First Q-53 Radar Equipped With Gallium Nitride Delivered To U.S. Army



AN/TPQ-53 Radar. Photo credit: Lockheed Martin

SYRACUSE, N.Y., APRIL 30, 2020 – Not only is the AN/TPQ-53 system the most modern radar deployed by the U.S. Army, it is now poised to be the first and only Army radar system operating with Gallium Nitride (GaN).

“Lockheed Martin (NYSE: LMT) recently delivered the first Q-53 system to the U.S. Army equipped with GaN,” said Mark Mekker, director, Lockheed Martin Army radar programs. “This critical upgrade will enable the Army to continuously grow and enhance the system’s capabilities to meet changing mission needs.”

GaN transmit-receive modules will provide the radar with additional power, reliability and the possibility for enhanced capabilities, including extended range, counterfire target acquisition (CTA) and multi-mission, which delivers simultaneous CTA and air surveillance. The systems upgraded with GaN are part of the Lot 3 contract awarded in 2018.

“We realize how critical it is to develop and build these radars so they will be responsive to the evolving operational demands and threats our deployed troops face every day,” said Mekker. “Lockheed Martin’s open, scalable radar architecture is the cornerstone of the systems’ designs and will allow for future upgrades that will not only extend the lives of the radars—but evolve their capabilities over the next 40 years.”

About the Q-53

The primary mission of the Q-53 is to protect troops in combat by detecting, classifying, tracking and identifying the location of enemy indirect fire in either 90 or 360-degree modes. The Q-53 has protected warfighters around the world since 2010.

Proven Radar Experience

With broad and deep experience developing and delivering ground-based radar solutions to our customers, our high-performing, high-reliability, solid state radar (SSR) systems specialize in counter target acquisition, early warning, situational awareness, and integrated air and missile defense. Our radars are designed with the highest degree of commonality and fully integrated SSR systems. They can operate in all environments, are available in highly mobile configurations, and are deployed worldwide. It’s why Lockheed Martin’s ground-based radars are the choice of more than 45 nations on six continents.

About Lockheed Martin

Headquartered in Bethesda, Maryland, Lockheed Martin is a global security and aerospace company that employs approximately 110,000 people worldwide and is principally engaged in the research, design, development, manufacture, integration and sustainment of advanced technology systems, products and services.
