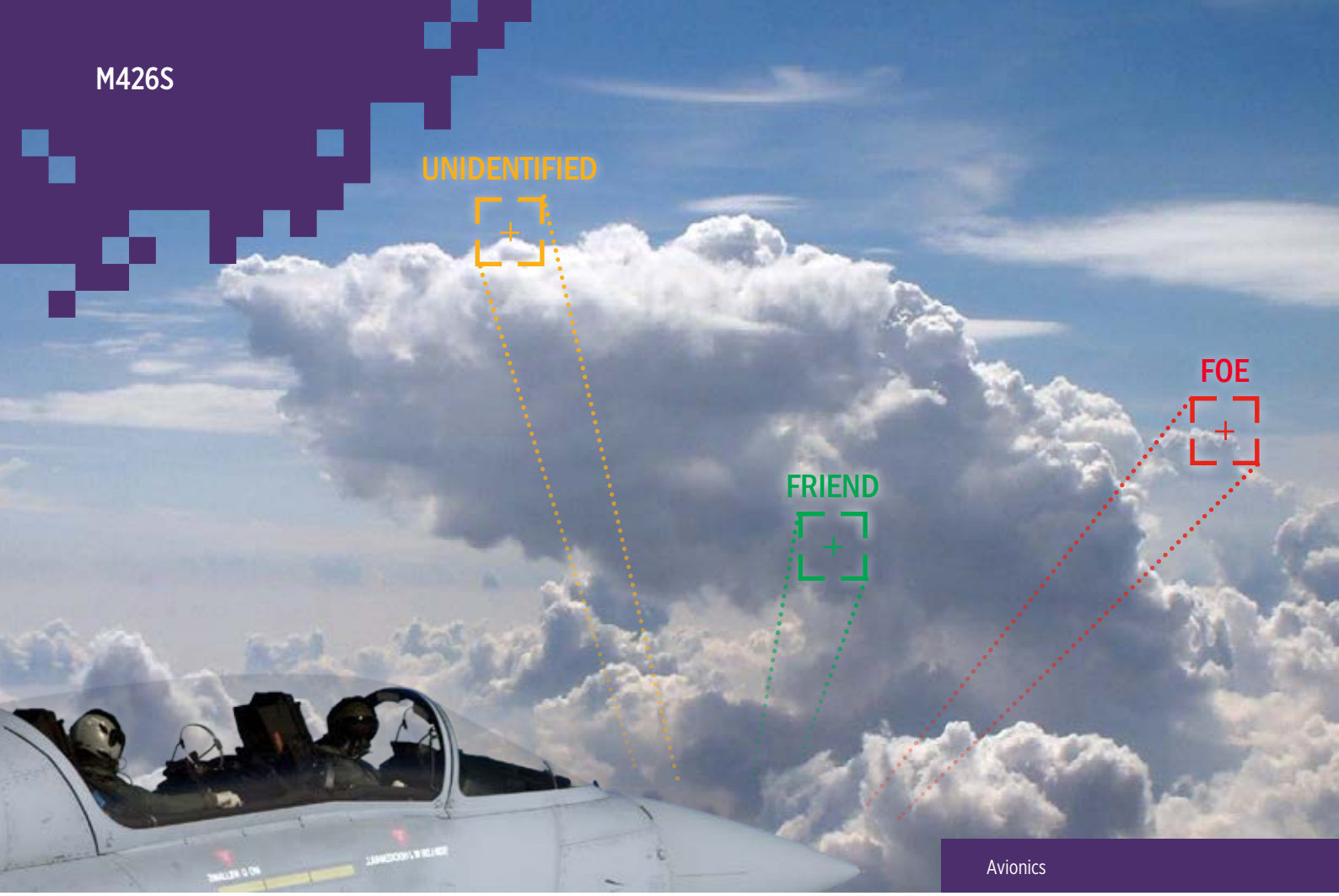

E-SCAN IFF INTERROGATOR

The M426S Electronically Scanned Identification Friend-or-Foe (E-Scan IFF) Interrogator is a state-of-the-art solution, which allows effective exploitation of the new capabilities offered by next-generation AESA radars, such as the Raven.

The E-Scan IFF Interrogator system comprises an Interrogator LRU, Transmit Receive Unit (TRU) and antenna sub-system. It provides the latest IFF system operating capabilities to identify both military (Modes 1, 2, 3A, C, 4 and 5) and civil aircraft (Mode S).

Its electronically-scanned IFF technology matches the primary E-Scan radar performance in terms of agility of operation, enhanced field of regard (angular coverage), range and target throughput, thereby giving increased effectiveness of long range air-to-air and air-to surface engagement.

Proven agile, random access, electronic beam steering technology allows the IFF interrogation beam to be steered independently of the main radar. Under the control of the mission system (ACCS), this enables the IFF system to interrogate contacts previously cued up by other platform sensors (primary radar, IRST, ESM, DAS etc.), improving operational effectiveness. The pilot may also manually select contacts on his MFDU for IFF interrogation.

E-Scan IFF significantly enhances the utility of the information which the aircraft's ACCS mission computer presents to the pilot when fusing IFF data with that from other aircraft sensor sources, such as radar (AESA or mechanical), infra-red detectors, defensive aide suites and embedded EW.

The field of regard from the dedicated conformal antenna arrays is significantly larger than from mechanically scanned antennas - ±100° compared with typically ±60°; and can explore definable volumes of airspace in great detail.

M426S

This expanded field of regard enables interrogation of unidentified aircraft by looking sideways so as not to adopt a threatening stance. Sideways interrogation also reduces the range closure rate, allowing more time to deal with multiple approaching attackers.

All members of the company's family of state-of-the-art next-generation IFF systems are NATO certified. They provide robust and secure links to support military identification processes and data transmission to ground centres, in order to support air traffic management services.

FEATURES

- A wide field of view, enabling both air-to-air and air-to-surface capabilities
- Ability to interrogate targets independently of the direction which the radar is pointing
- Reliability - no moving parts
- Low cost-of-ownership in comparison to equivalent M-Scan systems
- An IFF capability as part of an integrated set of sensors linked into Command & Control systems
- Matches longer range radar coverage
- Low latency/high agility
- Provides point-of-fire identification and surveillance operation
- Can be operated as an independent sensor
- Passive surveillance using high gain interrogator antenna
- Transmitted power control.

M426S

TRU

TECHNICAL CHARACTERISTICS

- Modes 1, 2, 3/A, C, S, 4 and 5 (level 1 and level 2)
- A/A or A/S according to STANAG 4193 and ICAO Annex 10
- Electronic beam steering via 3 conformal arrays, left, right and forward - raster or agile random access scanning or staring
- Field of regard
  - Azimuth ±100° relative to nose
- Interrogator system mass 34kg Max.

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