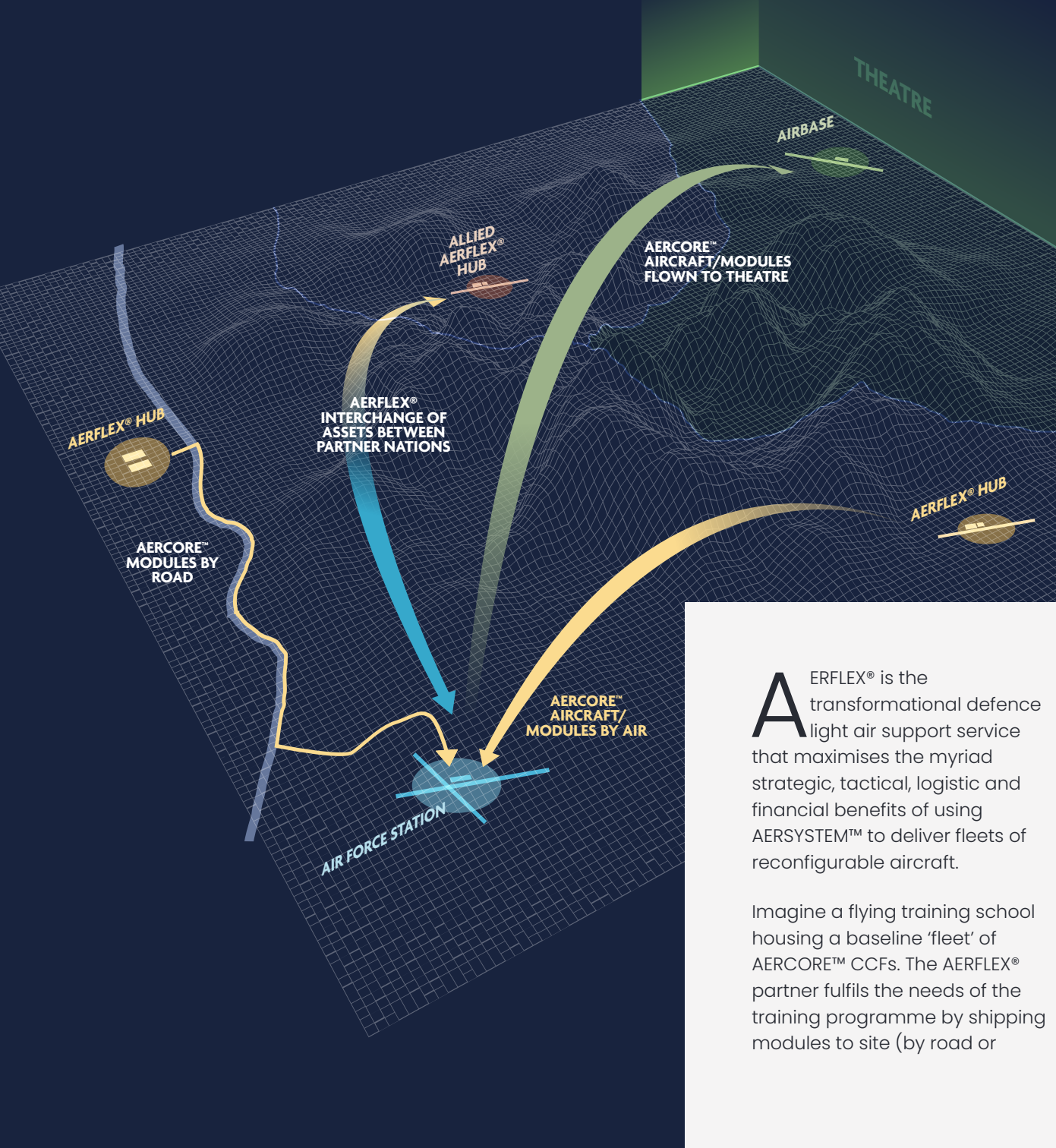


TRAINER TWIN ENGINE



TACTICAL ISTAR | TANKER





The future of
flexible aircraft
solutions



AERFLEX®

AERFLEX® is the transformational defence light air support service that maximises the myriad strategic, tactical, logistic and financial benefits of using AERSYSTEM™ to deliver fleets of reconfigurable aircraft.

Imagine a flying training school housing a baseline 'fleet' of AERCORE™ CCFs. The AERFLEX® partner fulfils the needs of the training programme by shipping modules to site (by road or

air) and configuring the CCFs as required. Modules removed from the aircraft from prior configurations can be taken for pre-emptive maintenance on- or off-site or stored in hub-and-spoke networks of facilities, ensuring consistent fleet readiness and redundancy.

Then, say, the air force is tasked with front line operations and requires additional support capabilities, such as tactical tanking or ISTAR cover. The

AERFLEX® partner can fly in additional CCFs, pre-configured aircraft, or pull CCFs from elsewhere in the air force such as the training fleet – or its allies' – to provision the surge in operational demand.

For the air force, the difference between life as an AERFLEX® customer, and as an operator of its own fleet of single point aircraft is stark. Capability has been delivered on-demand, in accordance with need rather

than fixed burden, with no additional procurement required.

Tactical decisions are based on need rather than what is available. And logistics alone become the drivers in achieving massively flexible light aviation capability.

And throughout, the digital thread remains, delivering vitally important insights to aircraft and aircrew performance.

TRAINING

TRAINER
SINGLE ENGINE
TRAINER
TWIN ENGINE

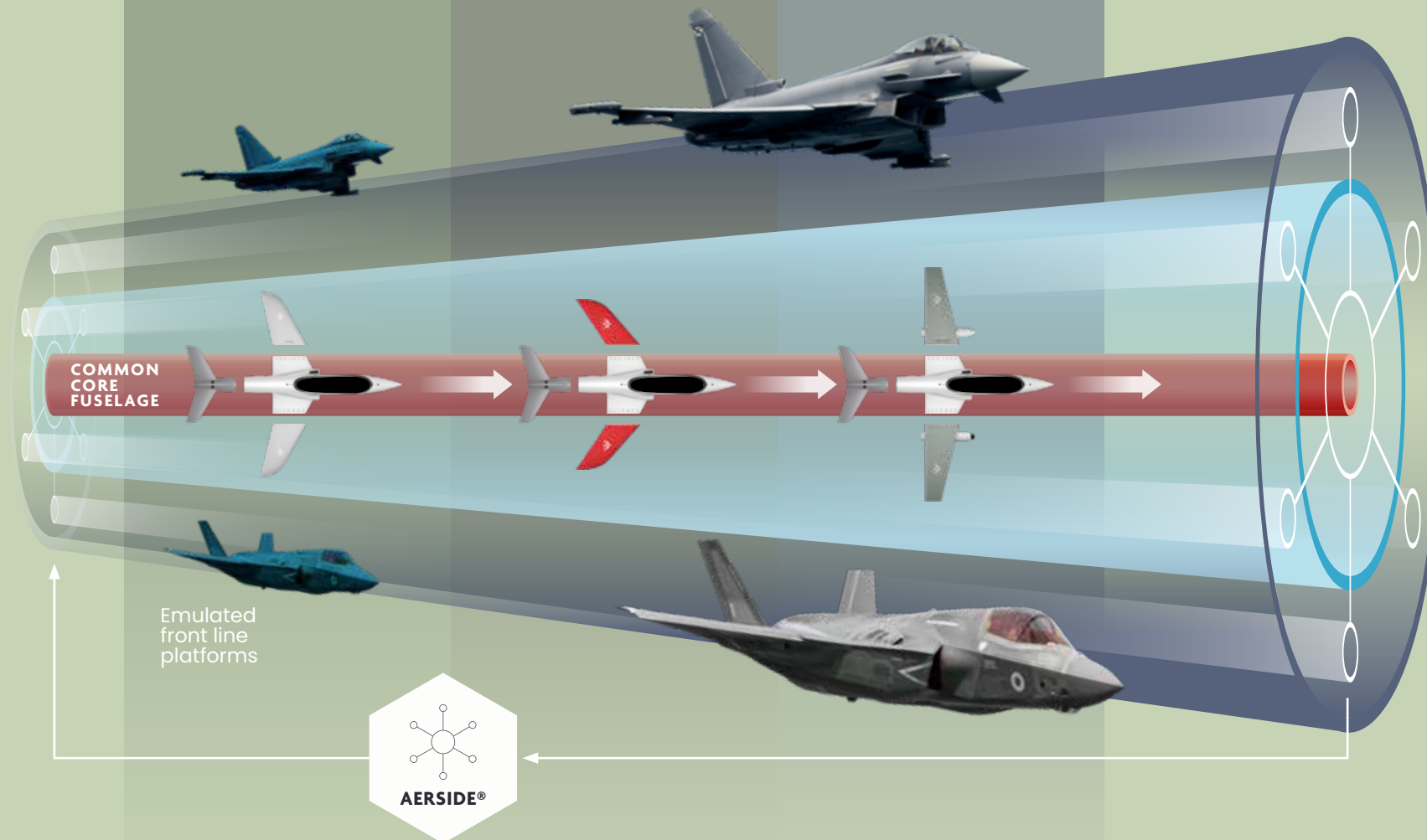
CONVERSION

AGGRESSOR
SURROGATE

OPERATIONS

UNCREWED TANKER
UNCREWED ISTAR

Integrated Combat Air Support & Training (iCAST™)



ICAST™ is where the cumulative power of the AERALIS® proposition comes together, delivering continuity, capability and value across not just training, but the whole air force – including operational support roles.

With iCAST™, AERALIS® delivers a seamless response across the spectrum of air force needs, from early flying training across to operational support roles alongside front line; fleet ownership, maintenance and capability management; and all the advantages imbued in a digitally-enabled air force.

Indeed, with AERSYSTEM™ being at the heart of the fleet, operating across the iCAST™ system, air forces can now farm data from across the operational spectrum, transforming the customer's ability to deliver, optimise and adapt the air system as operational needs evolve and change.

AERSYSTEM™

+

AERFLEX®

Common aircraft service

=

Seamless training and
operational system



Delivering the vision with leading lights of defence aviation and technology

To deliver flexible, affordable, on-demand defence capability, AERALIS® has assembled a cohort of partners from some of the world's leading names in defence aerospace design, engineering, manufacturing, technology, training and service delivery. We are proud to be working alongside these experts in the pursuit of our vision.

AERCORE™



AERFLEX®



AERSIDE®



NACELLE AND PROPULSION MODULES



WINGS AND EMPENNAGE MODULES





A E R A L I S®

T H E F U T U R E O F A I R F O R C E F L E E T S

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