

Airport Obstructions Standards Committee (AOSC) Decision Document #03 Summary

Approved: July 12, 2004

Atlanta Runway 8R/26L End-Around Taxiway

1) Introduction

- a) On December 11, 2003, representatives from Hartsfield-Jackson Atlanta International Airport and Delta Airlines met with the AOSC committee to discuss their proposal to construct a new end-around taxiway. As presented, the primary benefit of the proposal would be the allowance of Group I-IV aircraft arriving on runway 26R to taxi around the west end of departure runway 26L when the ceiling is above 300' AGL and visibility is greater than 1 mile. This would provide unrestricted taxi to the terminal, rather than the current procedure where arrivals are typically held at runway 26L until they can be crossed in groups as the departures are held.
- b) Based on full (arrival and departure) independent use of the taxiway, the Total Airport and Airspace Modeler (TAAM) modeling effort conducted by Delta Airlines indicated an approximate annual benefit of \$50M. However, Atlanta subsequently agreed to limit the scope of the initial FAA review to the departure-only case.

2) Rationale for Decision

- a) In April 2004, the AOSC hosted a joint FAA/industry session to discuss the end-around taxiway concept, along with the strategy to analyze proposed operations. Since that time, the AOSC and industry have worked together to analyze the four areas and that analysis forms the basis for this decision: TERPS, human factors, Runway Protection Zone and overflights. The provisions from this analysis should be incorporated into the implementation of the Atlanta end-around proposal.
- b) The US Standard for Terminal Instrument Approach Procedures (TERPS) required protection of the 40:1 Obstacle Clearance Surface (OCS) from penetrations by the tails of taxiing aircraft. Atlanta's 29-foot difference in elevation between the departure end of the runway and the lowest point on the end-around taxiway minimizes the effective obstacle height. TERPS analysis did not identify any issues, given that end-around taxi operations will only be allowed in weather conditions down to a ceiling of 300 feet and one-mile visibility.
- c) Atlanta's proposal was studied from a human factors standpoint, including a full vetting with industry. Simulation of the proposed operation, conducted in May 2004, did not reveal any concerns that warrant alteration of the proposal. It was understood that pilots needed to take into account the maximum tail height of aircraft on the end-around taxiway for One-Engine-Inoperative (OEI) surface (62:5:1) considerations.

Rationale for Decision (continued)

- d) In July 2004, analysis based on 22 years of incident/accident data showed an acceptable risk level (0.6×10^{-7}) associated with allowing taxiing aircraft in the Runway Protection Zone (RPZ) of runways with length of 9,000 feet or more – as long as the taxiing operations remain outside the 1000-foot x 500-foot Runway Safety Area.
- e) The collective analysis of the above risk areas supports allowance of overflights on ATL End-Around Taxiway.

3) AOSC Decision

The AOSC approved the proposed unrestricted departures over the end-around taxiway for Atlanta, as depicted on the approved Airport Layout Plan, including the 29' difference in elevation between the departure end of the runway and the lowest point on the end-around taxiway, which is 1,525 feet beyond the runway threshold. Usage was allowed in weather conditions down to a ceiling of 300 feet and one-mile visibility. The tail height of aircraft taxiing on the end-around taxiway will be limited to a maximum of 59 feet (Group IV).

Note: *The above referenced decision has now been appropriately updated in current FAA order, directives, advisory circulars, etc and has resulted in the sun setting of the original decision document and its replacement by this summary.*