

SECTION I: SE OVERVIEW

**Study Topic
Overview
Summary**

Following a wrong runway departure accident on August 27, 2006, in Lexington, Kentucky, ASIAs initiated a study to gather wrong runway event reports from several databases and found 117 reports of attempted or actual wrong runway takeoffs involving airplanes operating under 14 CFR part 121 between 1981 and 2006. A panel from CAST member organizations reviewed the reports to identify common factors and proposed mitigations. After the CAST panel eliminated duplicate reports and reports without sufficient information to determine contributing factors, 80 reports remained. The panel review identified several contributing factors, including crew resource management (CRM) deficiencies, airport geometry/complexity issues, human factors issues, and communications deficiencies. CAST adopted seven SEs as a result of the study, five of which were directed at airports and air traffic control.

SE Objective

The findings from the wrong runway departure study, including the part 139 airport assessment, should be incorporated into the Runway Safety Action Team (RSAT) process to enable the identification of contributing factors and threats that exist in the airport environment that have led to wrong runway departures.

An RSAT is established at either the regional or local level to develop a Runway Safety Action Plan for a specific airport. The RSAT's primary purpose is to address existing runway safety problems and issues. A secondary purpose is to identify and address potential runway safety issues. As identified in the wrong runway departure study, a coordinated effort involving representatives from regional flight standards, air traffic, airports, airway facilities, user groups, airport authorities, and National Airspace System implementation divisions offers the most effective solution to preventing wrong runway departures. The RSAT evaluations are a very effective method for the FAA, industry, and airport operators to proactively identify areas at airports that need improvement and propose mitigations. The contributing factors and threats in the airport environment identified in the wrong runway departure study have a close correlation to runway incursion contributing factors. Some mitigation strategies will need to be airport specific solutions, and the RSATs provide an opportunity for localized expertise to be leveraged in the development of these solutions.

**Primary Risks
Mitigated**

Runway Excursion (RE), Runway Incursion (RI), Loss of Control-Inflight (LOC-I), Navigation Errors (NAV)

Action	Organization(s)	Strategy	Description	Due Date
Action 1	FAA ATO	Outreach	Provide regional and local RSATs with the findings from the wrong runway departure study and include the report in the RSAT materials provided to each member of the regional/local teams.	N/A
<i>Comments: CAST closed this action.</i>				
Action 2	FAA ATO	Procedures	Incorporate the part 139 airport assessment into the airport selection process for RSAT evaluations.	N/A
<i>Comments: CAST closed this action.</i>				

See section II of this SE for detailed action descriptions.

References: The detailed analysis in the Wrong Runway Departures Final Report (August 2007) is available through CAST.



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SE 176 consists of two actions, which this section lays out in detail.

- **Action 1 (FAA ATO)** **PAGE 3**
Provide RSATs findings from wrong runway departure study
- **Action 2 (FAA ATO)** **PAGE 4**
Incorporate part 139 airport assessment into airport selection process for RSAT evaluations

SECTION III: SUPPLEMENTAL INFORMATION

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This section contains the following additional information that may be of interest to implementers:

- Source Study
- Related Initiatives
- Total Cost / Resource Overview

SECTION IV: REVISION LOG

PAGE 6

This section provides a history of revisions to this SE.



SECTION II: DETAILED ACTION INFORMATION

Action 1: Provide RSATs findings from wrong runway departure study

Primary
Implementer

FAA Air Traffic Organization (ATO)

Action Objective

Provide regional and local RSATs with the findings from the wrong runway departure study and include the report in the RSAT materials provided to each member of the regional/local teams.

Action Timeline

Flow Time: 30 days

Due Date: N/A

Timeline/Flow for
Future Adopters

N/A

CAST Lead

FAA ATO

#

Organization(s)

Detailed Steps

1a

FAA ATO

Provide wrong runway departure report to all RSATs.

Complete.

Notes



SECTION II: DETAILED ACTION INFORMATION

Action 2: Incorporate part 139 airport assessment into airport selection process for RSAT evaluations

Primary
Implementer

FAA Air Traffic Organization (ATO)

Action Objective

Incorporate the part 139 airport assessment into the airport selection process for RSAT evaluations.

Action Timeline

Flow Time: 45 days

Due Date: N/A

Timeline/Flow for
Future Adopters

N/A

CAST Lead

FAA ATO

#

Organization(s)

Detailed Steps

2a

FAA ATO

Provide Regional and Local Runway Safety Program Managers with the part 139 airport threat assessment report.

Complete.

Notes



SECTION III: SUPPLEMENTAL INFORMATION

Source Study Wrong Runway Departures Final Report (August 2007)

Related Initiatives N/A

Total Cost \$1,000 Plus \$1,500 per RSAT evaluation

Action 1 N/A

Action 2 N/A

	Organization	Resources Needed
Direct Resource Overview – Government	N/A	N/A
	Organization	Resources Needed
Direct Resource Overview – Industry	N/A	N/A
Indirect Resource Overview	The organizations identified in this section are not expected to incur direct costs associated with implementing this SE, but they may incur indirect costs within their normal line of work.	
	Organization	Description
	N/A	N/A



SECTION IV: REVISION LOG

Major revisions (whole numbers) represent CAST-approved changes to SE language. Minor revisions (decimals) represent minor changes to target dates or completion notes that do not affect implementer actions.

Revision	Date	Description
2.0	09/17/2018	New SE format. Content reorganized and terminology updated. No substantive changes.
1.0	12/06/2007	
Original	2007	CAST adopted SE 176.

