



# AN/APR-39D(V)2 DIGITAL RADAR WARNING RECEIVER/ ELECTRONIC WARFARE MANAGEMENT SYSTEM

Detect, Deny, Defeat Today



The electronic battlefield becomes more complex every day, dominated by an array of multispectral (RF/IR/EO) threats that jeopardize aircrew survival. To survive, aircrews must have not only sophisticated sensors and countermeasures, but also a way to manage them.

The Northrop Grumman AN/APR-39D(V)2 Radar Warning Receiver (RWR)/Electronic Warfare Management System (EWMS) is being designed to maximize survivability by improving aircrew situational awareness via interactive management of onboard sensors. The AN/APR-39D(V)2 provides advanced RWR capability for today's and tomorrow's RF threat environments. The system features the latest technology in a small, lightweight configuration that protects a wide variety of rotary, tiltrotor and fixed-wing aircraft from today's most modern threats.

The AN/APR-39D(V)2 RWR provides 360-degree coverage to automatically detect and identify threat types, bearing and lethality. The crew is alerted to each threat with a graphical symbol on the cockpit multifunction display (MFD) or color threat situational awareness display. The system gives the aircrew audio threat warnings, enabling pilots to maintain a "hands-on/heads-up" posture. This threat information greatly enhances aircrew situational awareness, providing time to execute maneuvers and deploy countermeasures.

As an EWMS, the AN/APR-39D(V)2 integrates controls, threat reports and bit reports while displaying data from multiple onboard sensors. The system can automatically initiate optimal chaff, flares and has growth built-in for RF jamming.

The AN/APR-39D(V)2 is currently in production for the United States Navy and United States Army.



Color Threat Situational Awareness Display



Display with ASE controller functionality

### AN/APR-39D(V)2 Benefits

- Digital receiver improves sensitivity and greatly improves tuning speed. The multi-channel digital receiver also provides high fidelity RF signal measurement for tighter mission data programming to characterize emitters and reduce ambiguities
- Handles new and complex emitters, including millimeter wave
- Promptly displays Signal Angle of Arrival (AOA) for signals of any polarization
- Supports a low-band array for C/D band AOA
- Includes an integrated EWMS processor
- Supports multiple interfaces available to meet the user's current and future requirements
- Expanded processing and discrimination capability to perform detection, direction determination, classification and response
- Flight line reprogrammable Operational Flight Program and threat library
- Reduced crew workload through easy to understand threat symbology and digital voice audio

### AN/APR-39D(V)2 RWR System Specifications

#### Frequency

Range C to M

Weight 47.7 lb/21.64 kg

Volume 986 in3/16,158 cm3

Power 280 W, 28 VDC

Audio Digital voice

Display Bright light/NVG compatible, alphanumeric symbology (for non-MFD equipped aircraft)

### AN/APR-39D(V)2 EWMS Interfaces

The APR-39D(V)2 RWR/EWMS supports a large number of communication and electrical interfaces, as well as numerous system interfaces for aircraft survivability equipment (ASE).

### Types of Radar Emitters Detected

- Pulsed
- Pulse Doppler
- Continuous Wave
- Scanning Emitters
- Agile PRIs and RF
- Low Probability of Intercept

### AN/APR-39D(V)2 Integrated Platform

#### Applications

The APR-39D(V)2 RWR/EWMS is designed to support numerous rotary and fixed-wing aircraft.