MQ-25 Test Asset Gets an Aerial Refueling Store in Prep for More Flight Testing

MQ-25 T1 aerial refueling store is installed at the AVMATS Hangar, in Mascoutah, Illinois. THE BOEING CO.

St. LOUIS – Boeing is preparing its MQ-25 T1 unmanned aerial refueling test asset to return to flight test later this year, this time with a U.S. Navy aerial refueling store, the company said in a July 23 email.

The store was recently integrated onto a purpose-built pylon under the wing of T1 during a planned modification. It is the same store currently carried by F/A-18 fighter jets that perform aerial refueling off aircraft carriers. MQ-25 will relieve F/A-18s of carrier-based aerial refueling, freeing up those assets to perform other missions.

"When we resume flight testing later this year, we'll have the opportunity to gather test points about the aerodynamics of that pod and the software commands that control it – all happening well before we deliver the Navy's first MQ-25 jet with the same pod," said Dave Bujold, MQ-25 program director. "That early testing and early software development is a big part of supporting the Navy's goal to get MQ-25 to the fleet as quickly as possible."

The Boeing and Navy team conducted an initial round of flight testing that began with T1's first flight in September 2019 and resulted in nearly 30 hours in the air. Bujold said those flights helped accelerate the team's understanding of the aircraft's aerodynamic performance and informed design decisions for both the air vehicle and its software.

The MQ-25 will be the U.S. Navy's first operational, carrier-

based unmanned aircraft. Boeing is under contract to manufacture seven aircraft that will subsequently go into Navy flight test.

When T1 returns to flight with the aerial refueling store, it will be under the control of Boeing air vehicle operators and monitored by a team of flight test engineers, including those from the Navy. That team first will be looking at the aerodynamic effects of the store at various points of the flight envelope and later will be monitoring the hose and drogue’s behavior in the wake of the MQ-25 airframe.