



Mission Critical Secure Networks

Secure Comms Systems

Ultra has a wide range of capability and experience in providing Secure Comms Solutions to the defence market.

Ultra has developed a strong secure communications capability gained through experience on several UK and export defence programmes, including UK MoD's Secure Communications on Tornado (SCoT), Loitering Munitions Concept Demonstrator (LMCD), and the Litening III programmes.

The SCoT system provides secure data and voice communications for Tornado aircrew with HF radio remote controls and Head Forward Indicator displays, showing the status of the system, integrated into the cockpit. Compliance with the latest civil aerospace operational requirements has been achieved, whilst enhancing the security of and providing the flexibility for communications in clear when required.

The LMCD programme, led by Ultra, addressed all Defence Lines of Development associated with the use of loitering munitions, including the provision of user training, achieving sufficient maturity in many DLoDs and enabling MoD validation of the concept. Ultra, as a key partner in Team Loitering Munitions, is providing the secure data link system for the FireShadow system.

Ultra has integrated the Litening III reconnaissance and targeting pod onto RAF Tornados and Typhoons to meet UK operational and sovereign requirements. Ultra has incorporated its Video Data Link to enhance weapons delivery during Close Air Support missions.



Ultra
ELECTRONICS

Ultra can offer leading capabilities for the supply and support of Secure Communication Systems for air, land or sea platforms.

System Capabilities:

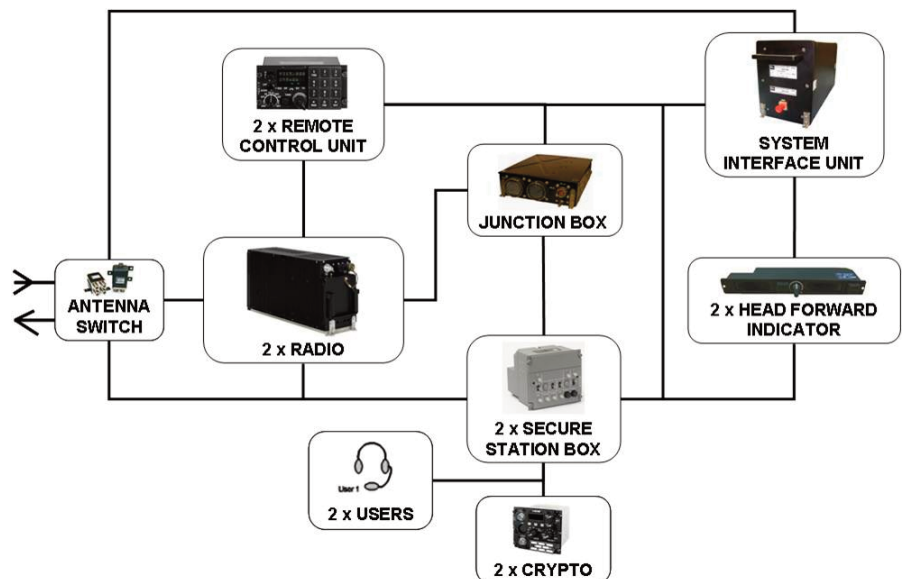
- Situational awareness e.g. Link-11, 16 and 22
- Secure data and voice communications, networked
- High integrity command and control, networked
- Secure transmission of Full Motion Video, networked
- Encryption Integration from AES128 to UK Top Secret
- Front panel or IP enabled crypto key fill and control
- TEMPEST, security accreditation, environmental qualification
- Platform integration and installation
- Safety cases and Certificates of Design

Product Capabilities:

- Secure full motion Video Data Links and video processing
- Networked High Integrity Data Link for best in class security
- End Cryptographic Units, key fill and management
- IP Interfaces
- Tactical Data Links, NTDS and ATDS, J series, M series
- SATCOM

Design Capabilities

- Radio Frequency and Modem design
- VHDL and FPGA design and complex algorithm implementation
- Red and black separation, encryption
- Formal messaging and message format validation
- Software design and proving
- X.400 and X.500



Secure Communications System on Tornado



MISSION CRITICAL SECURE NETWORKS AND SYSTEMS

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