Flight Testing Soon for Upgraded Marine Corps K-MAX UAS

The Marine Corps' first two Kaman K-MAX Helicopters arrived at Marine Corps Air Station Yuma, Ariz., Saturday, May 7, 2016. The K-MAX will be added to MCAS Yuma's already vast collection of military air assets, and will utilize the station's ranges to strengthen training, testing and operations across the Marine Corps. *U.S. MARINE CORPS / Pfc. George Melendez*

ARLINGTON, Va. – Kaman Air Vehicles, a division of Kaman Aerospace Corp., has conducted the first flight of the upgraded heavy-lift K-MAX unmanned rotorcraft – the K-MAX Titan – and expects to fly the two Marine Corps similarly upgraded K-MAX aircraft this month, the company said in a release.

"We are excited to reach this major milestone on K-MAX Titan – watching this capability take to the skies and knowing that we are going to solve some of the toughest challenges for our commercial and military customers," said Roger Wassmuth, senior director, Business Development, Air Vehicles Division, in the release.

The new K-MAX Titan system will be available for existing K-MAX aircraft as well as on new production K-MAX helicopters, the company said. The K-MAX is a rugged, low-maintenance aircraft that features a counter-rotating rotor system and is optimized for repetitive external load operations. The aircraft can lift up to 6,000 pounds (2,722 kilograms) with unmatched performance in hot and high conditions.

At the same time, Kaman is upgrading the autonomous capabilities of the two Marine Corps K-MAX air vehicles through a funded government contract. The two air vehicles are

being upgraded with the K-MAX Titan unmanned system and Near Earth Autonomy’s sensor-based autonomy suite.

Flight-testing of the upgraded Marine Corps K-MAX air vehicles is expected to start in May 2021.

The Marine Corps’ acquired two K-MAX systems as cargo resupply UAS, which it designated as CQ-24As. The system consists of two unmanned K-MAX helicopters, main operating base and forward operating base ground control stations, and associated ground support equipment and spares. The Marine Corps conducted evaluations of the K-MAX to fill an urgent requirement for an unmanned ability to deliver/retrograde cargo to forward operating bases while avoiding the use of convoys over dangerous routes.

In November 2011, the Marine Corps deployed the CQ-24A as a government-owned, contractor-operated system into Afghanistan for a six-month evaluation in combat conditions. The deployment was extended through May 2014. The two K-MAX aircraft, along with the rest of the system, were delivered to Marine Operational Test And Evaluation Squadron One (VMX-1) in 2016 to support further cargo UAS experimentation and concept of operations development. In April 2019, Kaman was awarded a contract to replace the avionics in the CQ-24s and return them to flight status.