

HOW MANY HOURS ARE ENOUGH?

By Jessica Hairston

In an E-2D, 1,000 is just the beginning.



E-2D on the ground at test location.

Just as an aircraft can reach flight hour milestones, so can its crewmembers.

In the case of an E-2D Advanced Hawkeye, that means two pilots and three weapon system operators.

Last year, Tom Boutin and Cole Simpson became the first pilot and weapon system operator, respectively, to reach the 1,000 flight hour mark in the E-2D.

Neither Boutin nor Simpson is a stranger to the E-2 platform—both accumulated thousands of flight hours in the E-2C Hawkeye. Boutin flew E-2Cs in the U.S. Navy before joining Grumman Corporation as a test pilot more than 25 years ago. Simpson served as a Naval Flight Officer, based out of Norfolk, Va., and Pt. Mugu, Calif., from 1996 until he joined Northrop Grumman in 2004.

As Northrop Grumman's lead test pilot for the E-2D, Boutin oversaw the aircraft's development program, "even before it was really an airplane...just an idea."

During the entire flight test program, Northrop Grumman has

"You don't get to 1,000 hours without the planes being available to fly and meeting the test and performance requirements from the customer, so I think it really is just a testament to the whole E-2D team."

—Cole Simpson, weapon system operator, E-2D Advanced Hawkeye



Cole Simpson (left) and Tom Boutin are first to reach 1,000 flight hours in the E-2D.

Photo by Melissa Souza

worked closely with the Navy as part of the integrated test team. It is of the utmost importance in the design phase to "interface with the people who will actually fly the airplane," said Boutin.

Leading up to the E-2D Advanced Hawkeye's first flight in August 2007, Boutin and the entire team felt the pressure. "There were a lot of things that had to happen and a lot of people that had to do their jobs the right way before we could even get off the ground. Through a lot of hard work by many people, it worked out," he said.

Building upon the capabilities of the E-2C, the E-2D is a superior airborne early warning aircraft. "I think the biggest differences are the performance of the radar—it's significantly better than the E-2C as far as detection and tracking, and the fact that all of our

interfaces are software-based," said Simpson.

Now, it is a lot easier for the mission commander to divide responsibilities among the crew and not be limited by the hardware configuration of the aircraft. Each crewmember is fully capable of controlling any of the functionality," Simpson explained.

As part of the flight test program, Boutin and Simpson also took part in carrier sea trials. One test team, comprising Boutin and three Navy pilots, had to demonstrate the E-2D on the aircraft carrier *USS Harry S. Truman* (CVN 75).

"We went through our matrix of test landings, basically

landings where you fly off-nominal conditions, intentionally make mistakes that the average fleet pilot could come across and then correct for it," stated Boutin.

It was an incredibly personal experience for Boutin. He was flying an E-2C for the Navy the last time he landed on an aircraft carrier more than 23 years earlier.

Overall, the milestones the E-2D program has reached, and will continue to achieve, are made possible by the efforts of hundreds of engineers, mechanics and technicians who work tirelessly to ensure that the aircraft is ready for flight. ▴