

GA-ASI and SAAB Perform Advanced AEW Flight Testing on Uncrewed MQ-9B



SAN DIEGO – General Atomics Aeronautical Systems, Inc. (GA-ASI) has partnered with Saab to perform advanced flight testing of an Airborne Early Warning (AEW) system on an Uncrewed Aircraft System (UAS). The flight testing was conducted over the past few months using a GA-ASI-produced MQ-9B carrying a Saab LoyalEye radar operating from GA-ASI's Desert Horizon flight operations facility in Southern California. The flight test demonstrated simultaneous tracking of several airborne and maritime targets at long ranges. The airborne targets tracked included multiple instrumented red fighter jets and several commercial aircraft.

MQ-9B is GA-ASI's flagship UAS, offering unmatched endurance, type certification and all-weather performance. GA-ASI is discussing unmanned AEW capabilities on MQ-9B with several customers.

"This has been one of the most highly anticipated flight tests

we have performed,” said GA-ASI President David R. Alexander. “The level of customer interest in AEW capability on MQ-9B throughout the world is extremely high. It just makes sense.”

Historically, airborne early warning capability has depended solely on large, crewed aircraft. AEW on MQ-9B introduces a new approach, combining long endurance, persistent airborne sensing on a UAS. MQ-9B’s ability to surveil large areas for extended periods expands coverage, and establishes persistent surveillance in operating environments where endurance, geographic reach, and reduced aircrew exposure are critical. Using an unmanned AEW solution also offers flexibility to perform Battle Management Command & Control (BMC2) in a distributed fashion anywhere appropriate infrastructure exists, whether that be on the ground, on a ship or on an existing manned AEW aircraft.

Saab’s LoyalEye AEW radar was installed on GA-ASI’s MQ-9B using payload pods. The AEW system is designed to provide persistent air surveillance. On the MQ-9B, it enables operators to use AEW in areas where it previously was unavailable, enhancing situational awareness while providing greater operational reach and flexibility without risking the loss of crew.

“This flight test underscores Saab’s commitment to evolving airborne early warning capabilities to meet future operational needs,” said Carl-Johan Bergholm, Head of Saab’s business area Surveillance. “LoyalEye complements existing capabilities by adding flexibility, extending reach, and enabling a more efficient use of resources in demanding environments.”

The AEW offering for MQ-9B will support a wide range of applications, including early detection and warning, long-range detection and tracking, simultaneous target tracking, and flexible systems integration. By combining persistent sensing with an uncrewed aircraft, MQ-9B with AEW offers operators another means of expanding airborne early warning

coverage while preserving high-value crewed assets for missions where they are most needed.

GA-ASI's MQ-9B models include the SkyGuardian® and SeaGuardian®, the United Kingdom's MQ-9B variant known as Protector, and the new MQ-9B STOL (Short Takeoff and Landing) configuration currently in development for naval aircraft carriers.

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