Mantis Deep & Persistent ISTAR

FACT SHEET

Overview

BAE Systems and UK Industry started the Mantis project under their own investment in January 2008.

A broad team led by BAE Systems leveraged the best capability from the UK and overseas industry.

Mantis used a significant number of UK suppliers, as well as other divisions of BAE systems including the supply of flight control computing from BAE Systems Australia, one of the few non UK developments in the programme with C4ISTAR and Control



Infrastructure related work from the defence and information business in the UK.

Under a contract awarded by the UK MOD in July 2008, BAE Systems was appointed as the industry lead and prime contractor of a jointly funded project to develop a world-class Advanced Concept Technology Demonstrator (ACTD) UAS called Mantis.

First flight was achieved on 21st October 2009 using BAE Systems' rapid engineering processes enabling it to go from concept to first flight in 19 months.

Mantis ACTD made a number of significant achievements that provided evidence of the system's potential to meet the UK's future Deep & Persistent ISTAR needs:

- Operational mission system demonstrated and operated in a testing, dynamic, composite set of mission scenarios.
- The high levels of autonomy proved that operator footprint is very low compared to other systems in its class without compromising very high levels of operational effectiveness.
- Utilised exacting and consistent design standards and flown under the MOD airworthiness certification processes resulted in an effective trials outcome.
- Designed with the same safety principles as a manned aircraft and, being twin engined, also maximises its potential to fly in UK controlled air space.
- True open architecture system demonstrated: a flexible and adaptable payload and mission system - able to easily integrate a wide variety of sensors and weaponry from best of class suppliers.
- Effectively employed state of the art command and control, planning and sensor analysis tools used across the BAE Systems Global UAS family.
- Produced the largest fully bonded composite assembly in Europe, wing carry-through of greater than 15 metres.
- o Largest known twin engine UAV to be flown to date.



In March 2011, BAE Systems and Dassault Aviation signed a Memorandum of Understanding (MoU) to collaborate exclusively on the preparation and submission of a joint proposal to the UK and French Ministries of Defence for the design, development, production and support of a Medium Altitude Long Endurance (MALE) Operational Unmanned Aircraft System (OUAS).

The programme, known as Telemos, will be based on the two companies' experience and, in particular, around the Mantis project.

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