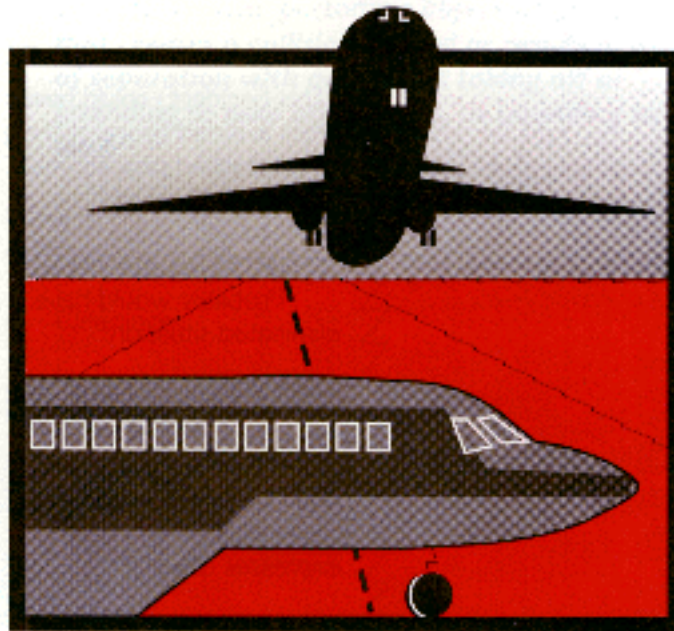


Reducing Runway Incursions:



Can You Relate?

“Ground control called us and said we had crossed an active runway without a clearance.”

“Being used to landing on runway 15, I saw what I wanted to see. . . .”

“I was preoccupied. . . .I thought we were cleared for takeoff. . . .”

“I never did see that second fuel truck. . . .”

Actual quotes from the Aviation Safety Reporting System (ASRS)

The Problem

The official definition of a runway incursion is **"Any occurrence at an airport involving an aircraft, vehicle, person, or object on the ground that creates a collision hazard or results in loss of separation with an aircraft taking off or intending to take off, landing, or intending to land."**

Runway incursions are primarily caused by errors in one or more of the following areas:

- Clearances
- Communications
- Ground navigation
- Positional awareness

Magnitude of the Problem

Runway incursions are rare events. They occur so infrequently that they are difficult to analyze statistically. While the solution appears relatively straightforward—keep aircraft away from where they are not supposed to be—the problem is compounded by the fact that

- Any **aircraft** can cause a runway incursion—currently there are approximately 216,000 registered aircraft in the United States.
- Any **pilot** can cause a runway incursion—currently there are over 675,000 pilots.
- Any **tower controller** can cause a runway incursion—there are over 8,000 tower controllers.
- Any person on an airport can cause a runway incursion.

How They Happen.

"I think I forgot to call for taxi instructions. . . ."

"Just plain lined up on wrong runway."

"My captain understood the message was for us. I was not so sure. . . ."

"I remember thinking, . . . I wonder what runway that bold line is for. . . ."

"The clearance to cross was acknowledged. . . . Almost immediately the captain noticed an aircraft on runway 15. . . ."

". . . we were not cleared to cross. Obviously, there was a failure to communicate."

So. What Can You Do?

"This (incident) could have been avoided by my sticking to established procedures."

"Should have used HSI Probably would have eliminated situation."

"The incident would have never occurred likewise, if you follow a simple rule of always verifying a clearance when a crew member expresses doubt."

"I believe this incident occurred because I did not take enough time studying the airport (runway/taxiway diagram) page before starting to taxi."

"Thanks to my safety pilot for his keen observation."

"This just points out the need for all parties to make sure that instructions are explicit and understood. We should have probably confirmed. . . ."

More actual ASRS quotes. To obtain further information on the ASRS write to: ASRS Program Office, P.O. Box 189, Moffett Field, CA 94035-1000

And, Here's More...

1. During the flight planning and flight dispatch process, make sure that you have received and understood all NOTAMs especially those dealing with airport construction and lighting.
2. Strive for clear and unambiguous controller-pilot communications. Read back (in full) all clearances involving crossing active runways, holding short, taxi into position and hold, etc. Don't just say "Roger." Use your full company or aircraft name plus your call sign, such as "TransGlobal 123."
3. Abide by the sterile cockpit rule from the gate until passing 10,000 feet, and from 10,000 feet until parked at the gate. In case of extended taxi delays follow the rule of thumb that only operational subjects should be discussed while the aircraft is in motion. Keep your thoughts and conversation on the task at hand.
4. Develop operational procedures that minimize distractions during ground taxiing. Complete as many checklist items as possible before taxiing or when holding short. Have the pilot taxiing clarify his/her intent to hold relative to all critical areas. When one or the other pilot is off frequency, ensure that both pilots understand any taxi instructions received while the other was off frequency.
5. If you are lost or unsure of your position on the airport, stop and ask ATC for directions. By requesting progressive taxi directions, you alert ATC that you are unfamiliar with the airport and may need special guidance.
6. Adhere to takeoff and runway crossing clearances in a timely manner. Inform the controller of any delay.



7. Whenever possible, while in a run-up area or awaiting a clearance to enter an active runway, position your aircraft so that landing aircraft can be observed.
8. Monitor the radio communications of other traffic cleared onto your runway for takeoff or landing. Be especially alert if military aircraft are present and using UHF frequencies.
9. After clearing the runway, always stay on the tower controller's frequency until instructed to change frequencies.
10. If Simultaneous Operations on Intersecting Runways (SOIR) are in progress at your destination airport, make sure you know the reduced runway distances available and whether your actual landing weight will allow you to accept a SOIR "land and hold short" clearance. Once you accept the clearance, you give up your option to use the entire runway.
11. Report deteriorated or confusing airport markings, signs, and lighting to the airport operator, the nearest FAA Airports District Office, or the Aviation Safety Hotline (toll free 1-800-255-1111).
12. Report confusing (or erroneous) airport diagrams to airport operators or the local FAA Air Traffic Control Tower Manager.
13. Help others see your aircraft during nighttime and periods of reduced visibility. Use exterior taxi and landing lights whenever practical while on the ground. Turn on company logo lights if the aircraft is so equipped. Also, turn on cabin interior lights.
14. Remember, safety is a team effort—flight crews, air traffic controllers, ground vehicle operators, maintenance staff, and airport operators—all must contribute to make aviation as safe as is humanly possible.



Examples of the New Airport Signs

A Typical Holding Position Sign for Runways



A Holding Position Sign for Approach Areas



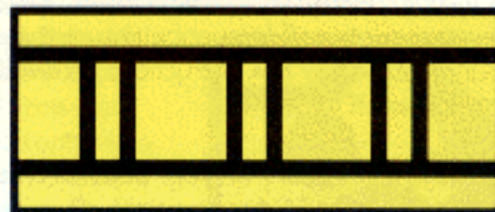
A Taxiway Location Sign



A Runway Location Sign



An ILS Critical Area Boundary Sign



U.S. Department
of Transportation
**Federal Aviation
Administration**
ASST-20/92.00

Based on FAA Advisory Circular (5015-340-10),
Standards for Airport Sign Systems, dated 7/31/91.
For additional information,
consult the Airport's Information Manual.

For additional copies of this brochure, contact:
FAA/ASST-20, 800 Independence Avenue, SW
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(202) 267-7770