

Multi-Domain Test Event Lets XQ-58A Demonstrate Tactical Data Link Integration



From U.S. Marine Corps Communications Directorate

EGLIN AIR FORCE BASE, FLA. – The Marine Corps’ XQ-58A Valkyrie completed its latest test flight and first multi-service integration effort during Emerald Flag 2024 at Eglin Air Force Base, Florida, this October.

Emerald Flag 2024 is a multiservice and multi-domain test event that incorporates new and developing technology while focusing on the efficiency of joint warfare. The effort includes integrating advanced long-range kill chains – enabling programs through a range of realistic combat training environments on air, space, and cyber space platforms.

The XQ-58A effectively demonstrated its capabilities as a forward deployed sensing platform – providing critical threat targeting data to Marine Corps fifth-generation aircraft to rapidly close advanced kill chains. Using a common tactical data link, the XQ-58A contributed broad airborne and surface sensor awareness information to multiple ground and airborne joint network participants.

“This XQ-58A test marked another milestone in the Marine Corps’ unmanned tactical aircraft program. The flight focused on the use of tactical data links to enable digital communication between the XQ-58A and an airborne four-ship of F-35Bs from Marine Fighter Attack Squadron 214 and other joint aircraft. The success of this flight test during Emerald Flag pushed the manned-unmanned teaming concept a step further for the entire Joint Force,” said Col. Derek Brannon, Branch Head for the Cunningham Group, Deputy Commandant for Aviation.

This joint collaboration was supported by the U.S. Air Force’s 96th Test Wing; the U.S. Air Force’s 96th Cyberspace Test Group; the U.S. Air Force’s 53rd Test and Evaluation Group; the Office of Undersecretary of Defense for Research and Engineering; Marine Corps Warfighting Laboratory; Headquarters Marine Corps Aviation; Naval Air Systems Command’s Advanced Development Team; Naval Air Warfare Center Aircraft Division AIRWorks; and 2nd Marine Aircraft Wing. This broad team facilitated ongoing research, development, test, and evaluation throughout the Marine Corps’ Penetrating Affordable Autonomous Collaborative Killer – Portfolio (PAACK-P) program.

The Deputy Commandant for Aviation’s Cunningham Group, an internal working group responsible for planning and implementing Project Eagle, and MCWL collaborated to see this project through to completion.

“This test flight marked the capstone event for the PAACK-P Rapid Defense Experimentation Reserve project and proved the tactical utility of uncrewed offboard sensing platforms,” said Lt. Col. Bradley Buick, future capabilities officer for Cunningham Group.

Through this successful joint integration, the XQ-58A continues to provide the Marine Corps with a testable platform for integrating new technologies and concepts in support of the Marine Air-Ground Task Force Unmanned Expeditionary

Tactical Aircraft program.