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

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

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

Friendly Aircraft
Command & Control Center
Counter Measure

Enemy Aircraft
Enemy Jammer
Command & Control Center
Counter Measure

Enemy UAS
Enemy Cruise Missiles
Enemy Helicopter
Enemy Jammer
Enemy Fire Detection

Sentinel A4 Marketing Presentation (77A604307B) – 26 May 2021
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.


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