

# GA-ASI Completes Full Scale Fatigue Test on MQ-9B



*MQ-9B's Third Lifetime Test Completes the FSF Testing Process With a Total of 120,000 Hours*

From General Atomics Aeronautical Systems Inc.

DUBAI AIRSHOW – 17 November 2025 – On October 31, 2025, General Atomics Aeronautical Systems, Inc. (GA-ASI) completed its “third lifetime” of full-scale fatigue (FSF) testing for the MQ-9B Remotely Piloted Aircraft (RPA). Completion of FSF testing for the third and final lifetime includes a total of 120,000 operating hours (40,000+ flight hours per aircraft life) for the RPA and is a key milestone in validating the design of the airframe. The testing verifies the airframe structural integrity in support of certification to the NATO STANAG 4671 standard.

The aim of the testing is to identify any potential structural deficiencies ahead of fleet usage and assist in developing inspection and maintenance schedules for the airframe. Test results will be used as documentation for certification and will form the basis for in-service inspections of structural components.

“The completion of our full-scale fatigue test validates years of GA-ASI design and analysis efforts,” said GA-ASI President David R. Alexander. “The first two lifetimes simulated the operation of the aircraft under normal conditions, and the third intentionally inflicted damage to the airframe’s critical components to demonstrate its ability to tolerate operational damage that could occur over the lifetime of the aircraft.”

Testing was conducted from December 13, 2022, through October 31, 2025, at Wichita State University’s National Institute for Aviation Research in Wichita, Kansas. The airframe tested was a production airframe purpose-built to support the test campaign.

MQ-9B is GA-ASI’s most advanced RPA and includes the SkyGuardian® and SeaGuardian® models as well as the new Protector RG Mk1 that is currently being delivered to the United Kingdom’s Royal Air Force (RAF). In addition to the RAF, GA-ASI has MQ-9B procurement contracts with Belgium, Canada, Japan, Taiwan, Poland, India, Denmark, and the U.S. Air Force in support of the Special Operations Command. MQ-9B has also been featured in various U.S. Navy exercises, including [Northern Edge](#), [Integrated Battle Problem](#), [RIMPAC](#), and [Group Sail](#).