Eight years ago, the U.S. Navy sent a Northrop Grumman-RQ-4A unmanned aircraft system into the field for a six-month deployment. Now, at the 25,000-flight-hour point, it’s still patrolling the skies.

The Broad Area Maritime Surveillance Demonstrator (BAMS-D), a precursor to the MQ-4C Triton program, was acquired by the Navy as part of its program to develop concepts of operation for high-altitude, long-endurance unmanned systems. After Northrop Grumman won the contract in 2003, the program was originally called the “Global Hawk Maritime Demonstration” (GHMD).

That’s because the Navy and Northrop Grumman team extensively modified the Air Force Global Hawk baseline Integrated Sensor Suite to include overwater radar and electronic support measures (ESM) capabilities for the maritime environment. Throughout the next few years, the Navy was impressed with the maritime intelligence, surveillance and reconnaissance (ISR) aircraft’s performance. “We need more of this,” Adm. William Gortney wrote after using the aircraft in an exercise in 2007.

By 2009, the aircraft was in operational service and renamed BAMS-D. Its initial deployment evolved to where the Navy deployed a second aircraft. In April 2017, BAMS-D surpassed the 25,000 flight hours milestone.

“BAMS-D has been a steady and reliable asset to the fleet,” said Sean Burke, program manager for the U.S. Navy’s Persistent Maritime Unmanned Air Systems (PMA) 262, which includes Triton and BAMS-D.

“The six-month test demonstration deployment has turned into more than eight years of strategic awareness to the fleet. The work BAMS-D has completed has been pivotal to building the foundation to the Triton program.”

Like other high-altitude, long-endurance systems developed by the Northrop Grumman Autonomous Systems division, BAMS-D flies at upwards of 60,000 feet and can fly for more than 24 hours at a time. Its sensors can cover vast areas, imaging huge swaths of territory, open ocean and littorals.

“Once we demonstrated what we could do for them and how important it was, it became pretty critical,” said Terry Barefoot, GHMD/BAMS-D program manager at Northrop Grumman.

BAMS-D is based at Naval Air Station (NAS) Patuxent River in Maryland. Retired Rear Adm. Dan Cloyd, Northrop Grumman’s corporate director for naval aviation programs, saw BAMS-D at a point when he was a Carrier Strike Group and Task Force commander. Prior to its arrival, maritime ISR was a group effort conducted by multiple aircraft and agencies. Most of those entities had other duties, making planning difficult. BAMS-D gave the Navy one persistent system dedicated solely to ISR, which made mission planning more efficient and effective.

“It’s never left because it’s very popular,” Cloyd said of BAMS-D. “It provides a lot of great information, and nobody wants to let it go.”

He added, “Every person at Northrop Grumman should be enormously proud of our being able to provide a capability to the Navy warfighter that is helping better provide for the security of our nation.”

Northrop Grumman is scheduled to deliver the first two operational MQ-4C Triton aircraft — a bigger, more advanced version of BAMS-D — later this year. Eventually stationed at five key operating bases, Triton will provide the Navy with 24-hour maritime ISR around the globe.

“Once we demonstrated what we could do for them and how important it was, it became pretty critical.”

—TERRY BAREFOOT

GHMD/BAMS-D program manager, Northrop Grumman

Photo by Erik Hildebrandt