

Drones: the next generation

The Taranis, Mantis, Zephyr and Herti aircraft are designed for a diverse list of both military and civilian tasks



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Whatever the ethical turbulence, the aeronautical and arms industry is in full flight towards a new generation of drones designed to fulfil an extraordinary array of military and peacetime requirements.

Already rolling down the runway is **Taranis**, an "unmanned combat air vehicle" being developed by the MoD, BAE Systems, Rolls Royce and QinetiQ. Named after the Celtic god of thunder, it is described as the "first ever, autonomous stealthy" long range, bomber. Taranis will undergo test flights this year.

Another collaborative, MoD-backed programme is BAE System's **Mantis**, a twin-engined, armed UAV designed to stay airborne for 24 hours. It has been tested in Australia. Mantis is said to be "a fully autonomous next-generation, unmanned aircraft system [that] can execute its mission with a much reduced need for human intervention by understanding and reacting to its environment".

QinetiQ's **Zephyr**, an ultra-lightweight, solar-powered UAV, set the record for an endurance flight in July lasting 14 days when it reached 70,000ft. It is promoted as an observation and surveillance platform that may have a "range of defence, security and civil requirements".

Another drone with dual military and civilian use is BAE's **Herti** (High Endurance Rapid Technology Insertion). It has been deployed by the army in Afghanistan and offered to the South Coast Partnership, a Home Office-backed project in which Kent police, the UK Border Agency (UKBA) and others were assessing security uses including patrolling the Channel.

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