

## How can a mechanic taxiing an aircraft cause a Runway Incursion?

- A Runway Incursion is defined as: any occurrence in the airport runway environment involving an aircraft, vehicle, person, or object on the ground that creates a collision hazard or results in a loss of required separation with an aircraft taking off, intending to take off, landing, or intending to land.



- When a mechanic taxiing an aircraft commits an error, such as failing to obey air traffic control instructions or failing to observe airfield signs, markings, and lights, it can result in a Runway Incursion.
- The number and rate of Runway Incursions has remained constant over the past several years. Extra care and vigilance are the keys to reducing them.

Report confusing or deteriorating surface markings and signs and inaccurate airport diagrams to the tower or your supervisor.

Be familiar with reported hazards, particularly those contained in the NASA Aviation Safety Reporting System (ASRS). The ASRS maintains a database of reported hazards. Alert messages from ASRS are forwarded to appropriate airport authorities for action. Airport authorities are requested to provide responses to ASRS. This serves as an important check on the type of corrective actions being taken and closes the loop in the incident reporting process.

To obtain ASRS forms, write to:  
NASA Aviation Safety Reporting System  
PO Box 189  
Moffett Field, CA 94035

Forms may also be downloaded from the ASRS website at:  
<http://asrs.arc.nasa.gov/forms>

**Federal Aviation Administration**  
**Air Traffic Organization**  
**Office of Runway Safety**  
**800 Independence Avenue**  
**Washington, DC 20591**

<http://www.faa.gov/runwaysafety>



**Federal Aviation  
Administration**

## Preventing Runway Incursions

### Focus on Mechanics Taxiing Aircraft



# How Can Mechanics Help Prevent Runway Incursions?

## 1. Keep communications clear and concise.

Effective communications between ATC and aircraft are the key to safe surface operations. A clear understanding of instructions should never be compromised, especially during busy times when the frequency is congested.

- Listen before you transmit – if able, monitor radio communications to establish a “mental picture” of airport activity.
- Think before keying your transmitter – keep communications with the controller clear and concise.
- Never assume – ensure you understand all instructions.
- Read back runway hold short instructions and clearances, including the aircraft call sign.
- If lost, contact Air Traffic Control immediately.



## 2. Be familiar with the airport.

Ground operations can be most demanding and complex.

- Review airport diagrams before taxiing.
- Know where you are on the airport and where you are going.
- Keep airport/taxi diagrams readily available during taxiing.
- Be on the alert for aircraft, vehicle, and pedestrian activity.

### STAY ALERT, ESPECIALLY WHEN VISIBILITY IS LOW

Extra attention is required when visibility decreases and your ability to maintain situational awareness becomes more difficult. Keep in mind:

- Cockpit workload and distractions tend to increase.
- Attention to communications tends to decrease.
- Fatigue levels increase.
- When snow and other weather conditions obscure surface markings and signs, increased vigilance is a must.

## 3. Follow proper cockpit procedures.

Proven and effective procedures in the cockpit are imperative for safe surface operations.

- Maintain a sterile cockpit environment – avoid unnecessary conversation.
- Make your aircraft visible by proper use of aircraft lights.
- If unfamiliar with the airport, don't hesitate to request progressive taxi instructions.
- Constantly scan outside the cockpit, especially when on or near runways, to increase your level of situational awareness.
- Never stop on an active runway.
- Should radio failure occur, follow lost communication procedures – and use good judgment.

