Aeva's 4D LiDAR Technology Selected for Airbus UpNext Optimate Project to Enhance Airport Taxiing Automation

May 21, 2025

Aeva® (Nasdaq: AEVA), a leader in next-generation sensing and perception systems, today announced its selection by Airbus UpNext, an Airbus subsidiary dedicated to exploring innovative technologies. Aeva will supply its advanced 4D LiDAR technology for the Optimate smart automation demonstrator, a project focused on enhancing pilot assistance and decision-making during airport operations.

Aeva's proprietary 4D LiDAR technology leverages Frequency Modulated Continuous Wave (FMCW) sensing, which allows it to simultaneously detect both precise distance and instant velocity for every point in a scene. This capability represents a significant advancement over conventional LiDAR systems. Its ability to provide high-resolution data at long ranges, extending up to 500 meters, makes it particularly well-suited for the dynamic and complex environments of airports, including runways and taxiways.

The Optimate project involves testing various sensor technologies, including multiple Aeva 4D LiDAR units, on an Airbus A350-1000 flight test aircraft and an electrical truck. These systems will undergo hundreds of hours of taxi operation at Toulouse-Blagnac airport and a more complex international airport.

"Airbus has a proven history of innovation and introducing next-generation technologies to the air transportation industry at scale," said Soroush Salehian, Co-founder and CEO at Aeva. "This collaboration is a tremendous opportunity to showcase the transformative potential of Aeva's 4D LiDAR technology in the aviation industry. We're excited to support the Optimate team in their smart automation technologies exploration."