T-Series

FalconWorks®

Heavy Lift Electric Uncrewed Aerial System (UAS)

MALLOY AERONAUTICS

BAE SYSTEMS

BAE Systems FalconWorks®

As part of BAE Systems' Air sector, FalconWorks® is the agile, forward-leaning centre for advanced research and technology, leading the company's Uncrewed Aerial System (UAS) strategy. As one of the largest suppliers of UAS in the UK and Europe, FalconWorks offers a comprehensive and fast-evolving range of uncrewed capabilities working with SMEs (small and medium-sized enterprises) and specialist suppliers across the UK.

The FalconWorks UAS portfolio continues to evolve, benefitting from access to and application of wider BAE Systems expertise, Academic and Research and Development (R&D) partnerships. Our cutting edge UAS portfolio is deliberately constructed to provide a range of core vehicle categories that in turn offer customer choice and variability in payloads to meet desired end use case outcomes in a cost effective, agile and commodity-based way.

PRISMATIC

PHASA-35®

Callen-Lenz

Koios

MALLOY AERONAUTICS

T-150

Malloy Aeronautics

Malloy Aeronautics, a BAE Systems business, develop and manufacture a world-class fleet of multi-role, heavy-lift, Vertical Take Off and Landing (VTOL) UAS. Founded in 2013, the company has developed a range of last mile aerial logistics capabilities working in collaboration with the US Marines, UK Royal Navy, and UK Royal Marines. Malloy Aeronautics' portfolio of aircraft provide a low cost, highly effective supply solution, across all domains, to remote and inaccessible locations, in support of peacetime operations, humanitarian relief and in contested areas.

Fregata

Malloy Aeronautics T-Series

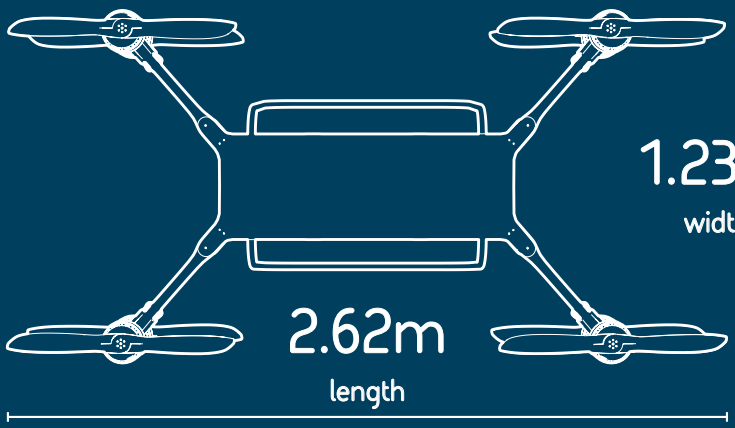
T-150

Providing the ability to reliably lift 68kg in all weather conditions, the T-150 UAS is a trusted partner by militaries and civilians around the world. With a removable hot swappable battery, the T-150 UAS is mission ready by design and easily deployable by 1-2 operators increasing efficiency against alternative solutions.

Capable of delivering time sensitive and high value cargo, the T-150 UAS has been designed for the toughest environments, demonstrated operationally in the article circle, desert and at sea.

The T-150 provides a cost effective solution to a variety of requirements across military and civilian domains. Proven logistically and most recently in weapons release, the T150 provides a low cost deep strike capability.

The T-150 is a best in class, all-electric UAS that delivers operational excellence and is recognised by militaries across the globe as a leading dual-use UAS.



68kg
maximum payload capability

108km/h
maximum speed

0.71m
height

45km
maximum range (zero payload)

Benefits

Multi-role reconfigurable platform

Class leading payload capacity

Low operating & maintenance costs

Integrable with third party systems

Secure interoperability

All-electric: Zero emissions at point of use

Commonality across the fleet

Low turnaround time

Runway independent operation

Limited training required

Use Cases

One system, many uses.

Assured Mobility

Logistics

Low cost logistics solution:
The T-Series is capable of conducting a range of logistics and re-supply missions across multiple domains, offering a lower cost per flying hour and servicing over traditional crewed rotary wing craft.

Helicopter substitution:
Ability for uncrewed operation in both land and maritime domains reduces the dangers of flying crewed aircraft in contested airspace or in hazardous environments.

Mission flexibility:
Its low cost enables the T-Series to be equipped to smaller formations, facilitating greater mission flexibility.

Autonomous:
Its autonomous capabilities enables the T-Series to support automated logistics and re-supply missions with minimum personnel and maximum capacity.

Adaptable:
Being payload agnostic, the T-Series can be easily re-figured with different payloads, enabling it to be readily adapted to support different mission types.

Delivery Effect

Find to Strike

The T-Series can carry and launch air-to-surface and air-to-air missiles, including guided anti-armour missiles. This gives the T-Series capability to deliver an end-to-end find to strike capability and a low cost per shot compared to traditional rotary-wing vehicles. The T-Series' autonomous laser target designation capability changes the way in which joint fire operations are currently carried out, providing a cost effective precision strike & force protection capability to all domains.

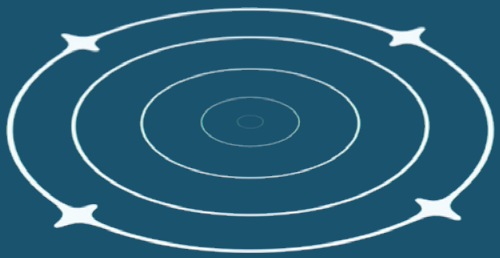
Where close air support is unavailable, target designation and release of precision laser-guided munitions at a range beyond that of small arms fire is currently not feasible. In such circumstances, a T-Series UAS can provide the ability to rapidly deploy precision strike in support of ground forces under attack or protect high value assets and Critical National Infrastructure (CNI).

By taking the requirement for crewed air assets out of the loop, the risk to aircrew and time to targeting and strike are reduced dramatically. This greatly enhances the ground forces' survivability by reducing the time it takes to get round on target, as well as greatly increasing the probability for a first-round strike and disruption of enemy forces.

T-Series Capability

Core Features

- Vertical take-off and landing (VTOL)
- Multi-role capability
- Removable hot-swappable rechargeable batteries
- Remote payload release capability
- Open architecture system
- Weatherproof design
- Customised transportation media
- Blood and medical goods transportation capability
- 1-2 person operation dependent on mission



Tailored Solutions

- Precision static and dynamic autonomous landing
- Anti-GPS jamming capability
- On-board mission computer
- Bespoke advanced mission planning system
- Configuration for sea operations
- Customised payload integration
- Interoperable with military systems

Extensive Pedigree

- In service with multiple armed forces and civilian users
- Extensively tested, assessed and operated by national and international armed forces
- Tested in extreme hot and cold (-21.6 to +40 degrees Celsius) temperatures
- Continuous improvement through testing and customer feedback
- Programme of record with US Marine Corps

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