Military Air Training and Simulation Solutions for Individual, Team and Collective Training; from Synthetic Training Equipment to Turnkey Training Services
With 80 years experience in providing training and simulation solutions, Thales can support your military air training needs from flight training through to mission rehearsal.

As a training solutions integrator, we can deliver synthetic training equipment from individual simulation technologies to complete simulator systems. Our services offer ranges from spares and repairs right through to fully equipped and staffed training centres.

Training Solutions

Training for the military air domain is a complex challenge; the demands of rapidly changing and diverse operational requirements and the impact of evolving aircraft and mission systems technologies drive the need for flexible training solutions that enable mission readiness.

Leveraging maximum operational value from our broad experience as a provider of real mission systems and aircraft systems, Thales offers innovative solutions for aircraft flight and mission training across individual, team and collective activities.

Thales works alongside armed forces as a trusted, global partner. Our job is to help you master complexity and provide you with training solutions that enhance operational effectiveness.

Dedicated to delivering your training needs
**Training applications**

### Flight Training
From ab initio through to complex tactical and combat flight training, including but not limited to:
- Cockpit procedures
- Tactical navigation
- Instrument flying
- Airmanship
- Conversion to type
- Continuation training
- NVG
- Formation flight
- Use of integrated systems

### Weapon and Sensor Training
From understanding basic concepts and procedures to building situational awareness and responding to high-threat mission environments, including but not limited to:
- Radar
- Electro-optics
- Electronic warfare
- Missiles, guns, rockets
- Datalinks
- Acoustics
- Sensor fusion
- Self protection
- Reconnaissance, target acquisition and tracking

### Mission Training
Mission training and mission rehearsal for the full spectrum of operations, including but not limited to:
- Whole-crew training
- Advanced tactical environment
- Command and control
- Immersive natural environment
- Mission planning
- Mission replay and debrief
- Scenario development tools
- Role-player capabilities

### Collective Training
Networked simulators and Exercise Control capabilities that create configurable Collective Training environments, including but not limited to:
- Multi-crew and multi-platform co-ordination
- Joint and Combined operations
- Standards-based networking and interoperability
- Connect to Live platforms for LVC
- Common tactical environment
- Multi-spectral correlation
- Distributed connectivity
- Exercise control
- Mass debrief
Training Services

Thales supports world-class armed forces in peace-time and during operations providing ab initio, operational conversion, continuation, upgrade and refresher training, through to mission rehearsal in preparation for live operations and multiple contingencies. Thales provides a comprehensive suite of training solutions for the whole life-cycle of military training in the Air, Land, Naval, Joint and multinational environments. These encompass the design, development and establishment of training services and centres that draw upon Thales’ core training and simulation capabilities, innovative training concepts, as well as financial, commercial and delivery models to provide high performing, cost-effective, and flexible value for money solutions.

A400M Training Facility
RAF Brize Norton

- Contract started 2013
- Majority shareholder of JV company
- Managing six elements of synthetic training
- DSAT compliant

ACE Tornado GR4 Training
RAF Lossiemouth & RAF Marham

- Contract started 2001, out of service in 2019
- Synthetic training for operational conversion, continuation and pre-deployment training
- Instructors all highly experienced ex-RAF QWIs, QFIs and EWIs, most with operational experience
- 600+ pilots navigators and weapon system operators trained over 57,000 synthetic flying hours

High G Training
RAF Cranwell

- Contract started 2016
- Initial contract to build, equip and run the service for five years, renewable every five years
- Human Training Centrifuge (HTC), provides rapid onset High G training to meet the needs of aircrew flying 4th and 5th generation aircraft
- Centrifuge pulls up to 9G – rotates 34 times per minute at 58 miles per hour.

Voyager Academy
RAF Brize Norton

- Contract started 2008
- Training Service Integrator for all Voyager training
- Delivering theoretical training for pilots, engineers and cabin crew in both civil and Military environments
- Part 147 accredited organisation

Innovation

Training transformation

The way aircrew are trained has been largely unchanged for decades yet the aircraft and systems, and the learning styles of students are very different to they were when current operational training syllabi were created. Thales is setting out to revolutionise training by exploiting emerging technologies and learning techniques to bring ‘constructive disruption’ to the flying and operational training market with capabilities in Virtual, Augmented and Blended Reality, as well as Live, Virtual & Constructive Training (LVC). These innovative technologies using Artificial Intelligence and biometric analysis to support adaptive learning techniques will maximise individual competence progression. This will give students the power to learn in their style at their pace whilst maintaining effective governance, to ensure the most effective training is provided at each stage of a student’s journey.

Unrivalled synthetic environment

Our AI-powered Computer Generated Forces (CGF) capability models the behaviour of simulated entities in the air, on the ground and at sea. It provides the ability to generate rich, high-threat tactical environments which, coupled with our high-fidelity, multi-spectral terrain databases can provide realistic immersive environments that enable highly effective student learning.

Human-centric training

HuMans improves training efficiency by allowing an instructor to understand the cognitive state of a trainee. Through non-invasive sensors, physiological data is contextualised, analysed and an assessment presented to the instructor. The result is a training session tailored to the trainee’s capability and an objective debriefing.

Training management and deployment at the touch of a button

Today’s complex distributed simulation exercises require substantial investment in time and people to deploy and manage. NUADA from Thales simplifies the complex, automating the management and deployment of exercises whether in scalable, on-demand cloud networks, or in legacy systems. Re-use and modification of existing scenarios is made easy, reducing cost and risk. This enables our customers to concentrate on excellence in training outcomes, with no need to worry about the technology.
United Kingdom
Manor Royal
Crawley
RH10 9HA

France
1 rue du Général de Gaulle
Osny
95523 Cergy Pontoise Cedex

Australia
274 Victoria Road
Rydalmere
NSW 2116

Germany
Fritz-Ludwig Strasse
Postfach 100 403
D-56070 Koblenz
E: sim.tts@thalesgroup.com
> thalesgroup.com <