

Runway Safety - Runway Incursions



Runway Incursions

This information on runway incursions is a way to analyze breakdowns or holes in the Air Traffic system. They can show what, how and why an event occurred. They can happen in numerous ways and can be caused by any combination of errors, fatigue, negligence, etc. Luckily the Runway Safety Office has set a goal in accordance with FAA Call to Action to lower incursions to less than 50% from the previous year.

What is a Runway Incursion?

- A runway incursion is any unauthorized intrusion onto a runway, regardless of whether or not an aircraft presents a potential conflict. This is the international standard, adopted by the International Civil Aviation Organization.
- It is important to note. Surface Incidents are those incidents, which did not involve potential aircraft conflicts; those are now classified as C or D runway incursions. Category C or D incursions are low-risk incidents with either no conflict potential or ample time or distance to avoid a collision.

There are four categories of runway incursions:

- Category A is a serious incident in which a collision was narrowly avoided
- Category B is an incident in which separation decreases and there is a significant potential for collision, which may result in a time critical corrective/evasive response to avoid a collision.
- Category C is an incident characterized by ample time and/or distance to avoid a collision.
- Category D is an incident that meets the definition of runway incursion such as incorrect presence of a single vehicle/person/aircraft on the protected area of a surface designated for the landing and take-off of aircraft but with no immediate safety consequences.

Operational Errors	Pilot Deviations	Vehicle/Pedestrian Deviation
Action of an Air Traffic Controller that results in: Less than required minimum separation between 2 or more aircraft, or between an aircraft and obstacles, (vehicles, equipment, personnel on runways) or Clearing an aircraft to take off or land on a closed runway	Action of a pilot that violates any Federal Aviation Regulation Example: a pilot crosses a runway without a clearance while enroute to an airport gate	Pedestrians or vehicles entering any portion of the airport movement areas (runways/taxiways) without authorization from air traffic control

Runway Incursion Severity

Available Reaction Time	Evasive of Corrective Action	Environmental Conditions	Speed of Aircraft and/or Vehicle	Proximity of Aircraft and/or Vehicle
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Category D	Category C	Category B	Category A	Accident
Incident that meets the definition of runway incursion such as incorrect presence of a single vehicle/person/aircraft on the protected area of a surface designated for the landing and take-off of aircraft but with no immediate safety consequences.	An incident characterized by ample time and/or distance to avoid a collision.	An incident in which separation decreases and there is a significant potential for collision, which may result in a time critical corrective/evasive response to avoid a collision.	A serious incident in which a collision was narrowly avoided.	An incursion that resulted in a collision