



Potentially catastrophic runway incursions are on the rise again; ALPA and government and industry continue to fight this perennial risk to aviation safety.

By Jan W. Steenblik, Technical Editor

On July 23, 2006, an Atlas Air B-747 freighter landing at about 10 p.m. local time on Runway 13 at Chicago O'Hare International Airport rolled through the intersection with Runway 27R just as a United Airlines B-737 with 120 passengers and five crewmembers aboard was taking off on the latter runway. The National Transportation Safety Board later estimated the miss distance at 35 feet.

Three days later, an America West Express airliner taxied onto Runway 25R at Los Angeles International Airport—and into the path of a United Express turboprop making an intersection takeoff. The turboprop missed the jet by an estimated 150 feet vertically and 50 feet horizontally.

These high-profile, widely publicized events were sobering reminders that runway incursions remain a perennial risk to aviation safety—and with air traffic on the increase, the rate and risk of runway incursions will not easily be reduced. No wonder, then, that when the NTSB updated its "Most Wanted" list of transportation safety improvements in November 2006, topping the list for aviation was runway incursions.

The Safety Board noted, "This issue has been on the Board's [Most Wanted] list since its inception in 1990." The NTSB acknowledged that the FAA has completed action on

ALPA's Short List to Reduce Runway Incursions

IMMEDIATE ACTION



Implement runway status lights and takeoff hold lights as the standard for

large airports.



Accelerate use of enhanced paint and markings at the largest airports with scheduled

airline service.



Persuade the FAA to change its policy on Class II electronic flight bags (EFBs) to allow

surface map displays that show own-ship position.



Deploy multilateration technology to track aircraft and ground

vehicles on the surface of major airports. (Multilateration is the process of locating an object—in this case, an aircraft or ground vehicle—by accurately computing the time difference of arrival [TDOA] of a signal emitted from the object to three or more receivers. Multilateration may also refer to

locating a receiver by measuring the TDOA of a signal transmitted from three or more synchronized transmitters.)



Enforce air traffic controllers' use of standard ATC procedures and phraseology.



Examine the culture of pilot-pushing in high-density operations.



Enforce standards requiring English language proficiency for all pilots and controllers.



Examine the emphasis on increasing airport capacity, considering the fatigue and human factors limitations on pilots and controllers.

LONG TERM

ALPA has a clear position on overhauling operations at airports:

runway status alerting, and automated datalink taxi clearances.



Develop a national airport surface management system for pilots, operations, and air traffic controllers, integrating Class III EFBs, ADS-B multilateration,



Harmonize international aviation regulations to implement runway incursion mitigations that have already been recommended. 

"a number of objectives to make ground operation of aircraft safer." In fact, ALPA and a number of aviation stakeholders have worked hard—and often cooperatively—for decades to reduce the rate and risk of runway incursions. However, much remains to be done.

The NTSB warned that, despite efforts to date, "these incidents continue to occur with alarming frequency." According to FAA figures, some 327 runway incursions were reported in the United States during fiscal year 2005; in FY 2006, the num-

ber rose to 330. Perhaps even more important, the number of incursions in the highest-risk categories increased to 31 in Fiscal Year 2006.

What can you do as an individual flightcrew member and ALPA member to push down the rate and risk of runway incursions?

A few suggestions:

1. Visit ALPA's runway safety website, www.alpa.org/runwaysafety.
2. If you are involved in a runway incursion, participate in the recently extended Runway Incursion Informa-

tion Evaluation Program (see page 29).
3. Become involved with your local executive council (LEC) safety committee and your master executive council (MEC) safety committee. It's said that "all politics are local," and so are some of the solutions to many aviation safety problems, including runway incursions.
4. Familiarize yourself with—and support—ALPA's efforts on the local, national, and international level to meet this aviation safety hazard head-on (see "ALPA's Short List to Reduce Runway Incursions," this page). 

FAA Renews Nonpunitive Reporting System For Runway Incursions



FAA Administrator Marion Blakey has extended the Runway Incursion Information Evaluation Program (RIIEP) through July 20, 2008.

"ALPA enthusiastically supports the RIIEP and encourages members to participate in the program if they are involved in a possible runway incursion," says Capt. Terry McVenes (US Airways), ALPA's Executive Air Safety Chairman.

The RIIEP gathers critical safety data not otherwise available concerning the root causes of incidents, including runway incursions, on the airport surface. The primary means of gathering the data is through in-depth interviews of pilots and maintenance technicians involved in these incidents.

The FAA has publicly stated that the agency "does not expect to use information provided by pilots or maintenance technicians during interviews conducted by ASIs [aviation safety inspectors] under the RIIEP in FAA legal enforcement action. The record since the inception of the RIIEP [in March 2000 for 1 year, renewed for 2 years in July 2004] displays excellent collaboration in this regard."

Under the continued RIIEP, pilots and mechanics taxiing airplanes involved in an alleged runway incursion may expect to be contacted by an FAA ASI shortly after the incident. The ASI will inform the pilot or maintenance technician that participation in the RIIEP process is voluntary.

The ASI may conduct the interview in person, electronically, or by telephone. The FAA has developed standardized RIIEP methodology in the form of questionnaires, from which the ASI will obtain important, sometimes critical, safety data.

According to the FAA, "as an incentive to encourage participation in the RIIEP, for certificated airmen who cooperate and provide detailed information regarding [an alleged violation of FAA regulations], the FAA intends to continue forgoing legal enforcement action and, instead, offer administrative action or counseling, which involve no finding of violation, provided

- "1. the nature of the apparent violation does not indicate that a certificate holder lacks qualification to hold a certificate;
- "2. the apparent violation was inadvertent, i.e., not the result of purposeful misconduct;
- "3. the apparent violation was not [the result of a] substantial disregard for safety or security;
- "4. the apparent violator has a constructive attitude toward complying with the regulations; and
- "5. the apparent violation does not indicate a trend of noncompliance."

Regarding determining whether an apparent violator has a "constructive attitude" regarding compliance with the regulations, the FAA said it "will consider documentation showing the completion of an FAA- or industry-sponsored safety seminar on the subject(s) causal to the alleged

violation." The agency specifically cited ALPA's runway safety website, www.alpa.org/runwaysafety, as one of the online seminars that meet that requirement. "We will consider

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successful completion and documentation of these runway safety education programs favorably in determining the course of action we will take when a pilot or maintenance technician is involved in a surface incident, including a runway incursion," the FAA said.

Moreover, says the FAA, "notwithstanding published FAA RIIEP policy to the contrary, reports of surface incidents, including runway incursions, accepted under an ASAP [Aviation Safety Action Program] will be conducted in accordance with Advisory Circular (AC) 120-66B, Aviation Safety Action Programs, as amended, and a memorandum of understanding between the FAA, the certificate holder and, where applicable, pilot or maintenance technician groups." 