

Questions Surround Air Force's New Glider-Based Drone

BY JAN TEGLER



A crew chief stands next to an ULTRA drone

In early May, U.S. Air Forces Central released a series of photographs of a glider-like drone preparing for an early-morning mission at an “undisclosed location.”

Photo captions identified the aircraft as the Unmanned Long-endurance Tactical Reconnaissance Aircraft, or ULTRA.

At least one ULTRA drone has been flying with 380th Air Expeditionary Wing as a low-cost, longer-endurance alternative to the MQ-9 Reapers, which the wing also operates. But the Air Force Research Laboratory — which developed ULTRA in a collaboration with Fairfax, Virginia-headquartered DZYNE Technologies — won’t acknowledge that aircraft is already operational.

“The ULTRA program continues to progress through prototype development and test activities,” AFRL spokesman Bryan Ripple said. “AFRL is not releasing further details on the ULTRA program at this time as that information is pre-decisional or not yet approved for public release.”

“As for the recent imagery of the ULTRA program released by U.S. Air Forces Central” on the Defense Visual Information Distribution Service website, “we cannot comment on the specific location of any aircraft platform operating within the U.S. Central Command area of responsibility due to operational security,” said Ann Stefanek, chief of media operations in the Office of the Secretary of the Air Force.

A photo story from May 6 on the AFCENT website — “AFCENT Commander visits 380th AEW” — shows

Ninth Air Force Commander Lt. Gen. Derek France speaking with a member of the ULTRA team in front of the remotely piloted drone at an undisclosed location within the U.S. Central Command area of responsibility on April 29.

France “visited the wing to get a better understanding of [ULTRA’s] current operational capabilities, better enabling him to make informed decisions throughout the region,” according to the story.

The Air Force’s fiscal year 2025 budget request describes ULTRA as a technology and concept development effort to procure an unmanned aerial system that is capable of multiple-day duration flights while still being “extremely affordable.”

The service proposes buying four ULTRA drones in 2025 at a gross weapons system unit cost of about \$9 million each, about \$35 million total. That compares favorably with the cost of the MQ-9, last recorded as costing \$23 million per unit in the Air Force’s 2023 budget request, and the RQ-4 Global Hawks the 380th AEW operated until recently at more than \$130 million each.

AFRL’s Center for Rapid Innovation has had ULTRA in development since at least 2019. The drone went from concept to first flight in less than 10 months, according to lab press releases.

A laboratory webpage provides the only detail the Air Force is willing to share on ULTRA, describing it as an inexpensive, GPS-hardened, ultra-long endurance intelligence, surveillance and reconnaissance plat-

form with an endurance capability that “exceeds 80 hours while carrying over 400 pounds of payload.”

ULTRA looks like an unmanned glider because it was developed by DZYNE and CRI from a German-made manned sport glider called the Stemme S12. The S12 aligned with ULTRA’s emphasis on using commercial-off-the-shelf drone technologies “to ensure acquisition and sustainment costs remain low,” the web page stated.

Designed to be an “ISR truck,” ULTRA can carry a range of electro-optical/infrared, radio frequency and other low-cost intelligence collection payloads and sensors in a reconfigurable platform. Integration of lower-cost sensors is possible due to the drone’s flight at “lower operating altitudes, which don’t require large optics or high-power RF to maintain effectiveness,” according to the web page.

Flown with a command-and-control system that allows for “point and click” operations, ULTRA can go aloft worldwide via satellite-based links “that also provide the high-rate ISR data feed to the operators in real time,” the web page said.

The Air Force has stated that ULTRA will be able to operate at “excessive ranges” required in areas like the Pacific and that its low price will enable the Air Force to procure aircraft systems in large quantities.

Asked whether further purchases of ULTRA drones beyond the four planned for acquisition in fiscal year 2025 were likely, Stefanek reiterated, “the Air Force has nothing else to provide based on operational security reasons.” **ND**