

Surface Safety Portfolio



Runway Incursion Device (RID)

Background A safe and efficient National Airspace System (NAS) begins and ends on the airport surface. Separation services that are provided by Air Traffic Controllers (ATC) in the sky, are also paramount on runways, taxiways, and other airport surface movement areas. Giving ATC the tools necessary to improve their situational awareness on the surface is key for the future of surface safety. The Runway Incursion Device is such a tool used as a memory aid to indicate whether an airport runway is occupied or closed before ATC clears an aircraft to land or takeoff.

A standard RID when deployed will provide a visual and/or aural indication when a runway is not available for arriving or departing aircraft. Each RID is customizable to uniquely identify up to 16 runways (8 physical surfaces). If for whatever reason a runway became unavailable, for example airport operations vehicle inspecting the surface for Foreign Objects or Debris (FOD), a button for the corresponding runway would be depressed indicating the runway was occupied (i.e. an indicator light flashes Red). When the runway is available, the button is toggled again, and the availability indicator turns green. This simple, yet effective, memory aid has a proven operational track record of providing benefit at the locations where it is currently in use today.

Current State of RID In November 2023, the RID program received approval from the Joint Resources Council (JRC) to proceed with program implementation. The team is currently working on the RID design and development efforts.

What's Next Several RID devices will be fabricated to support testing beginning in June 2024. RID devices will then be installed at five airports for an operational evaluation. The RID team will also closely coordinate with stakeholders in the Technical Operations community to put in place a proper maintenance and sustainment plan that will ensure the prolonged operational utility of this valuable surface awareness tool. RID devices will be installed at five (5) airports for an operational evaluation by November 2024, with deployments to 74 airports beginning in 2025.

Summation RID provides ATC another tool to enhance surface situational awareness. RID is not the final and only endeavor the FAA is pursuing to address such a critical operational need. RID, along with the Airport Runway Verification Tool, and the Surface Awareness Initiative, are a few examples of the FAA's commitment to always advancing the safety of the NAS.

