



*LOCKHEED MARTIN*

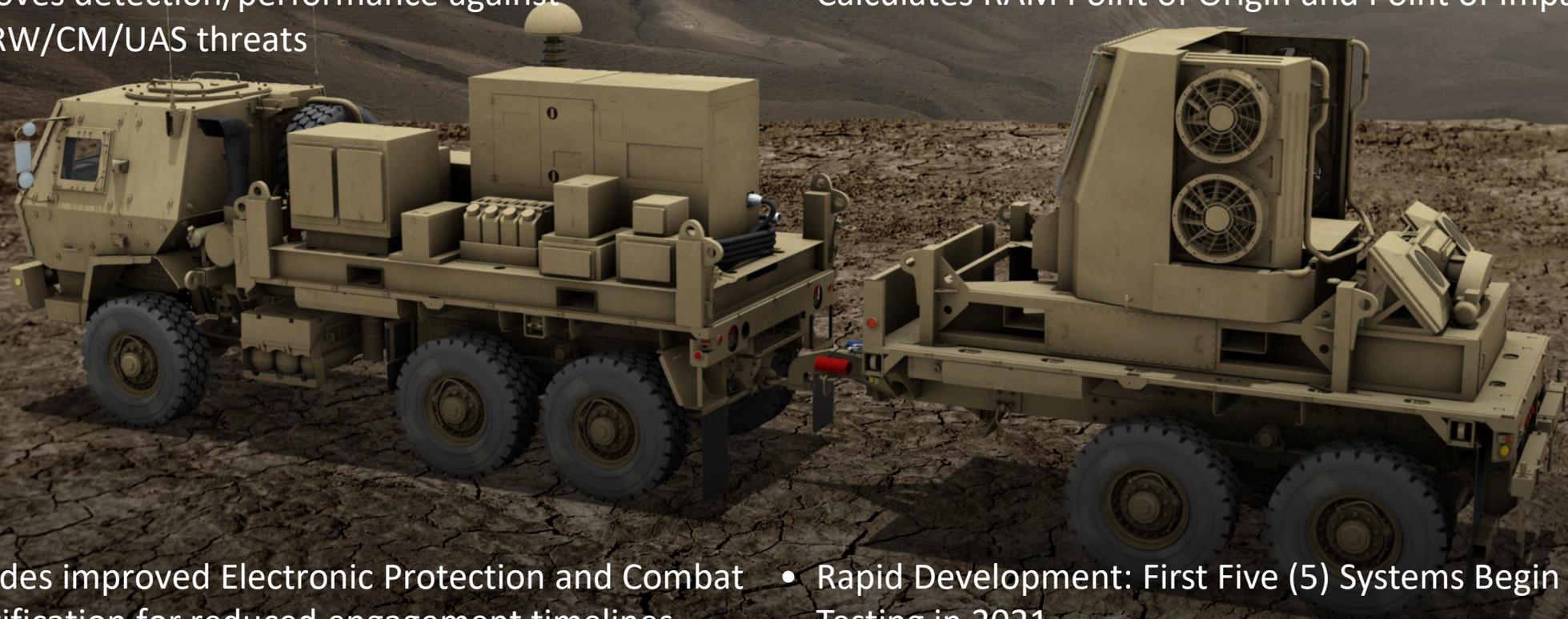


# MPQ-64A4 - Sentinel A4



# The Lockheed Martin Sentinel A4 Radar

- Replaces Existing Sentinel AN/MPQ-64 Radars for the US Army
- Improves detection/performance against FW/RW/CM/UAS threats
- Adds the ability to detect Rocket, Artillery, and Mortar (RAM) threats
- Calculates RAM Point of Origin and Point of Impact

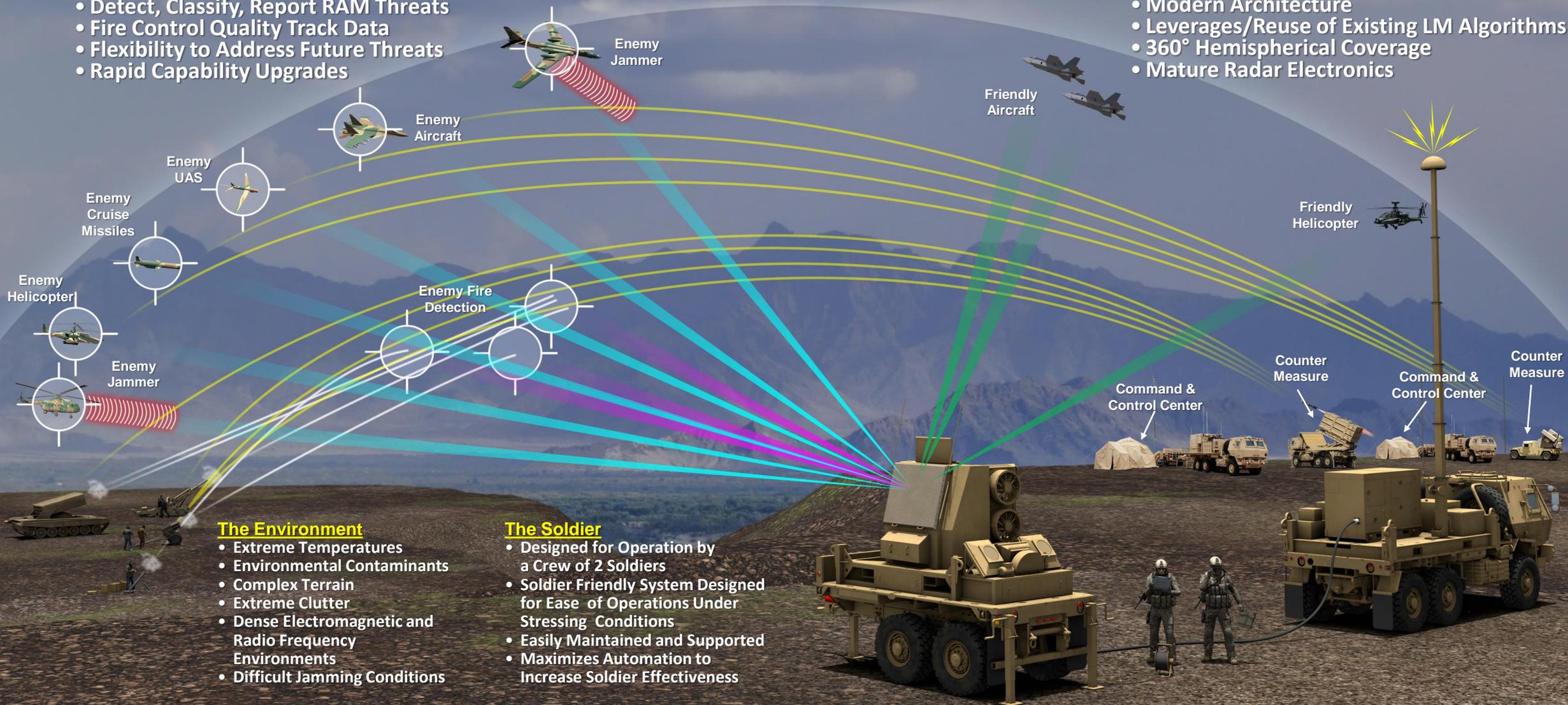


- Provides improved Electronic Protection and Combat Identification for reduced engagement timelines
- Rapid Development: First Five (5) Systems Begin Testing in 2021

The Sentinel A4 Delivers a Modern, Flexible Architecture to the US Army

# The Sentinel A4 Mission

- Surveillance and Detection of CM, FW/RW, UAS
- Detect, Classify, Report RAM Threats
- Fire Control Quality Track Data
- Flexibility to Address Future Threats
- Rapid Capability Upgrades



## The Environment

- Extreme Temperatures
- Environmental Contaminants
- Complex Terrain
- Extreme Clutter
- Dense Electromagnetic and Radio Frequency Environments
- Difficult Jamming Conditions

## The Soldier

- Designed for Operation by a Crew of 2 Soldiers
- Soldier Friendly System Designed for Ease of Operations Under Stressing Conditions
- Easily Maintained and Supported
- Maximizes Automation to Increase Soldier Effectiveness

# Lockheed Martin Approach

- Collaboration with US Army and Labs
- Modern Architecture
- Leverages/Reuse of Existing LM Algorithms
- 360° Hemispherical Coverage
- Mature Radar Electronics

# Summary

**A Real, Threat-Based Mission Need.** A modern sensor that has been designed to address current and emerging Air, RAM and Cruise Missile threats

**Sensor to Evolve with the Operational Environment.** The next generation Sentinel A4 radar leverages recent advances in radar technology to provide a modular, scalable architecture

**Mature, Low-Risk Technology.** State of the Art Digital Architecture with Gallium Nitride (GaN) transmitter technology, distributed architecture concepts, and advanced signal processing techniques

The Lockheed Martin Sentinel A4: the Army's Premiere Battlefield Radar for the Next 40 Years

