UNMANNED UH-1H HELICOPTER IN THE WORKS

News / Manufacturer



There have been great strides in autonomous flight systems in recent years, but the tricky bit is getting them installed in conventional vertical take-off and landing (VTOL) aircraft. In North Virginia, Aurora Flight Sciences announced it's using the technology from its Autonomous Aerial Cargo Utility System (AACUS) to integrate the company's Tactical Autonomous Aerial Logistics System (TALOS) on a UH-1H helicopter as part of a program to produce a "platform agnostic" system that can be used on almost any VTOL aircraft to make it pilot optional.

In a flight demonstration on Thursday, Aurora used a manned Bell 206 to demonstrate how AACUS can use its sensors to scan an area and plan maneuvers for autonomous takeoff, flight, and landing. The system had been previously tested on an autonomous Boeing H-6U Unmanned Little Bird and three different manned Bell 206 aircraft.

AACUS was originally designed for delivering cargo on unmanned or optionally-manned VTOL

© 2015-2026 50SKYSHADES.COM — Reproduction, copying, or redistribution for commercial purposes is prohibited.

aircraft. In flight, the AACUS/TALOS system automatically scans its surroundings and plots a safe path to its destination. It can even detect obstacles, including power lines, and avoid them, as well as obstacles on the ground. This allows it to land autonomously in unprepared fields and "non-cooperative landing sites" under the supervision of field personnel using a tablet app without the need for special training.

AACUS-enabled aircraft scanning a potential unproven landing zone

Image not found or type unknown

The company sees the technology as having broad applications – not only in acting autonomously, but also as an electronic co-pilot to help pilots in difficult situations, including first responders operating on stormy nights or landing in debris-strewn area. In these situations, TALOS could alert the pilot to potential dangers in time to avoid them. Eventually, it could be used for medevac, fire fighting, oil platform work, business aviation, and agriculture, as well as for military applications.

"The arrival of a Huey as our third test platform frames a key point for future customers – the TALOS system is platform agnostic; you're not buying a new fleet of helicopters, you're buying a

© 2015-2026 50SKYSHADES.COM — Reproduction, copying, or redistribution for commercial purposes is prohibited.

capability set for your current fleet," says John Wissler, Vice President of Aurora's R&D Center in Cambridge, Massachusetts. "TALOS is not an aircraft, nor is it a robot flying an aircraft – TALOS is transferable intelligence designed with both manned and unmanned aircraft requirements in mind. The value of TALOS can be described in a few words – platform agnostic, scalable autonomy, onboard sensing of the environment, and on-board intelligence that no other system in the world can provide."

Aurora plans to complete integrating TALOS in an autonomous UH-1H in time for demonstrations in 2017 or 2018.

The animation below shows a TALOS-equipped helicopter on a resupply mission.

11 NOVEMBER 2016

SOURCE: NEWATLAS
ARTICLE LINK:
https://ut.50skyshades.com/news/manufacturer/unmanned-uh-1h-helicopter-in-the-works

© 2015-2026 50SKYSHADES.COM — Reproduction, copying, or redistribution for commercial purposes is prohibited.