



TARANIS

Informing the future force mix

FACT SHEET

Overview

- Taranis is an Unmanned Combat Aircraft System (UCAS) advanced technology demonstrator.
- The project aims to contribute to the understanding of strategic UCAS, through the demonstration of relevant technologies and their integration into a representative UAV system. Taranis will provide the UK MoD with experimental evidence on the potential capabilities of this class of UAV and help to inform decisions on the future mix of manned and unmanned fast jet aircraft.
- Named after the Celtic God of Thunder, Taranis will explore and demonstrate how emerging technologies and systems can deliver battle-winning capabilities for the UK Armed Forces incorporating both an autonomous and survivable UAV concept design. Any future in-service systems based on such a concept design will be under the command of highly skilled ground based operators who will also be able to remotely pilot the aircraft.
- About the size of a BAE Systems Hawk Jet, Taranis is jointly funded by the UK MoD and UK industry and is managed by the UK MoD's Unmanned Air Systems Project Team in the Defence Equipment and Support organisation based in Bristol.
- Taranis was formally Rolled Out at a ceremony in July 2010. Initial ground testing commenced in 2010 with flight trials planned for 2011/2012.
- In addition to the existing industry partners, the project will also engage a significant number of other UK suppliers who will provide supporting technology and components.



Background

- The initial concept for the project was built on the BAE Systems funded Raven programme and many other technology de-risking activities undertaken under both industry and MoD funding.
- The Raven programme demonstrated in flight an autonomous system using a configuration similar to the one proposed for Taranis.
- Building on the success of the Raven programme Taranis aims to push the boundaries by providing advancements in low observability capability and autonomous mission systems operations demonstrating the feasibility and utility of UAVs.
- The joint funded contact was placed in December 2006. Originally valued at £124.5M, the contract has been uplifted under separate approvals to £142.5M and extended by approximately one year to accommodate an additional programme of work with a wider scope. This utilises the Taranis air vehicle to provide further outputs with wider exploitation into manned fast jet aircraft and includes additional risk mitigation activities to enable full realisation of the programme objectives.

- BAE Systems was appointed as the industry lead and prime contractor of this joint project to develop a world-class UAV Technology Demonstrator Programme called Taranis.
- BAE Systems formed an exclusive teaming arrangement combining Rolls-Royce, the Systems division of GE Aviation (formerly Smiths Aerospace) and QinetiQ to work alongside UK MoD military staff and scientists to develop and fly Taranis.
- BAE Systems, as prime contractor, will provide many elements of the Taranis technology demonstrator, including the low observability, systems integration, control infrastructure and full autonomy elements (in partnership with QinetiQ).
- Rolls-Royce will focus on the next generation propulsion installation for the demonstrator and the Systems division of GE Aviation will utilise their skills in 'vehicle systems'.
- The TDP Programme also uses a number of other UK based suppliers.
- Other BAE Systems companies include BAE Systems Australia, who supply the flight control computing and support from BAE Systems Integrated System Technologies (INSYTE) with C4ISTAR related work.

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