

CH-53K Advanced Aviation Training Device Declared Ready for Training



The CH-53K Advanced Aviation Training Device is a new “first of its kind” trainer for both pilots and aircrew of the CH-53K. The mixed-reality static trainer recently completed a test readiness review and joint final testing and was declared ready for training. (U.S. Navy)

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PATUXENT RIVER, Md. – A Test Readiness Review (TRR) and Joint Final Testing (JFT) were recently completed for the CH-53K Advanced Aviation Training Device (AATD) 1, resulting in the trainer being declared Ready for Training (RFT) on Aug. 16. The new mixed-reality static training device is the first of its kind to support both pilot and aircrew training on the CH-53K King Stallion.

Veraxx Engineering Corporation developed the AATD prototype for the H-53 Heavy Lift Helicopter Program Office (PMA-261).

According to Maj. Daniel Meckley, H-53 Training Systems Integrated Product Team Lead, "The purpose of the device is to provide cockpit familiarization and crew resource management training to pilots and aircrew."

The AATD provides mixed reality goggles for pilots, which simulates the external environment while also allowing them to see their hands.

"With the AATD, the pilots don't need to use the goggles because there is a big screen TV in front of the device to conduct basic training," explained Meckley.

The crew chief also wears a set of goggles, but these are virtual reality instead of mixed reality.

"This means the crew chief cannot see his or her hands," said Meckley. "All they see is the simulated environment."

According to Meckley, even though the crew chief station is physically located behind the cockpit, the training can simulate being anywhere inside or outside the aircraft.

"This leads to enhanced communication and crew resource management during specific training areas like aircraft startup/shutdown, confined area landings, formation flights, etc.," he said.

PMA-261 manages the cradle-to-grave procurement, development, support, fielding and disposal of the entire family of H-53 heavy lift helicopters, including the CH-53K King Stallion, the CH-53E Super Stallion and the MH-53E Sea Dragon.