Near Earth Autonomy Achieves First Autonomous Flight of Leonardo AW139 Helo

From Near Earth Autonomy, June 17, 2025

PITTSBURGH, Pa. – June 17, 2025: Near Earth Autonomy (Near Earth), a prime performer for the U.S. Marine Corps Aerial Logistics Connector (ALC) program, has successfully completed the first autonomous test flight of a Leonardo AW139 helicopter. This milestone demonstrates the real-world viability of scalable, uncrewed rotorcraft operating in contested environments without pilot or remote operator input, accelerating the path toward operational deployment.

Conducted in May in Phoenix, the flight marked the first time that the AW139 was

autonomously controlled by Near Earth's onboard autonomy stack. The demonstration validated critical capabilities such as precise flight control, autonomous decision-making, and seamless integration with existing aircraft systems.

"This flight showcases Near Earth Autonomy's leadership in developing trusted autonomy for real-world operations," said Dr. Sanjiv Singh, CEO of Near Earth Autonomy. "By directly controlling the AW139's flight modes with our autonomy system, we've shown that scalable autonomous logistics using existing platforms is not just possible, it's happening now. This capability is essential for reducing risk to military personnel and ensuring resilient supply chains in the field."

The ALC program, managed under a Naval Aviation Systems Consortium Other Transaction Agreement (OTA), is designed to field an autonomous aerial logistics system that enhances operational readiness and mission responsiveness. As the

program progresses, future testing will expand on key autonomy features such as automated obstacle avoidance, route planning, and logistics system integration.

This achievement was made possible through Near Earth’s collaboration with Honeywell Aerospace Technologies and Leonardo. Honeywell’s AW139 served as the flight test platform and was equipped with mission-critical avionics that interfaced with Near Earth’s autonomy system. Leonardo, the aircraft manufacturer, provided vital engineering support to facilitate integration.

“This successful demonstration is a major step in creating brand new possibilities for not only the USMC, but potentially other helicopter operators as well,” said Bob Buddecke, President, Electronic Solutions, Honeywell Aerospace Technologies. “Together with Near Earth Autonomy and Leonardo, we’re showing how existing aircraft can be adapted with trusted avionics to support the next generation of defense logistics. Uncrewed aircraft will be vital in keeping service men and women safe in contested environments, and we are one step closer to realizing that vision.”

Near Earth Autonomy is developing an autonomy solution that is affordable, scalable, and certifiable, enabling rapid adaptation of crewed aircraft to uncrewed logistics roles. These capabilities are essential for meeting both current and future operational demands across the Department of Defense and beyond.