

BULLETIN



U.S. Department
of Transportation

**Federal Aviation
Administration**
Office of
Aviation Safety

February 1988

AVIATION SAFETY

Runway Incursion Problem

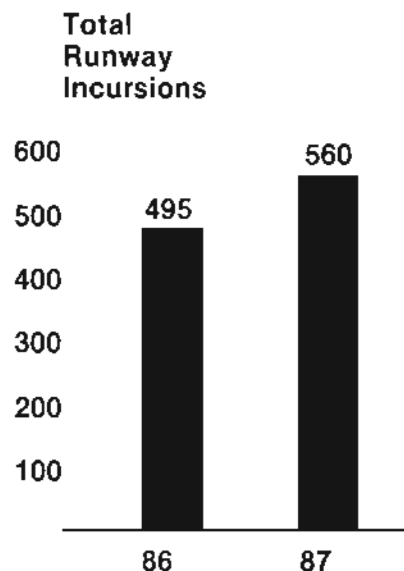
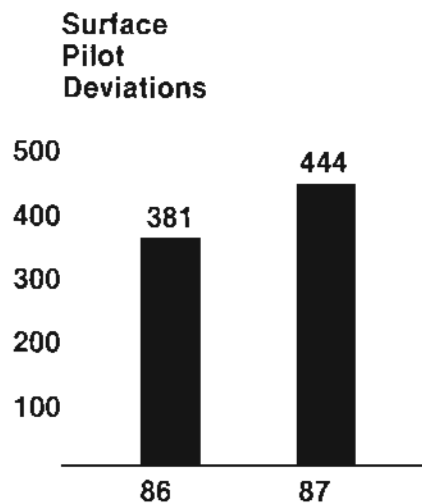
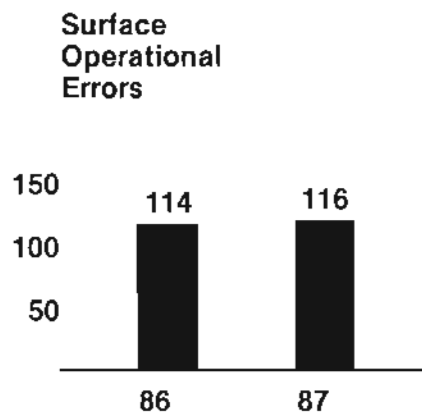
This is the first in a series of safety bulletins that are intended to help us prevent accidents and incidents. This bulletin is directed at the increasing problem of runway incursions.



"The runway incursion problem is compounded by many factors. . ."

The runway incursion problem is compounded by many factors; increased numbers of operations, increased numbers of aircraft, higher construction and support activities on and around airports, and increased congestion on ground and local radio frequencies are a few of the more troublesome ones. While a function of the ATC system is to accommodate all who request flight services we need to heighten our awareness of problem areas and exercise caution when circumstance dictates.

Regardless of the source of the data we analyze, the results are the same; i.e., runway incursions are increasing. The numbers of runway incursions contained in the operational error and pilot deviation data bases reveal the following:



All FAA and NTSB data show a similar trend however, they are somewhat different due to the way occurrences are defined. It can be seen that all of us in aviation need to work harder to reverse this trend.

As we continue operations in the harshest winter months and prepare for the spring/summer surge, we have to increase our awareness of potential problem areas and work to eliminate them. Adverse surface conditions, increased vehicular traffic on runways due to snow and/or construction, and forecast traffic increases are but some of the challenges that will have to be met.

One might ask, "OK, so what can I do?" The answer is that every one who has reason to operate on the airport surface or control/clear traffic for operation on the airport surface can do a lot! In short, we all have to sign up for the concept that "Safety is Everybodys Business".

If one had to name a principal reason for the runway incursion problem it would have to be a breakdown in communications- either verbal, visual, or both.

“OK, so what can I do...?”

Examples of verbal breakdowns would include:

1. partial or incomplete radio transmissions
2. misunderstood instructions
3. acting on anticipated instructions
4. interrupted instructions
5. incorrect phraseology
6. failure to read back or confirm instructions
7. lack of attention to routine tasks

Examples of visual communications breakdowns would include:

1. failure to “clear” a runway before using it for takeoff or landing
2. visual reference to location on airport surface
3. lighting problems caused by glare or intensity
4. runway/taxiway signs that are dirty, unlit, snow obscured or inadequate
5. inability of tower controllers to see areas of the airport surface- i.e., blind spots.

There are many other factors involved and frequently more than one are present when an accident/incident occurs.

The following recommendations can help reduce the numbers of runway incursions and hopefully prevent a catastrophe.

“FLIGHT CREWS...”



... could help reverse the increasing runway incursion trend by:

1. visually checking before crossing or entering active runways
2. reading back all instructions whether required or not
3. insuring familiarity with airport layout prior to taxiing/landing
4. turning on exterior lights to aid visibility and conspicuity
5. reviewing cockpit procedures to insure runway/taxiway and ramp familiarity are adequate prior to surface movement

“AIR TRAFFIC CONTROLLERS...”



... can help reduce the problem by:

1. standardizing/improving coordination between local and ground positions
2. requesting readback of instructions
3. using standard phraseology at all times
4. exercising extra caution when coordinators are absent or positions are combined.

“When in doubt —STOP— the process!”

“AIRPORT OPERATORS...”



...can help by:

1. controlling access to the airport operating area
2. assuring competency of drivers on the airport operation area
3. assuring signs/markings are clean, clear, well lit and strategically placed
4. insure that NOTAMs are current and construction areas are well marked and lit.

“SUPPORT/MAINTENANCE...”



...personnel can help by:

1. being aware of and advise responsible persons of potential hazards
2. using extreme caution when operating vehicles around aircraft
3. being sure to obtain proper clearance before operating vehicles on or around taxiways, runways, or aircraft runup areas.

“EVERYONE...”



When in doubt-stop the process: verify the action you are about to take is right!

Remember—

“Safety is Everybodys Business.”

Comments regarding this Bulletin should be addressed to:

**Federal Aviation Administration
Office of Aviation Safety
Safety Programs Division ASF-300
800 Independence Avenue, S.W.
Washington, DC 20591**

ASF/ASB 88-1

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**Federal Aviation
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