

Predator B ER Spreads Bigger Wings

Defense-Update

Tamir Eshel



SONY DSC

General Atomics Aeronautical Systems, Inc. (GA-ASI) conducted recently the longest flight of Predator B/MQ-9 Reaper Extended Range (ER) Long Wing, retrofitted with improved long-endurance wings with greater internal fuel capacity and additional hard points for carrying external stores. The recent endurance flight is a continuation of a test program that began on February 18th at GA-ASI's Gray Butte Flight Operations Facility in Palmdale, Calif.

The most recent flight proved Predator B Big Wing's ability to boost flight time by over ten hours while replicating an operational mission in altitude and maneuver profile. During the flight, Predator B Big Wing demonstrated its ability to launch, climb to an operational altitude, loiter and conduct reconnaissance maneuvers, and land after 37.5 hours without incident. Follow-on tests will be conducted to expand its flight envelope further and push its endurance profile to the limit. Developed on Internal Research and Development (IRAD) funds, the new wingspan is 13-feet longer, increasing the aircraft's endurance from 27 hours to 42 hours.

According to Linden Blue, GA-ASI CEO, the new 79-foot wing span not only boosts the Predator B ER's endurance and range, but also serves as proof-of-concept for the next-generation Predator B aircraft that will be designed for Type-Certification and airspace

integration, "The wing was designed to conform to STANAG 4671 [NATO Airworthiness Standard for RPA systems], and includes lightning and bird strike protection, non-destructive testing, and advanced composite and adhesive materials for extreme environments." Blue added.

Additional improvements include short-field takeoff and landing performance and spoilers on the wings which enable precision automatic landings. The wings also have provisions for leading-edge de-ice and integrated low- and high-band RF antennas. An earlier version of Predator B ER featuring two wing-mounted fuel tanks is currently operational with the U.S. Air Force as MQ-9 Reaper ER.

The long wings are the first components to be produced as part of GA-ASI's Certifiable Predator B (CPB) development project, which will lead to a certifiable production aircraft in early 2018. Further hardware and software upgrades planned for CPB will include improved structural fatigue and damage tolerance, more robust flight control software, and enhancements allowing operations in adverse weather.