



## Unmanned Air Systems Training Solutions

The increased demand for real-time operational information, aligned with the requirement to reduce costs and the threat to personnel, has seen the role played by Unmanned Air Systems (UAS) grow in strategic importance across many theatres of operation.

Ensuring that front-line forces maximise the potential of such systems however, presents its own unique set of training challenges. Finmeccanica Company, SELEX Systems Integration is currently delivering training to support the UK armed forces' latest UAS front-line capability.

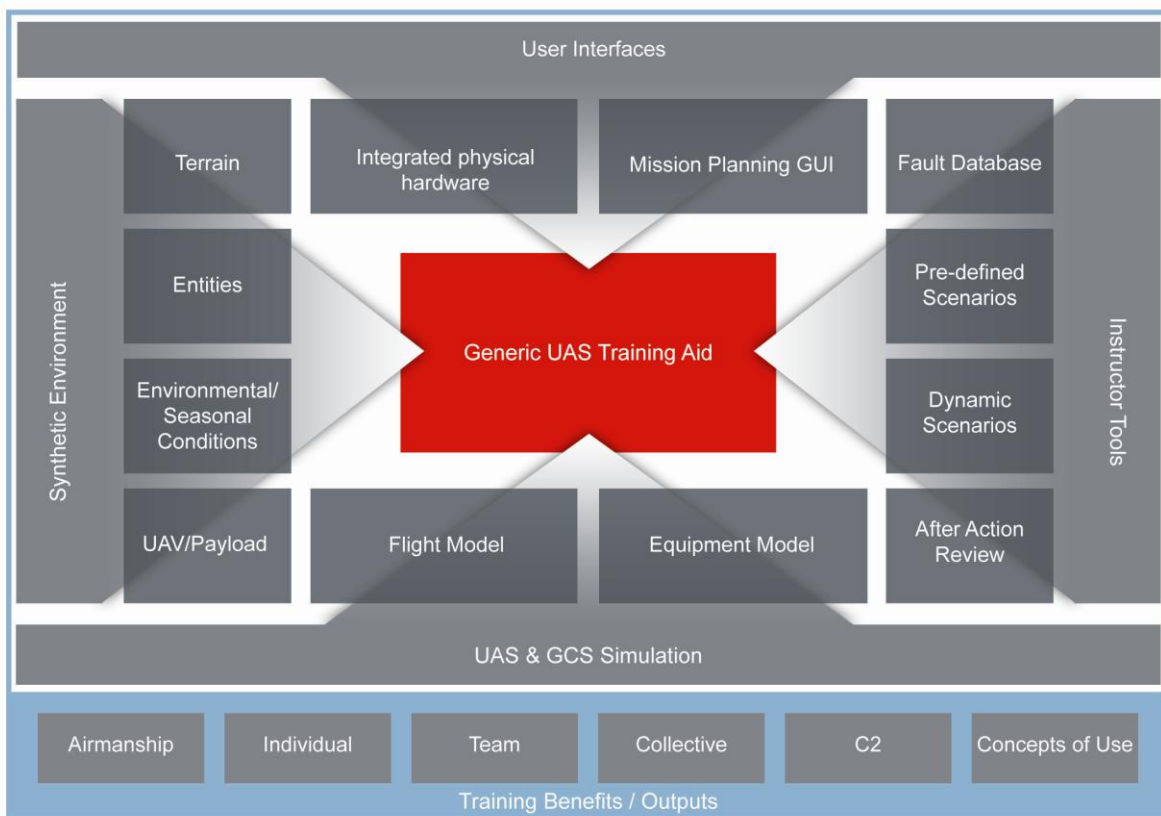
### **WATCHKEEPER Tactical Unmanned Air Vehicle (TUAV)**

SELEX Systems Integration is responsible for the through-life training solution of the British Army's new WATCHKEEPER TUAV. As the chosen training partner of the Thales UK WATCHKEEPER team, SELEX Systems Integration provides operators, commanders and maintenance crews of 32 Regiment Royal Artillery, Larkhill, with an integrated training facility that develops system knowledge, and individual, team, and collective operational skills.

SELEX Systems Integration's solution has delivered an agile and affordable training solution to allow for the changing operational environment of the WATCHKEEPER programme. The training solution offers:

- › **Low demand on operational equipment** –developing qualified Army operators and maintainers, without the need to rely heavily on operational equipment thereby increasing in-service capacity.
- › **Increased cost effectiveness** –keeping operating costs low through the use of classroom-based instruction facilities and mock-up ground control stations which enable operators to learn to control UAVs and their on-board suite of imaging payloads in a high fidelity simulated environment.
- › **Reduced Training Timescales** –a highly realistic training environment that supports the seamless transitions between training and operational environments.
- › **Low risk approach** – maximising the value of domain experts, COTS technology and training methods already proven in the military environment and beyond.
- › **Independent best-of-breed** – a training solution that is not determined by any training technology vendor or software system house, to allow uninhibited focus on training results.

**Managing complexity, delivering success**



### A proven approach to UAS training

The domain knowledge and expertise gained from the Company's delivery of the British Army's WATCHKEEPER TUAV training solution enables SELEX Systems Integration to offer a scalable and flexible training solution that can be adapted to match the training requirements of any specific system type, its unique operating procedures and concept of operations. Our approach presents end-users with:

- > **highly realistic and immersive environments** that reflect specific operational conditions enabling operators to practice and develop their skills and knowledge
- > **modular plug-in capability** to accommodate the payloads demanded by a UAS' specific configuration
- > **scalable virtual terrains** and computer generated entities to accurately represent the operational landscape through the payload data links
- > **the integration of physical equipment** to mirror the system's operations within a simulated environment
- > **an Instructor interface** which enables the testing, guidance and monitoring of student performance

### Benefits to the end user

SELEX Systems Integration training solution enables students to undertake missions in which they can develop the operational procedures they will eventually be expected to perform, within a highly realistic operating environment.

Our training solution helps develop:

- > **Airmanship** – Users develop an understanding of the skills required to successfully operate their UAV within unsegregated airspace, reducing the likelihood of operator error based failures and accidents.
- > **Individual/Team/Collective training** – Placing the UAS operators within team and collective environments allows the development of best working practices, decreasing real operational equipment training time and maximising utilisation.
- > **C2 protocol** – Incorporation of C2 elements by the simulated transmission of voice and data ensures maximum exploitation of UAS capability and allows the development of procedures that reduce tasking times to a minimum.
- > **Concepts of Use** – Early identification of the operational demands on UAS operators and equipment helps to de-risk programmes and allows for quicker implementation and acceptance. It also ensures that operators develop the skills to effectively manage the regulatory considerations within their operational environment in addition to developing the specialist skills needed to operate an UAS and its associated payloads.

With its domain knowledge and training solutions excellence, SELEX Systems Integration is the ideal through-life training partner for manufacturers and users of UAS'. The company can deliver an effective blended learning solution that ensures each UAS achieves its full operational potential in the shortest possible time.