

**Electronic Systems**

## AN/APR-39B(V)2 Suite of Integrated Sensors and Countermeasures (SISCM)

### Advanced EW Protection for Maximum Survivability



Today's pilot has access to an unprecedented number of individual on-board sensors and countermeasures. While each of these systems maximizes survivability, they can also maximize pilot workload, often making it difficult and time consuming to extract the right information at the right time.

The solution is multi-sensor integration, provided by Northrop Grumman's Suite of Integrated Sensors and Countermeasures (SISCM).

SISCM is a low-cost, versatile and reliable survivability suite that integrates all situational awareness and self-protection subsystems into one coordinated system. The suite provides true multispectral warning as well as semi-automated and automated smart countermeasures to protect fixed wing, rotary wing, tilt rotor and transport aircraft.

SISCM is controlled by the AN/APR-39B(V)2 Radar Warning Receiver/Electronic Warfare Management

System (RWR/EWMS). The EWMS is a state-of-the-art card using ball grid array (BGA) technology with the latest Power PC 603r microprocessor. The EWMS has the power, throughput and memory to perform any EW management task, all within an architecture designed for growth. The APR-39B(V)2 also serves as the RWR component of SISCM, providing continuous 360° coverage of the radar-guided threat environment.

#### **Demonstrated Benefits**

- Provides true multi-spectral awareness
- Reduces pilot workload
- Provides enhanced threat warning and countermeasures
- Fuses data from other on-board sensors and systems (INS/GPS/radar, etc.)
- Records threat and GPS data for post-flight analysis and mission planning

# AN/APR-39B(V)2 Suite of Integrated Sensors and Countermeasures (SISCM)

## Advanced EW Protection for Maximum Survivability

### Maximizes Survivability/ Minimizes Workload

SISCM provides:

- Fully integrated multi-spectral warning:
  - RF (MMW and MW)
  - EO (UV and Laser)
- Fully integrated smart countermeasures:
  - RF
  - IR
- Optional Advanced Situational Awareness Display (ASAD):
  - Combines threat warning with stored Electronic Order of Battle (EOB)
  - Overlays EOB and threat data on GPS synchronized digital map
  - Digital Elevation Model provides line-of-sight alert for both radar and optically directed weapons
  - Displays off-board derived intelligence information via data link
  - Displays FLIR, radar and flight instrument data
  - Calculates threat avoidance by geolocation, terrain and sensor input

### Tested, Certified and Available Now for International Sales

SISCM is tested, certified and available now for installation on multi-Service platforms. The system is approved for international sales.

For more information, please contact:

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### Modular Survivability Suite

### Tailored to Your Platform, Threat Environment and Budget

SISCM is a modular system that enables Northrop Grumman to tailor installations to specific platform, threat environment and budget requirements. All components used are proven, off-the-shelf technology, providing a low cost, low risk approach to multi-sensor integration.

A “plug and play” capability allows operators to easily add sensors or upgrade existing components in response to budgetary increases and/or changes in the threat environment.

- *Electronic Warfare Management System*
  - AN/APR-39B(V)2
  - AN/ALQ-213(V)
- *Missile Warning Systems*
  - AN/AAR-47(V)1/2
  - AN/AAR-54(V)
  - AN/AAR-57(V)
  - AN/AAR-60
- *RF Electronic Countermeasures*
  - AN/ALQ-162(V)6
- *Directional Infrared Countermeasures*
  - AN/AAQ-24(V) NEMESIS
  - Viper™ Multi-band Laser
  - Memory Loader/Verifier Set
  - AN/USQ-131
- *Countermeasures Dispenser System*
  - AN/ALE-47
- *Laser Detection Set*
  - 301-MA
  - AVR-2/2A
- *Cockpit Display*
  - Advanced Situational Awareness Display



### SISCM Applications

AH-1W	CH-47D	Cougar	MH-53	RC-7	UH-1Y
AH-1Z	CH-47SD	HH-60G/H	MH-60S	S-70	VH-3
AH-64D	CH-53	KC-130F/R/T	MV-22B	UH-1N	VH-60
C-130H					

### Pre-Planned Product Improvements to Meet the Evolving Threat

Upgrade of the APR-39B(V)2 to a full up EWMS is the U.S. Navy's first in a series of Pre-Planned Product Improvements (P<sup>3</sup>I) programmed for the APR-39B(V)2. The APR-39B(V)2 architecture will easily accommodate future upgrades in response to the evolving threat.

*Specifications and features subject to change without notice.*