

Airport Obstructions Standards Committee (AOSC)
Decision Document #01b

Approved: December 18, 2003
POFA application clarified on February 6, 2004

POFA and Runway / Parallel Taxiway Separation Standards

Introduction

This decision document addresses the issues related to the Precision Object Free Area (POFA) and runway / parallel taxiway separation for both existing and future runways and identifies actions to ensure safety of airport operations by:

- 1) Maintaining the current level of safety based on historical performance
- 2) Updating and refining risk modeling tools [Collision Risk Model (CRM) and Airspace Analysis Tool (ASAT)] to authoritatively support the application of airport design standards
- 3) Committing to internal and external coordination to corporately assess the impact and implementation of future guidance
- 4) Minimizing service disruption or adverse impact at airports that have existing runways or projects in an advanced stage of planning affected by these standards

I. Precision Object Free Area (POFA)

A. AOSC Decision

Issue clarifying guidance regarding the POFA that will require the POFA to be cleared when weather is below 250 feet and $\frac{3}{4}$ SMs (or RVR below 4,000 feet) and an aircraft is within 2 miles final.

This guidance will be applied uniformly to all airports nationally, with a target date for mandatory POFA compliance of January 1, 2007. Any airport that fails to meet the POFA guidance by that date will not have its procedures approved at their next subsequent biennial review.

B. Action Plan Summary (Details and due dates are included in Attachment A)

AFS will issue the following clarifying guidance regarding the POFA:

- *The requirement to clear the POFA applies when an aircraft on a vertically guided final approach is within 2 nautical miles of the runway threshold and the reported ceiling is below 250 feet and/or visibility less than $\frac{3}{4}$ SM (or runway visual range below 4,000 feet). If the POFA is not clear, the MINIMUM authorized height above touchdown (HAT) and visibility is 250 feet and $\frac{3}{4}$ statute mile (SM). The POFA is considered clear even if the wing of the aircraft holding on a taxiway waiting for runway clearance penetrates the POFA; however, neither the fuselage nor the tail may infringe on the POFA.*

AAS-1 will develop new POFA marking and signing standards and issue associated guidance through an Advisory Circular. AFS-1 and AAT-1 will ensure aircrew and controller training, and AAT-1 will issue guidance that controllers must ensure that the POFA is clear in the conditions identified above.

C. Interim Guidance

It is recognized that airports are operating at an existing level of safety and that application of the new POFA TERPS standards is not immediately achievable. Therefore, prior to January 1, 2007, new POFA standards will not be applied during biennial reviews of flight operations at airports in either of the following two categories unless there is a modification of runway / taxiway configuration (including new displacement of threshold), or a modification of the airport environment that could potentially reduce the existing level of safety:

- Airport has an existing configuration that allows more than the wing of a taxiing or holding aircraft to penetrate the POFA of a runway equipped for operations and used for both arrivals and departures.
- Airport has a draft EIS for a project that will create a configuration allowing more than the wing of a taxiing or holding aircraft to penetrate the POFA of a runway that is equipped for operations and used for both arrivals and departures.

Any new project designed with a POFA, where the project does not yet have a draft EIS, will be required to conform with new POFA standards as agreed upon by the AOSC (or modifications to standards maintaining an equivalent level of safety).

II. Runway / Parallel Taxiway Separation

A. AOSC Decision

Supported by ASC, the AOSC will review existing runways equipped for CAT II/III operations where the separation distance to the parallel taxiway does not currently meet the separation standards contained in TERPS vol. 3, effective with Change 19 on May 15, 2002, and TIL 005A, effective on September 18, 2000 and currently pending revision. The review will:

- Identify those locations where dual taxiways or alternate surface movement areas can satisfy the runway / taxiway separation criteria agreed upon by the AOSC.
- Attempt to establish operational mitigations, with a focus on modifying taxi routes, restricting Group V/VI aircraft operations, or increasing the hold line distance.
- Implement operational mitigations where they are possible without causing significant operational impacts.
- Evaluate those airports that are found to have no acceptable mitigation (without significant operational impact) and perform a risk determination for the group before determining possible next actions.

B. Interim Guidance

It is recognized that airports are operating at an existing level of safety and that application of the new TERPS runway / parallel taxiway separation standards is not immediately achievable. Therefore, these standards will not be applied during biennial reviews of CAT II/III flight operations at airports in either of the following two categories unless there is a modification of runway / taxiway configuration (including new displacement of threshold), or a modification of the airport environment that could potentially reduce the existing level of safety:

- Airport has an existing runway equipped for CAT II/III operations where the separation distance to the parallel taxiway does not currently meet the separation standards contained in the TERPS guidance identified above.
- Airport has a draft EIS for a project that will create a configuration where the separation distance between a runway equipped for CAT II/III operations and the parallel taxiway does not currently meet the separation standards contained in the TERPS guidance identified above.

Any project that will affect the separation distance between a runway equipped for CAT II/III operations and the parallel taxiway, where the project does not yet have a draft EIS, will be subject to all existing standards and policy on modifications to standards.

III. Related Recommendations from the AOSC

A. Aligning and Synchronizing Agency Guidance

Moving forward, the AOSC working group will serve as a horizontal team to review modifications to standards within individual lines of business in order to ensure consistency among airport design standards, air traffic operational standards, and TERPS.

B. Briefings to Industry Groups

The details of this decision have been briefed to STL, ATL and DFW, who have contacted the FAA on these issues, as well as to industry groups including ACI, ATA and AAAE in order to solicit their support in getting the word out to their members.

C. CRM / ASAT Updates


The risk modeling tools [Collision Risk Model (CRM) and Airspace Analysis Tool (ASAT)] will be updated and refined to authoritatively support the application of airport design standards. An action plan and funding plan for the CRM and ASAT updates will be developed by January 31, 2004.

**AOSC Decision regarding POFA and Parallel
Runway/Taxiway Separation Standards**

Decision Prepared By:

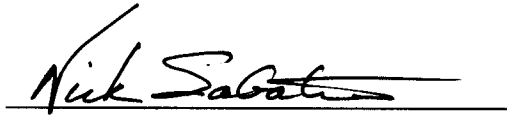
- Dave Bennett, AAS-1
- Bob Bonanni, AAS-100
- Chris Blum, ACE-1
- Chuck Friesenhahn, AFS-400
- Harry Hodges, AFS-420
- Ruth Leverenz, ARC-1
- Dave Madison, ATP-101
- Michael O'Harra, ARC-4
- Gary Skillicorn, AND-710
- Howard Swancy, AFS-5

Decision Approved By:



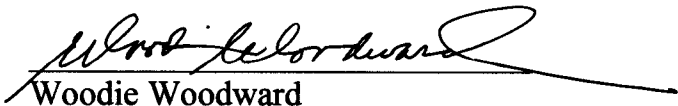
Ruth Leverenz
Assistant Administrator for Regions and Centers, ARC-1

12/18/03
Date



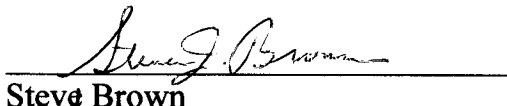
Nicholas Sabatini
Associate Administrator for Regulation and Certification, AVR-1

12/18/03
Date



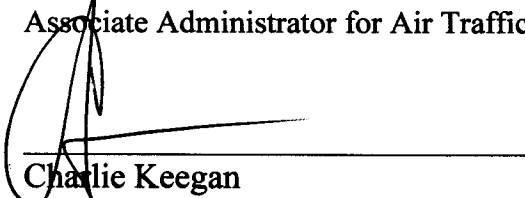
Woodie Woodward
Associate Administrator for Airports, ARP-1

12/16/03
Date



Steve Brown
Associate Administrator for Air Traffic Services, ATS-1

12/18/03
Date



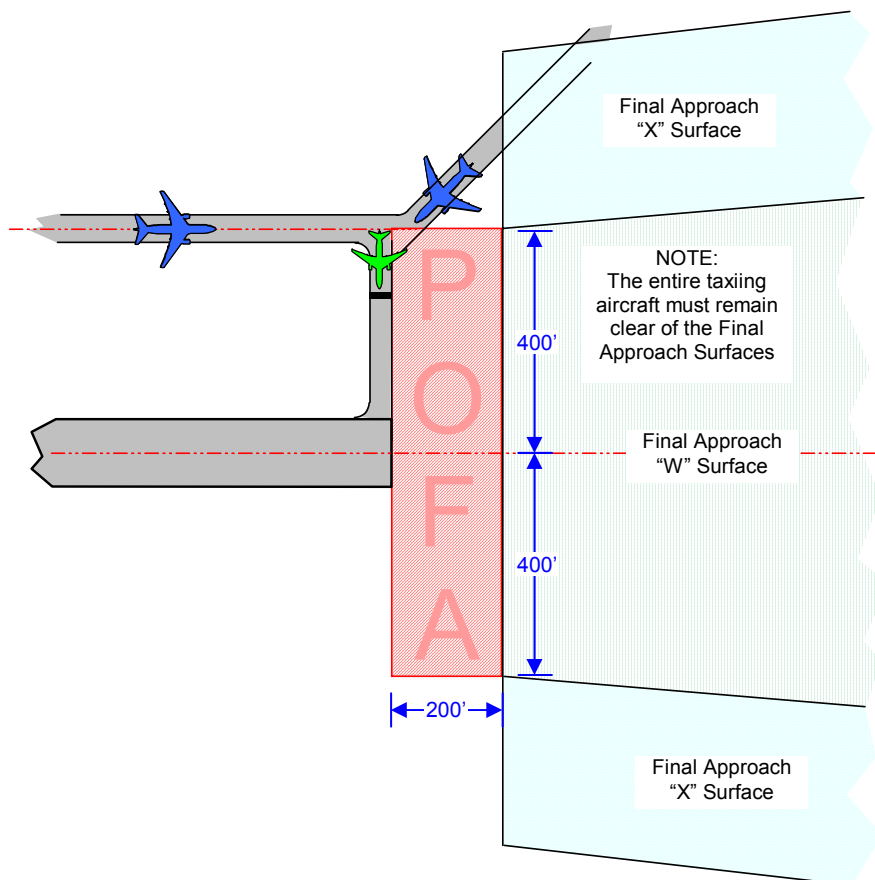
Charlie Keegan
Associate Administrator for Research and Acquisitions, ARA-1

12/18/03
Date

ATTACHMENT A

POFA Action Plan

1. Concurrent with the signing of this decision document, AFS-400 will issue clarifying guidance as a change notice to the TERPS (FAA Order 8260.3B) that captures the following language agreed upon by the AOSC. The target date for mandatory POFA compliance from every airport nationally is January 1, 2007. Any airport that fails to meet the POFA guidance by that date will not have its procedures approved at their next subsequent biennial review.
 - *The requirement to clear the POFA applies when an aircraft on a vertically guided final approach is within 2 nautical miles of the runway threshold and the reported ceiling is below 250 feet and/or visibility less than $\frac{3}{4}$ SM (or runway visual range below 4,000 feet). If the POFA is not clear, the MINIMUM authorized height above touchdown (HAT) and visibility is 250 feet and $\frac{3}{4}$ statute mile (SM). The POFA is considered clear even if the wing of the aircraft holding on a taxiway waiting for runway clearance penetrates the POFA; however, neither the fuselage nor the tail may infringe on the POFA.*



ATTACHMENT A

POFA Action Plan (continued)

2. AAS-1 will develop new POFA marking / signage standards and issue associated guidance thru an Advisory Circular by June 2004. A 30-month implementation period will follow.
3. Secondary tasks include:
 - AFS-1 will ensure the accomplishment of aircrew training (semi-annual recurrent training for air carrier pilots; part of biennial review for general aviation pilots)
 - AAT-1 will ensure the accomplishment of controller training (60 days prior to implementation at any given site)
 - At the same time that AAS-1 issues the above Advisory Circular, AAT-1 will issue guidance for controllers to ensure that the POFA is clear when an aircraft on a vertically guided final approach is within 2 nautical miles of the runway threshold and the reported ceiling is below 250 feet and/or visibility less than $\frac{3}{4}$ SM (or runway visual range below 4,000 feet).

ATTACHMENT B

Preliminary Assessment of Impacts for Runway / Taxiway Separation

- The OEP runway projects at Atlanta, Boston, Cleveland, Cincinnati, Houston, Orlando, Minneapolis-St. Paul, St. Louis, and Seattle will proceed as currently approved and be treated as existing infrastructure, with continuing approval of CAT I/II/III approaches – since an EIS Record of Decision has been issued for each project.
- Runway / taxiway projects at Lehigh Valley Int'l (ABE), Birmingham Int'l (BHM), Greensboro Piedmont Triad Int'l (GSO), Guam Int'l (GUM), Los Angeles Int'l (LAX), Louisville Int'l Standiford Field (SDF), Norman Y Mineta San Jose Int'l (SJC) and Tampa Int'l (TPA) will also be treated as existing infrastructure, with continuing approval of CAT I/II/III approaches – since at least a Draft Environmental Impact Statement has been issued for each project.
- The new OEP runway at Dulles is being designed to the new 600' runway/taxiway separation standard, and there are no POFA impacts.
- In their July 25, 2003 memo to AGL-1, Flight Standards concurred with the initial December 2002 O'Hare Airport Layout Plan and associated concept of operations. Although there are runway/taxiway pairs closer than 600', the Airport agreed with the operational restrictions associated with their design, including the need for ATC management by aircraft group. Through ongoing discussions, the FAA and Airport Management will continue to address any concerns or changes.
- At John F. Kennedy Int'l (OEP Airport), where Group VI aircraft will be utilized, the initial Agency review of the concept of operations proposed by the airport showed that the designated A-380 taxi route designated by the airport operator for group V/VI aircraft is acceptable. The airport's pending request for a modification to standards for operation of the A-380 with less than Group VI runway-taxiway separation will be evaluated in accordance with TERPS guidance, as revised, as well as airport design criteria.
- Columbia Metropolitan (CAE) has a Cat III runway with an existing parallel taxiway separated by 700 feet. The draft ALP shows a proposed parallel taxiway on the opposite side of runway 11/29 separated by 400 feet. The airport is planning to have air cargo operations with Group V aircraft in the near future. The Airport District Office has notified the Airport owner and they are working together during the ALP review and approval.
- Several airports, including Visalia, Crescent City, Arcata and Pago Pago, have proposed projects in the early planning stages that have not proceeded to the point of evaluating potential impacts and alternatives. In each case, the local Airport District Offices will inform the sponsors of the POFA requirement and will continue to work with them to address the issue and ensure any requirements and policy positions are appropriately implemented.