NAVAIR delivers first redesigned MH-60s gunner seats to fleet

Posted by TBN[Staff] On 09/25/2019

Naval Air Systems Command, Patuxent River, MD - September 25, 2019 - The Aircrew Systems Program Office delivered, installed and demonstrated the first two redesigned MH-60S Seahawk gunner seats on Sept. 24 and 25 to Helicopter Sea Combat Wing Pacific (HSCWP) at Naval Air Station North Island.

This delivery is the culmination of innovative, strategic planning across multiple organizations working together to complete the mission with urgency.

“From the Air Boss and NAVAIR’s advocacy, the Office of Chief of Naval Operations Air Warfare Division rapid funding, program office customer service, HSCWP and Helicopter Sea Combat Wing Atlantic (HSCWA) operator feedback; this was a team effort to make possible an urgent fleet request,” said Capt. Ryan T. Carron, Commodore, Commander HSCWP.

The original MH-60S Gunner Seat was notoriously uncomfortable for aircrew to sit in for any length of time, and became detrimental to aircrew long-term health. Fielding a replacement is naval aviation’s No. 2 safety priority.

“The MH-60S Gunner Seat is proof that the fleet and NAVAIR listen to one of our most precious assets—the naval aircrewmen. Its redesign focused on the health of the aircrew, providing better crash protection and improving endurance,” Carron said.

The program office used an innovative approach and formed a Gunner Seat Task Force (GSTF) to allow the fleet to provide real-time input during each step of the prototype’s development. The integrated product team responsible for the Gunner Seat redesign, led by Fillip Behrman, whom Carron personally thanked for “his personal drive and leadership,” used the GSTF as a resource to vet ideas, support fit checks and provide a conduit into the aircrew community.

“The gunner seat redesign is a great example of how taking measured risks for an urgent fleet need and incorporating direct Fleet input allowed us to deliver capability with far greater speed. The result will be increased aircrew endurance and mission performance, said Vice Adm. Dean Peters, commander, NAVAIR.

As lead systems integrator, the government team used model based systems engineering to expedite the Interim Flight Clearance decision, and support faster design decisions.

Additive manufacturing was employed to assess quickly the component fit/functionality prior to cutting complex metallic components, saving the program months of schedule and cost.

The Naval Air Warfare Center Aircraft Division AIRWorks office provided rapid prototyping to bring the redesign to life in six months. This collaboration across organizations using innovative techniques saved both time and money.

“The success of the gunner seat redesign comes down to the power of relationships, using the direct input and collaboration with the fleet, coupled with a tailored approach using AIRWorks and organic prototyping allowed the team to go fast and deliver this capability with speed,” said Gary Kurtz, director, Common Systems and Commercial Services.

The MH-60S gunner seat redesign has adjustable lumbar support, height adjustments, as well as energy absorbers with selectable weight profile integrated into the seat. All of these redesigned features provide a seat that is not only crashworthy but also comfortable for aircrew to sit in for many hours at a time—and has the fleet stamp of approval prior to delivery.

“The gunner seat serves as a model for how innovative capability can be developed in the future,” Carron said.

The Aircrew Systems Program Office (PMA-202) includes all systems that directly support the aircrew and troops or passengers in the performance of their missions, and consist of the functional components, internal and external interfaces, and the environment to optimize human performance, protection and sustainment in aviation operations. It serves as the premiere organization for human performance optimization and enables the Navy and Marine Corps to be combat effective by providing and sustaining aircrew systems that work the first time, every time. PMA-202 analyzes, develops, and executes innovative solutions that ensure warfighters are equipped with aircrew systems that are “Ready to Fight Tonight”, through all phases of naval aviation, with the capability and capacity to “Win the Future”.