

Trajectory-Based Operations: The Next Revolution in Air Traffic Management

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Advanced technologies such as Automatic Dependent Surveillance – Broadcast (ADS-B), Performance Based Navigation (PBN), and digital air-to-ground communications have been deployed in Europe and the United States and have begun to be integrated into air traffic control operations. To achieve true Air Traffic Management (ATM), and realize the objectives of NextGen and SESAR, these technologies must be fully integrated with ATC automation systems. Trajectory-Based Operations (TBO) is an ATM method for strategically planning, managing, and optimizing flights throughout the operation by using time-based management, information exchange between air and ground systems, and the aircraft's ability to fly precise paths in time and space. TBO relies on a detailed four-dimensional flight trajectory, synchronized between the flight deck, ATC automation, and airline operations center, to efficiently maximize the use of airspace and airport infrastructure. Mr. Post will present the FAA's vision for TBO, portray its operational and environmental benefits, and describe the FAA's plans for development and implementation.