Runway Safety

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The Runway Safety Program MISSION

To deliver premier quality, data-informed safety trends, technical training, mitigations, and data management, all aimed at reducing risk in the National Airspace & Surface Environment.



Organization FAA REGIONS & ATO SERVICE AREAS





Federal Aviation Administration

ROLE OF REGIONAL ADMINISTRATOR'S OFFICE

- Serves as advocate/spokesperson for the runway safety program within the region and fosters collaboration and support amongst internal organizations.
- Facilitates and supports collaboration and partnership between the Regional Runway Safety Program Managers and aviation departments of state and local governments on runway safety matters.
- Chairs the Regional Runway Safety Governance Council.
- Supports outreach efforts to the aviation community on runway safety.
- Reviews regional runway safety plans annually; provides input for development of the plans, and supports initiatives identified in the plans.
- Provides input on the effectiveness of the regional and national runway safety programs.



The Runway Safety Program RUNWAY SAFETY ACTION TEAM (RSAT)

- Type: Local, Special Focus
- Who: ATC, Airport Operator/Tenants, FAA Airports, FSDO, Tech
 - Ops, Runway Safety and interested users of the airport.
- What: Surface movement issues/concerns
- Why: Mitigate issues/concerns
- Where/When: ATCT Facilities, Yearly
- Outcome: Formulate a Runway Safety Action Plan (RSA)



The Runway Safety Program **REGIONAL PLAN FOCUS** Core 30/OPSNET45 \bigcirc Airports of Interest Ο



The Runway Safety Program **REGIONAL PLAN FY24** Core 30 & Airports of Interest (AOI): South Dakota 2024 None for FY 2024 Other RSAT's Planned Rapid City: May 3 - Sioux Falls: July 18 Red = Core 30



The Runway Safety Program DEFINITIONS *Runway Incursion (RI):*

 Any occurrence at an aerodrome involving the incorrect presence of an aircraft, vehicle or person on the protected area of a surface designated for the landing and take-off of aircraft.



The Runway Safety Program RI SEVERITY

RUNWAY INCURSION SEVERITY CATEGORIES

Little or no risk

D

Ample time/distance to avoid collision Significant potential for collision

Barely avoid collision

A

- A category D event involves no other aircraft or vehicle
- Events in categories C, B, and A, increase the risk of collision, respectively, based on proximity and closure rate/speed of event participants/targets



THE RUNWAY SAFETY PROGRAM DEFINITIONS

Surface Incident (SI):

 A surface incident is an unauthorized or unapproved movement within the designated movement area (excluding runway incursions) or an occurrence in that same area associated with the operation of an aircraft that affects or could affect the safety of flight.



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The Runway Safety Program DEFINITIONS Runway Excursion (RE):

- A runway excursion is a veer off or overrun from the runway surface (per ICAO).
- These surface events occur while an aircraft is taking off or landing and involve many factors ranging from unstable approaches to the condition of the runway.



The Runway Safety Program TYPES OF SURFACE EVENTS

- Operational Incident (OI) A surface event attributed to ATCT action or inaction.
- <u>Pilot Deviation</u> (PD) A surface event caused by a pilot or other person operating an aircraft under its own power.
- Vehicle or Pedestrian Deviation (VPD) A surface event caused by a vehicle driver or pedestrian
- <u>Runway Excursion</u> (RE) A veer off or overrun from the runway surface while an aircraft is taking off or landing.
- Other Surface events that cannot clearly be attributed to incorrect action(s) by an air traffic controller, pilot, driver, or pedestrian. These events would include incursions caused by equipment failure or other factors. By definition, excursions will be classified as "Other" events.

NATIONAL RUNWAY INCURSIONS BY TYPE AS OF MARCH 31, 2024

AJI-14 Surface Events Monthly Surface Safety Report_pdf

Runway Incursions by Incident Type

 Airport Operations
Runway Incursion Rate per 1 Million OI = PD = VPD = OTH 40 32.9 33.19 33.08 ĨN. 32.39 1,400 53,283,654 28.51 52,298,720 27.78 Incursion Rate per 47,428,076 44,222,911 1,200 1,118 20 1.084 1,070 26,490,029 1.033 1,000 # of Runway Incursions 841 800 600 475 400 338 324 309 311 308 295 285 241 226 200 -164 126 121 44 30 26 16 15 14 2019 2020 2021 2022 2023 2024

Event Fiscal Year

Federal Aviation Administration

SOUTH DAKOTA

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Federal Aviation Administration

Runway Incursions (RI) Fiscal Year 2020-2024 SOUTH DAKOTA

						Incident Type				Severity Category				
State Name	State	FY	RIs	Airport Operations	RI Rate per 100K	OI	PD	VPD	Other	A	в	C	D	E
South Dakota	SD	2020	2	103378	1.93		2	0					2	
South Dakota	SD	2021	4	115595	3.46	1	2	1					4	
South Dakota	SD	2022	3	116272	2.58		1	2				1	2	
South Dakota	SD	2023	6	113444	5.29		5	1				2	4	
South Dakota	SD	2024	6	55439	10.82	1	4	1					6	



The Runway Safety Program SUMMARY

Most runway incursions are not serious occurrences. However, reducing the risk of them occurring remains one of the FAA's highest safety priorities and is a shared responsibility that encompasses pilots, air traffic controllers, airport vehicle drivers as well as other stakeholders.



Thank You