Vahana, an A³ Project, to Use Near Earth Autonomy’s Landing Zone Assessment Technology

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Santa Clara, Calif. and Pittsburgh, PA – A³, the advanced projects and partnerships outpost of Airbus in Silicon Valley, has entered into a contract with Pittsburgh’s Near Earth Autonomy, a leader in autonomy for air vehicles, to use Near Earth’s landing zone assessment technology in Vahana, its electric, self-piloted vehicle project. Near Earth’s technology will be a component of the overall sense-and-avoid system for Vahana’s full-scale vehicle to be demonstrated by the end of 2017.

Vahana intends to open up urban airways by developing the first electric self-piloted vertical take-off and landing (VTOL) passenger aircraft. The development of a fully autonomous aircraft requires key technical capabilities including mature obstacle detection and avoidance for aircraft take-off and landing.

“At Vahana we’re focused on efficiently developing our aircraft by leveraging capable partners who can meet our rigorous timelines,” said Zach Lovering, Project Executive, Vahana. “These partnerships are essential to many aspects of our aircraft including our sense-and-avoid system. To that end we have adopted Near Earth Autonomy’s landing zone assessment technology for use on our aircraft.”

“The partnership with A³ is an exciting opportunity to support the advancement of intelligent, autonomous flight,” said Sanjiv Singh, CEO, Near Earth Autonomy. “Our engineering team has years of experience working with government agencies and commercial partners on landing zone assessment for unmanned aerial vehicles. We are thrilled to deploy our proven technologies to support Vahana’s mission to transform urban air mobility.”

The sensor payload developed for Vahana by Near Earth Autonomy creates a 3D representation of the landing environment using laser scanning and inertial measurement. During descent, this representation is used to assess the landing site by an onboard computer. The assessment verifies that the designated landing site is safe, away from obstructions or hazardous terrain. If necessary, it provides alternate locations to ensure safe touchdown.

Vahana and Near Earth Autonomy completed a series of acceptance flights in June of 2017 to meet the goal of flying a full-size prototype before the end of 2017.

About Vahana:
Vahana is an electric, self-piloted vehicle project being developed by A³, the advanced projects and partnerships outpost of Airbus in Silicon Valley. The mission of Project Vahana is to design and build a self-piloted vertical take-off and landing electric vehicle. The Vahana team is a group of passionate and restless experts in aircraft design, manufacturing, electric propulsion, vehicle autonomy, and aircraft certification. The project aims to solve urban mobility by moving from the beltways to the airways. For more information, visit https://vahana.aero/.

About Near Earth Autonomy:
Near Earth Autonomy is creating a future where autonomous aircraft are commonplace and safe. Our technology enables aircraft ranging in scale from sub-meter to full scale to autonomously inspect, map, survey, and transport. We work on applications in infrastructure, maintenance, agriculture, mining, emergency response, and cargo delivery. Near Earth is a privately held, spin-off from Carnegie Mellon University. For more information, visit http://nearearth.aero.