



AACUS-enabled aircraft scanning a potential unproven landing zone. (Artist's Concept)

Aurora to Develop Unmanned UH-1H

Portable, autonomous flight system to be demonstrated on Huey

Manassas, Virginia, November 10, 2016 – Aurora Flight Sciences continues to break ground on the development of advanced autonomous capabilities for vertical take-off and landing (VTOL) systems. Aurora's work on the *Autonomous Aerial Cargo Utility System (AACUS)* program will be leveraged to integrate the company's *Tactical Autonomous Aerial Logistics System (TALOS)* on a UH-1H helicopter. The primary goal of the AACUS program is to enable rapid cargo delivery by unmanned, and potentially optionally-manned, VTOL systems. AACUS encompasses the development and implementation of VTOL-based obstacle detection and avoidance, and allows for autonomous landings at unprepared, off-field, non-cooperative landing sites. AACUS also enables dynamic contingency planning to the point of landing, with goal-based supervisory control by any field personnel with no special training.

At the AACUS flight testing event held today in Northern Virginia, the AACUS program demonstrated on a manned Bell 206 the perception and planning capabilities required for autonomous takeoff, transit and landing. "We know how to make things fly, we've been doing it for over 100 years," said Retired Brig. Gen. Frank Kelley, the Deputy Assistant Secretary of the Navy for Unmanned Systems. "What we don't yet know how to do, is how to couple aircraft and autonomous systems together, but great programs like this are helping us get there."

Aurora's TALOS system has been demonstrated previously on a Boeing H-6U Unmanned Little Bird flown autonomously, and three different human-piloted Bell 206 aircraft. "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 capability set for your current fleet," said 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 transferrable 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."

Commercial applications for the TALOS technology are also being explored by Aurora. "Think of the civilian first responder pilot attempting to land in a remote, storm-ravaged area at night – TALOS senses and alerts to power lines and landing zone obstacles well before the pilot and informs the pilot's maneuvers," said Wissler.

The final phase of the AACUS program will transition the TALOS system onto an autonomous UH-1H platform currently under development at Aurora, with culminating demonstrations occurring in 2017-2018.

Aurora's TALOS system is being developed for the AACUS program with funding from the Office of Naval Research. To learn more about TALOS, visit www.aurora.aero/aacus.

Media Contacts

Shelly Simi
Director of Corporate Communications & Public Relations
simi.shelly@aurora.aero
Office: 703.530.1963
Mobile: 571.379.0071

Ashley Gudzak
Communications Manager
gudzak.ashley@aurora.aero
Mobile: 904.651.2364

About Aurora Flight Sciences

Aurora Flight Sciences is an innovative technology company which strives to create smarter aircraft through the development of versatile and intuitive autonomous systems. Operating at the intersection of technology and robotic aviation, Aurora leverages the power of autonomy to make manned and unmanned flight safer and more efficient. Headquartered in Manassas, Virginia, Aurora operates production plants in Bridgeport, West Virginia and Columbus, Mississippi, has Research and Development Centers in Cambridge, Massachusetts, Dayton, Ohio and Mountain View, California, and a European office, Aurora Swiss Aerospace, located in Lucerne, Switzerland. To view recent press releases and more about Aurora please visit our website at www.aurora.aero.

Aurora Press Release APR338

Aurora Flight Sciences Corporation

www.aurora.aero

9950 Wakeman Drive
Manassas, VA 20110-2702
703-369-3633 • Fax 703-369-4514

3000 East Benedum Industrial Drive
Bridgeport, WV 26330-9683
304-842-8100 • Fax 304-842-8116

90 Broadway, Suite 11
Cambridge, MA 02142-1110
617-500-4800 • Fax 617-500-4810

200 Aurora Way
Columbus, MS 39701-9670
662-328-8227 • Fax 662-328-8971