

Opportunities and Challenges for Quantum Clocks and Sensors in Aerospace and Defence

Henry White, Lead Technologist – Sensing, BAE Systems
Henry.white@baesystems.com

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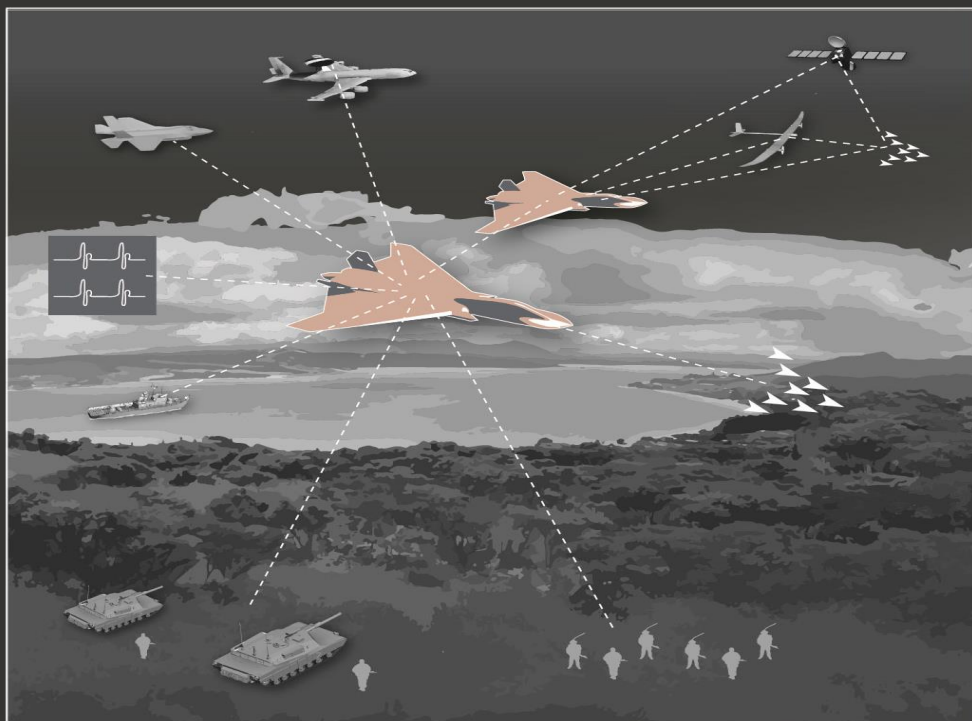
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Project TEMPEST



Connected & Co-operative



Affordable

Scalable Autonomy

Integrated sensor and next-generation counter-measures

Balanced survivability design

Virtual Cockpit

Advanced active and passive electro-optical sensors

Flexible Payload Configuration

Capable

Next Generation Flight Control System

Distributed multi-spectral sensors

Advanced Radio-Frequency sensors

Physical Architecture 'Designed for growth'

Upgradeable

Advanced Digital Processes & Tools



Opportunities

Enhanced sensors:

- Radar systems
- Optical IR systems
- Multi-platform sensor systems
- Magnetic and gravity sensing

GNSS denied operations:

- Navigation
- Network compatibility

Challenges

Harsh environments:

- Temperature
- Vibration
- Humidity
- Size, weight and power consumption

Platform specific challenges :

- High Altitude Platforms, Fast jets
- Ships
- Submarines



Thank You

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