



SPEAR-EW

NETWORK ENABLED ELECTRONIC WARFARE CAPABILITY



SPEAR-EW is being developed by MBDA to complete a wide range of Suppression of Enemy Air Defence (SEAD) missions under a Technical Demonstration Programme contract awarded by the UK MOD, Defence Equipment & Support (DE&S). Based on the proven SPEAR airframe, SPEAR-EW integrates a next generation miniaturised Electronic Warfare payload, providing both stand-in jammer and decoy capabilities greatly increasing the survivability of aircraft and weapons packages. This is a significant force multiplier in the complex A2AD threat environment.

SPEAR-EW builds on the success of the SPEAR Development programme, taking the mature weapons design and replacing the warhead and seeker with an increased fuel load and modular EW payload. These elements deliver an enhanced loitering and broad EW effect across the threat spectrum.

SPEAR-EW is delivered utilising the same electrical and physical interfaces, from across the SPEAR family of weapons, reducing both Platform Integration and Through Life Costs.

SPEAR-EW will utilise the SPEAR family launcher system allowing four units to be carried in a single bay of the F-35. A 3-pack SPEAR family launcher is under development for other platforms, such as Eurofighter Typhoon and Gripen.

SPEAR-EW delivers:

- EW capability against:
 - Integrated Air Defence Systems
 - Static and Mobile GBAD systems
 - Suppression of ship based radar systems
- Enhances platform/weapon survivability
- Fully programmable EW payload, against the ever-evolving threat
- High load out for increased persistence
- Increased survivability through enhanced range
- Technology growth path to co-operative weapons and ISTAR capabilities
- Reduced overall Mission costs, delivering force multiplier capability
- Reduced Integration and Through Life Capability costs utilising the SPEAR family



SPEAR family

Guidance

- Pre-programmed flight with INS/GPS and two-way datalink

Navigation and guidance

- Robust Inertial Navigation, with GPS throughout the operating envelope with pre-programmed flight parameters

Network enabled

- Providing operational flexibility and co-operative weapons/ ISTAR capability

Payload

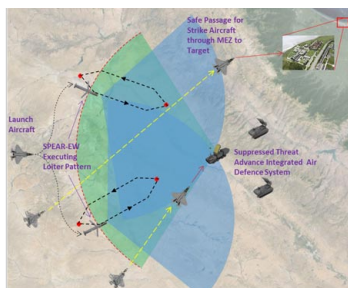
- Modular Electronic Warfare payload, delivering jamming and decoy capability across the threat spectrum

Propulsion

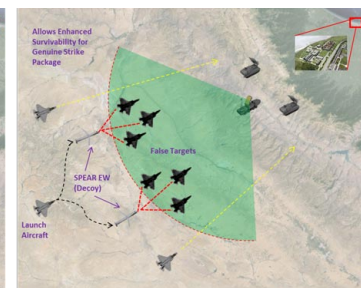
- Turbojet propulsion provides long range and power supply to payload
- Higher fuel capacity providing increased range and loiter time

Architecture

- Mil Std 1760 and UAI compliant for current and future



Stand-in jamming mission profile



Decoy mission profile

Technical details:

Weight: < 100kg
Length: < 2m
Diameter: 180mm

