



Runway RISKS

Reducing Incursions, Excursions, and Confusion

May 2008

Volume 1
Issue 5

Did you know...

1 >> Air carriers are reporting completion of their review of cockpit procedures aimed at identifying and eliminating elements that may contribute to pilot distraction during taxi operations. American Eagle, Southwest, and Continental all report having reduced the length of their respective taxi checklists.

2 >> All 112 of the active U.S. air carriers report having provided pilots with simulator or other training that incorporates realistic scenarios from pushback through taxi.

ALPA has worked hard and successfully for many years to improve runway design, markings, signage, and the technology that guide us. But nothing can replace the awareness of a pilot in the cockpit.

Through our new campaign, "Hold Short for Runway Safety," ALPA is focusing its efforts on preventing runway incursions, excursions, and confusion. We will provide you commonsense guidance that will help prevent operational breakdowns. Every pilot knows we have too much to do and not enough time to do it between getting in the cockpit and hitting Vr.

Case Study—

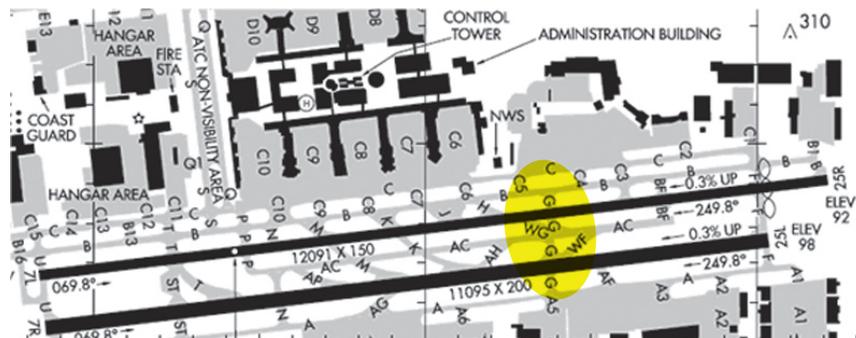
Los Angeles International Airport

On March 22, 2008, at 0635 local time, the crew of an SF340 flying under FAR Part 135 was cleared to follow a major airline aircraft via taxiway G, cross runway 25R, and hold short of runway 25L. Although the SF340 pilot's readback was correct, the aircraft crossed runway 25L without a clearance. Fortunately, no other traffic was close enough to the aircraft to create a loss of separation.

The SF340 pilot returned a call to the tower about an hour after the incident and talked with the reporting controller. (Note: ALPA advises against calling the tower without

representation.) The incident met the criteria for a Category D runway incursion under the new FAA definition, namely, the incorrect presence of an aircraft in the area intended for takeoff and landing.

FAA analysts report having seen this type of incident when a "follow..." clearance was issued, and consequently recommend that pilots exercise extreme caution upon receiving this type of taxi instruction. Many reported pilot-deviation surface incidents involve entering the runway or crossing the holding position marking after acknowledging the "hold short" instruction. ✈️



Lesson Learned: Be cautious when operating with a "follow" clearance. These clearances have been identified in a disproportionately higher number of runway incursions than other types of taxi clearances.



ALPA Air Safety Team
800.424.2470

Visit www.alpa.org

to learn more about runway safety and ALPA initiatives to continuously improve aviation safety.

ALPA's Runway Safety Course

What a Response!

Thanks to everyone who has completed ALPA's online *Runway Safety Course*. The number of pilots who have done so since the FAA issued its *Call for Action* in January 2008 has increased exponentially (see chart at bottom of page). Although no direct correlation can be made, there has been an encouraging decrease in the number of serious runway incursions nationwide since that time as well.

If you have not yet taken the Runway Safety Course, we encourage you to do so at your earliest convenience.



Membership feedback indicates that some users have experienced difficulties with the online training application. We apologize for any inconvenience and are working to eliminate the source of the trouble; we are also updating course content. If you have a suggestion for any topics that you think should be included, we would like to hear from you. Please submit your comments to runway-safety@alpa.org.

FAA Sponsors

Runway Safety Summit



The FAA Southwest Region hosted a two-day Runway Safety Summit April 22–23 in Ft. Worth, Texas.

It included panel discussions with ALPA members and other pilots, air traffic controllers, airport vehicle operators, airport employees, and industry experts on human factors and research. The goal was to identify runway safety hazards and best-practice mitigation strategies. The national and regional directors of the FAA's Runway Safety Programs were in attendance and provided updates on current trends and plans to reduce risk exposure to runway collisions.

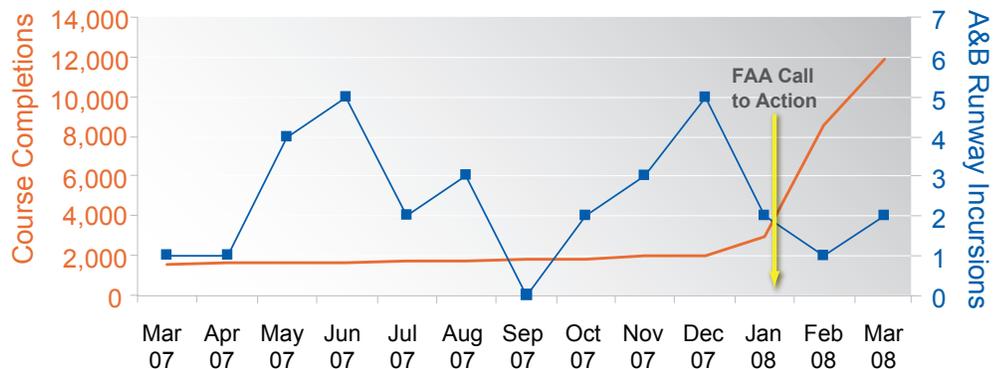
The agenda included a breakout session where cross-functional teams developed preliminary hazard lists and discussed technological, training, and Standard Operating Procedure (SOP) solutions intended to mitigate risk to the system. The teams identified 68 items that included threats such as fatigue, confusing airport layout, insufficient staffing, failure to apply lessons learned, limited experience, low visibility operations, inadequate training, workload

management, lack of team training, and more. The list was further defined to illustrate how many of these threats cut across multiple work and supervisory disciplines, to include pilots, controllers, managers, and regulators.

To view the full hazard list, please click on the link. If you know of other threats that you believe should be included, please identify them, using the submit button on page 4. The FAA intends to use the list to develop a comprehensive strategic plan intended to eliminate or mitigate runway safety threats. Ideally, the plan will consist of a blend of technology, training, and standard operating procedures solutions. Because there is always room for improvement, once the strategy is implemented, its effectiveness will be measured and risk controls adjusted as needed.

Clearly, eliminating runway incursions is a team effort that depends on the contributions of a variety of industry stakeholders. The next safety summit is scheduled for June 11–12, 2008, at the Atlanta Airport Hilton. ✈️

Total Completed ALPA Runway Safety Course vs. Number of Category A&B Runway Incursions



FAA Changes Taxi Procedures

The FAA recently issued an [amendment to FAA Order 7110.65](#), Air Traffic Control, with an effective date of May 19, 2008. The amendment requires controllers to provide the route to follow for all aircraft and vehicles on the movement area at tower-controlled airports. ALPA views this change as an improvement over the Order's previous language because it will reduce the potential for confusion regarding taxi clearances.



Runway Status Lights (RWSL)

at Boston-Logan International Airport

Boston-Logan International Airport (BOS) authorities, in conjunction with the FAA, recently announced their plans for the installation of Runway Status Lights (RWSLs) at the airport. This project will be conducted on an experimental basis, as RWSL technology has not previously been employed on intersecting runways.

Boston's system will consist of Runway Intersection Lights (RILs), Takeoff Hold Lights (THLs), and Runway Entrance Lights (RELs) installed on taxiways. Locations for the RELs were selected on the basis of known "hot spots," recent runway incursion sites (e.g., taxiways C and D), and other known congested areas (e.g., taxiways E and K).

The locations selected for THLs and never-before-tested RILs were selected on the basis of a near collision between two departing aircraft in June 2005.



- Runway Status Lights (RWSL) turn on and off automatically; RWSL driven by surface radar surveillance
- RELs turn ON when it is unsafe to enter or cross a runway; RELs are visible from taxi hold position
- THLs turn ON when it is unsafe to depart from the runway; THLs are visible from takeoff hold position (and final approach)
- RILs turn ON when it is unsafe to cross a runway intersection; RILs are visible from approach to runway/runway intersection

REL: Runway Entrance Lights
 THL: Takeoff Hold Lights
 RIL: Runway Intersection Lights

www.RWSL.net

Click on map to enlarge

Did you know...

- » 3 Critical Items for Success:
1. Identify high risk areas (with data)
 2. Develop interventions to reduce the risk in the highest risk areas
 3. Get information out internationally
 - On a regionally tailored basis
 - In a user-friendly format

» Data shows we are being effective in preventing runway incursion accidents, but the number of incidents and severity still indicates a very high risk.

Source—Flight Safety Foundation Runway Safety Initiative Briefing

Coming Attractions!

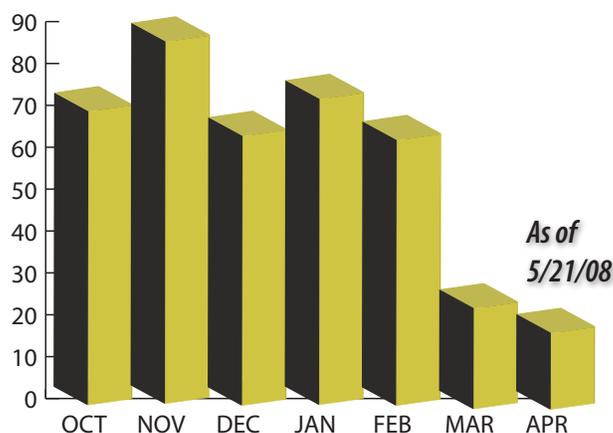


Our efforts to address runway incursions via this newsletter and company programs appear to be helping to reduce the number of occurrences. But runway safety obviously encompasses more than just preventing ground collisions. Our next and final issue of this newsletter will focus on runway excursions, another hazard in which pilot precautions and good judgment play decisive roles. Mr. Wes Timmons, FAA's Director of Runway Safety, will also provide his unique perspective on the success of the Call to Action program.

FLY SAFE!

Runway Incursions Month-to-Month FY 2008

All categories, All types of operations (FAA Statistics)



Our Goals

While our main goal of distributing this newsletter is to increase your knowledge and awareness of runway safety hazards, ALPA is also committed to providing access to educational resources on our website. In addition, we strive to:

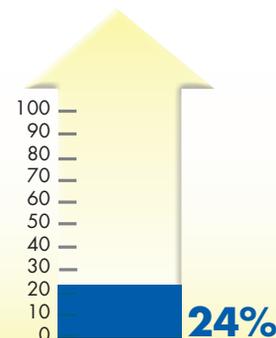
1. immediately provide you with awareness tools,
2. conduct this educational campaign to provide information to line pilots,
3. continue the pursuit of long-term system mitigations of runway collision hazard.



To date, 13,414 pilots have received certificates of accomplishment for the online Runway Safety Course. Help us raise that number even higher.

Take the course today!

http://flash.aopa.org/asf/runway_safety_alpa



Do you have a best practices recommendation for safe airport operations?

Through personal experience, many pilots have learned or developed their own best practices for safe operations. If you have a suggestion regarding safe operating procedures in the airport environment, please share it with us by sending an email to runway-safety@alpa.org, or clicking on the button below. All suggestions will be reviewed and considered for publication in subsequent newsletters.

Thank you for your contribution.

Thank you for reading this edition of the ALPA *Runway Risks* newsletter. Please provide us with your comments on this critical topic and look for future issues for more information regarding runway safety.