



## HELICOPTER INTEGRATED DEFENSIVE AIDS SYSTEM AW159 LYNX

HIDAS, the Helicopter Integrated Defensive Aids System, was developed for and has been proven in theatre on the UK's Apache attack helicopter. HIDAS utilises threat data from multi-spectral sensors, together with a user-defined Mission Data Set (MDS), to produce a comprehensive tactical picture of the operating environment.

The system offers unparalleled situational awareness to the aircrew and delivers optimum self-protection to the platform by rapidly identifying hostile weapon systems and initiating appropriate tactics and countermeasures.

HIDAS utilises a modular architecture which can be scaled to meet the requirements of any helicopter platform. For the AW159 Lynx, the company offers the HIDAS-15 variant. Standard components of HIDAS-15 comprise:

- Radar Warning Receiver and Defensive Aids System Controller
- Missile Warning System
- Countermeasures Dispensing System.

For the Naval variant of the AW159, the Radar Warning Receiver provides a basic surveillance function. If a more capable ESM is required, the modular nature of HIDAS-15 provides ease of integration.

Provision is made for growth to include the following subsystems:

- Laser Warning
- Hostile Fire Indication
- Directional Infrared Countermeasures
- Radio Frequency Countermeasures.

HIDAS-15 is supported by a Mission Data Generator (MGD) for Electronic Warfare Operational Support. The MDG provides trained users with a facility to construct theatre specific MDS with sovereign EW data. The MDG also includes a facility to replay mission data that is captured by the Defensive Aids System Controller. Unknown emitters that are detected during a mission can be analysed using the recorded data, the output of which can then be used to update and improve the MDS.

# HIDAS-15

## KEY BENEFITS

- Rapidly detects, identifies, prioritises and counters threats to the platform, without the need for crew intervention
- Fully integrated with the AW159 platform
- Greatly enhances platform survivability, even in dense threat environments
- Mission-configurable using sovereign EW data.

## INTEGRATED

The high level of integration between the HIDAS sensors and countermeasures provides increased survivability in hostile threat environments. Integrated sensor systems enhance the tactical awareness of the crew. Integration into the aircraft mission system optimises a co-ordinated response to threatening weapon systems.

## RAPID REACTION

HIDAS has an optimised sensor architecture to ensure rapid reaction to helicopter threats. The crew has the ability to adopt manual, semi-automated or fully automated response modes. The system initiates optimal countermeasures to individual threat systems whilst also taking into account the dynamics of the platform.

## USER PROGRAMMABLE

HIDAS utilises mission specific data entered by the user at the flight line. Independent electronic warfare (EW) data ownership and management is crucial for achieving national independence from equipment suppliers and foreign nations. Proprietary operational support tools allow the user to prepare and analyse mission data.

## INTELLIGENT

HIDAS is a knowledge-based system that processes detected signals to produce real-time intelligence for aircrew. The intelligence recorded by HIDAS during a mission can be quickly downloaded and analysed on the operational support tools.

## IDENTIFICATION

The ability to reference intercept data against comprehensive threat emitter and weapons system libraries means detected threats can be uniquely identified. The continual referencing of live data allows threat systems to be prioritised, providing the crew with a comprehensive tactical picture of the EW environment.

## SCALABLE

At the core of HIDAS is a Defensive Aids System controller. This allows configuration to meet the requirements of all helicopter platforms through scaling the sensor capability and incorporating appropriate advanced countermeasure systems.

## OPERATIONAL

HIDAS has completed several years of development, followed by extensive testing and trials on airborne platforms. The system is in full operational service in a variety of roles providing the benefits of enhanced situational awareness, reduced crew workload and enhanced platform protection in today's demanding and ever-changing battlefield.

