

Airport Obstructions Standards Committee (AOSC) Decision Document #04 Summary

Approved: March 21, 2005

Runway / Parallel Taxiway Separation Standards

1) **Introduction**

- a) The FAA maintains standards and orders used in the development of operational procedures and airport design guidance. Separation standards for runways and parallel taxiways are designed to protect various airport imaginary surfaces and instrument approach operations. As a result, these standards are dependent upon a number of variables, including approach visibility minimums, missed approach criteria and applicable aircraft design groups (including tail heights). Furthermore, close coordination is required to maintain consistency among applicable Agency guidance including, but not limited to, the Airport Design Advisory Circular (AC) 150/5300-13 and the US Standards for Terminal Instrument Procedures (TERPS) Order 8260.3.
- b) Guidance related to Cat II/III operations exists in both directive orders and nondirective AC documentation (including AC 120-29) and TERPS Instruction Letter (TIL) 00-005A. Based on statutory requirements linked to funding, AC 150/5300-13 is used by airports as the primary guidance document for construction of new runways and taxiways. However, the airport design guidance provided in AC 150/5300-13 had some inconsistencies with the obstacle clearance criteria in AC 120-29 and TIL 00-005A. Specifically, the TERPS criteria for instrument approaches required certain areas to be clear of taxiing aircraft for the use of various categories of instrument approach procedures. The runway / parallel taxiway separation standards in AC 150/5300-13 did not in all cases assure that those areas will be clear of taxiing aircraft without the use of additional operating procedures.

2) **Rationale For Decision:**

Policy direction was required to ensure that guidance related to airport infrastructure projects is consistent with the Agency's commitment to ensure safe precision approach and landing operations. This decision document addressed the issues related to the separation between runways and parallel taxiways for both existing and future runways by:

- Maintaining or improving upon the current high level of safety demonstrated through historical performance under existing standards
- Committing the Agency to updating and refining the safety assessment toolset [e.g., Collision Risk Model (CRM) and Airspace Simulation and Analysis Tool (ASAT)] to authoritatively support the application of airport design standards
- Minimizing service disruption or adverse impact at airports that have existing runway or taxiway projects that are in an advanced stage of planning and that would be affected by revised standards
- Encouraging airport operators to proceed with planned new airport construction using these revised standards, with the understanding that airports may choose to defer related airport planning until after the FAA updates the safety assessment toolset and consequently further revises the runway/parallel taxiway separation standards, if necessary

Rationale for Decision (continued)

- Committing to internal and external coordination to corporately assess the impact and implementation of future guidance
- Clarifying that taxiing, parked and holding aircraft are obstacles for purpose of design, review and approval of instrument procedures

3) AOSC Decision

- a) **Construction of new runways/parallel taxiways:** The following runway / parallel taxiway separation standards applies to all new runway/parallel taxiway construction projects. Airport improvement projects for which a Draft Environmental Impact Statement (EIS), Environment Assessment (EA), Categorical Exclusion (CATEX) had not been issued prior to approval of AOSC Decision Document #01 on December 18, 2003 will be treated as new projects.
- i) Existing separation standards from AC 150/5300-13 will apply to:
 - All CAT I operations involving Group I-V aircraft
 - CAT II/III operations involving Group I-IV aircraft (400 ft runway / parallel taxiway separation standard)
 - ii) For CAT II/III operations involving Group V aircraft or CAT I operations involving Group VI aircraft, a 500 ft runway / parallel taxiway separation standard will apply to any airport electing to proceed with construction.
 - iii) For Cat II/III operations involving Group VI aircraft, a 550 ft runway / parallel taxiway separation standard will be applied for airports electing to proceed with construction at this time.

Note: All separation distances are based on sea level. Distance adjustments for elevation will be applied to airports above sea level per AC 150/5300-13.

- b) **Existing Infrastructure:** The Agency will work with airports to develop operating procedures where compliance with the runway/parallel taxiway separation standards listed above can be achieved utilizing existing infrastructure without significant impact on airport operating efficiency. Note: Airport improvement projects where a Draft Environmental Impact Statement (EIS), Environmental Assessment (EA) or Categorical Exclusion (CATEX) was issued prior to approval of AOSC Decision Document #01 on December 18, 2003 will be treated as existing infrastructure.
- c) **Exceptions:** For airports unable to meet the revised separation criteria, existing CAT II/III approach minima will remain the same unless the airport environment is modified as described below:
1. Major airport improvements are constructed (including new runways, new taxiways, and runway / taxiway extensions adding 3,000 ft or more)
 2. The operational environment is changed to allow the airport to meet the above guidance
 3. Applicable Agency guidance is changed in such a manner that the airport could meet that guidance without adverse impact

Note: AFS reserves the right to modify CAT II/III approach procedures and/or increase minima in compliance with obstacle clearance criteria and policy unrelated to runway/parallel taxiway separation.

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.*