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Defence Science and Technology Laboratory



This is a programme of research and technical support to optimise effectiveness and reduce whole-life costs of the Combat Air Enterprise, which comprises the Typhoon, the Lightning, and Future Combat Air Systems (FCAS). The programme provides technical inputs to support decision making across combat air and de-risk technologies and also includes future air platform concepts and key platform technologies, including low observable design.

Working in partnership

Working in partnership with Defence Equipment and Support (DE&S), Dstl provided independent technical evaluation of F-35B Lightning II to support flight clearances for UK F-35B operations in the United States. Other milestones included commencement of routine Short Take-Off and Vertical Landing, night operations (June 2014) and stand-up of the UK Operational Test unit, 17 Squadron (January 2015).

A major element of this programme is the FCAS-focused research project, which runs until March 2016. BAE Systems is the prime contractor for the project, which aims to de-risk the key platform technologies for the next generation of combat air systems. The project covers airframe materials and structures, aerodynamics, weapons bays, propulsion integration, sensor integration, air data systems, and integrated vehicle utility systems.

Rolls-Royce is the prime contractor for the Engine Technologies for Affordable Persistence and Survivability (ENTAPS) project, which is developing key technologies for the next generation of combat aircraft propulsion systems.

For more information about this programme, contact: centralenquiries@ dstl.gov.uk.

Approximate funding (2015/16):

£22.4 million - 63% is delivered externally*

*The 2015/16 funding is a projected forecast and is subject to change in-year.

