

PERFORMANCE - PASSIVE

PERFORMANCE - ACTIVE



ELECTRONIC SUPPORT MEASURES (ESM)

- **Frequency Coverage**
Microwave band and millimetric extension.
- **Direction Finding**
Spherical coverage vector DF with high accuracy DF.
- **Sensitivity**
High sensitivity for long range detection.
- **Resolution**
High sensitivity for resolution of signals in a high density environment and interoperation with on-board emitters.
- **Intercept Time**
High probability of intercept through wide instantaneous bandwidth and sophisticated search capability.
- **Pulse Density**
High pulse density handled by dynamically controlled channeliser and fast set-on superhet for parameter measurement.

ELECTRONIC COUNTERMEASURES (ECM)

- **ECM Techniques**
Full range of coherent and non-coherent ECM techniques, with on and off-board transmission.
- **Multiple Threat handling**
Two DRFM, with independent resources.
- **On-Board Transmitters**
Solid State phased array transmitters forward and rear.
- **Off-Board Transmitters**
Towed decoy with anti-monopulse capability.
- **Growth option**
Enhanced ECM techniques.

MISSILE APPROACH WARNER (MAW)

- **Warning time**
Optimum warning time for effective countermeasure deployment is given over the forward and rear sectors against current and projected future missile threats.
- **False Alarm Rate**
Effective protection against false alarms through use of proven clutter rejection techniques.
- **Mutual Interference**
Synchronisation techniques and multiple RF channels will allow aircraft to operate in formation.



Eurofighter Typhoon is expected to operate in hostile environments. The Defensive Aids Subsystem (DASS) is designed to ensure the aircraft will survive the full range of threats enabling mission success.

The DASS is installed internally, without the need to carry flight profile limiting pods, and provides protection against air-to-air and surface-to-air threats.

Enhanced survivability is achieved with an all round set of self defence sensors and countermeasures. These will detect and evaluate potential threats at maximum range and then automatically deploy the most effective countermeasures.

The DASS is an integral part of the aircraft's fighting equipment and not only provides comprehensive protection but also contributes to the overall platform situational awareness. The passive Electronic Support Measures (ESM) together with the active Missile Approach Warner (MAW) work in harmony with other on-board sensing systems to give timely warning and identification of threats.

The Electronic Countermeasures System (ECM) automatically activates the most suitable on or off-board counter to the threat while the information is displayed graphically on the cockpit multi function displays. This allows the pilot the further option of manoeuvre or in some cases, manual override. On board countermeasures cover a comprehensive range of jamming techniques including coherent, non coherent and anti-monopulse using Digital RF Memories (DRFMs). Off-board countermeasures include Towed Decoys.

The system is provided with the ability for the user to ensure maximum effectiveness in all scenarios by allowing total programmability of mission data.

To cater for ever changing threat profiles, the system is designed to allow easy modification for future growth thus ensuring protection for Eurofighter through the 21st Century.



DASS FEATURES

Electronic Support Measures

- All round coverage.
- Effective threat identification in high density environment for automatic initiation of countermeasures.
- Target identification with high accuracy DF.

Electronic Countermeasures

- Fully integrated ESM/ECM.
- Comprehensive range of coherent and non-coherent ECM techniques including anti-monopulse using DRFMs.
- On-board and off-board countermeasures.

Missile Approach Warner

- Long detection range both forward and rear for effective deployment of countermeasures.
- Low false alarm rate using proven clutter rejection techniques.



PRAETORIAN - AGAINST ALL ODDS

The four nation consortium, EuroDASS, has launched 'Praetorian' as the new brand name for the Eurofighter Typhoon electronic support measures, electronic countermeasures, missile warner and towed decoy elements of the DASS. These systems are fully integrated ensuring the aircraft's survivability against a wide range of threats, while providing continuous situational awareness.

The name 'Praetorian' originates from the Praetorian guard, the feared and elite troops used to protect Roman emperors.

Against all odds, Praetorian will ensure the survivability of aircrew and aircraft.

