

WRONG RUNWAY DEPARTURE  
JOINT SAFETY IMPLEMENTATION TEAM

*Implementation Plan for  
Safety Enhancement 181R1  
Taxiway and Runway Configuration*

**Statement of Work:**

The purpose of this safety enhancement is to determine risk factors associated with airport geometry and complexity. Airports that have multiple runway thresholds in close proximity may be a hazard that could be mitigated by physically moving the runway and/or taxiway.

**Lead Organization for Overall Safety Enhancement Completion (LOOSEC):**

ARP-100

**Safety Enhancement 181: (SE 181)**

Aviation safety will be improved by mitigating the risk factors associated with airport geometry and complexity.

**Score:** *[To be completed by JIMDAT.]*

**Output 1:** Review and update FAA AC 150/5300-13, Airport Design Standards, to incorporate airport risk analysis to address confusing taxiway and runway geometry.

**Action:**

- (1) Review existing airport geometry at airports during the Airport Layout Plan review to determine conformance to FAA AC 150/5300-13, Airport Design Standards. Identify potential hazards, evaluate and mitigate risks, and document the process for followup.

**Completion Date:** 12 months from CAST approval

**Output 2:** Develop and implement the Airport Geographic Information System for storage and maintenance of collected airport data. The GIS ensures appropriate data is collected, processed, and made available for airport use and planning.

**Action:**

- (1) Airport GIS
  - a. Resources: Office of Airports, Safety and Standards Engineering
  - b. Timeframe: 12 months from CAST approval
  - c. Actions: Web site is online and actively collecting data  
<http://airports-gis.faa.gov>.

**Programmatic Approach:**

**Product Development.** The output requires validation that it will be compatible with the National Airspace System (NAS) and that it will address common threats found at complex airports.

**Implementation Strategy.** Once the AC is updated, it will be distributed to all Airport District Offices (ADO) for use. The ADOs are participating in the AC update. The engineering standards address confusing airport geometry and will enable ADO engineers to evaluate those locations for planning purposes. The Airport GIS allows for the collection of accurate and approved survey data to assist in the planning of new airport geometry.

**Organizational Strategy.** Ken Jacobs, AAS-100; Tim Roe, AAS-100; and Bob Bonanni, AAS-100 are leading committees to develop these efforts.

**Implementation Activities.** The Office of Airports will work closely with local Airport District Offices to evaluate and incorporate risk mitigation strategies and make recommendations for improving how airport layout plans are reviewed and approved.