Reports Needed for ASRS Study

Non-Tower Airport Runway Incursion Incidents

"Runway incursions" are defined in a number of different ways within the aviation industry. In ASRS usage, a runway incursion occurs when an aircraft crosses a hold line, or enters a runway, in violation of standard Tower or non-Tower airport operating procedures.

The FAA definition of a runway incursion includes air traffic controller and vehicle-pedestrian actions, as well as aircraft-related actions. Related runway incursion data collected by the FAA show a clear, and troubling, trend. From 1988-1999, the total number of runway incursion events at the nation's airports increased 171 percent.

During this same period, runway incursion events resulting from pilot actions increased even more dramatically – by 267 percent. Pilot deviations are now responsible for more than twice as many runway incursions events each year as air traffic controller or vehicle-pedestrian errors.

In an effort to reduce and eventually eliminate runway incursions, the FAA is gathering and evaluating additional sources of data on the causes of these events. The agency has a particular need for more information on runway incursions that occur at non-Tower, or Tower-closed, airports.

Often the FAA knows what happened in a runway incursion event, but not why. Was the pilot familiar with the airport layout? Were airport signs, lighting, or marking contributing factors? Did language or clearance interpretation problems contribute to the event? Did radio communications play a role? What does the pilot believe caused the runway incursion?

ASRS to Conduct Runway Incursions Survey

The FAA has asked ASRS to help identify the factors and events that contribute to runway incursion events by pilots. The ASRS is interested in receiving pilot reports of occurrences where an aircraft *crossed* a runway hold line, or *entered* a runway, in violation of standard non-Tower airport operating procedures. The incident must have occurred at a non-Tower airport, or at an airport where the Control Tower was not in operation.

ASRS has a special interest in reports of "critical" runway incursion events – those involving a serious hazard or near-collision. The incidents reported should have occurred within the last six months. *Reports from both general aviation and air carrier pilots will be needed for the study.*

ASRS will immediately begin contacting pilots who report runway incursion incidents that fit these criteria to request their voluntary participation in a telephone survey ("structured callback"). Reporter participation in the survey is strongly encouraged.

All personally identifying information (names, company affiliations, etc.) will be removed before the ASRS research data are given to the FAA.

How the Interviews Work

Pilots who experience runway incursions may participate in the ASRS study by reporting their incident on a NASA pilot reporting form obtained from their company, a Flight Service Station, or from the ASRS web site (**http://asrs.arc.nasa.gov/ forms_nf.htm**). ASRS will contact reporters to solicit participation in the study, and set up interview appointments.

The telephone surveys will last 45 minutes to 1 hour. Reporters will receive their ID strips back–with no record of their identity retained by ASRS–as soon as the interview is complete.

ASRS will provide a de-identified summary of the data collected to the FAA for its use in developing runway incursion prevention measures.

FAA Partners in Safety

The FAA is currently giving high priority to a number of education and training initiatives as part of its Runway Safety Program. More information on these initiatives is available from the FAA Runway Safety Program web site at **http://www.faa.gov/runwaysafety/**.

The FAA is being joined in its safety efforts by a number of aviation industry partners. Partner organizations include the Air Line Pilots Association (ALPA), Aircraft Owners and Pilots Association (AOPA), National Business Aviation Association (NBAA), and National Air Traffic Controllers Association (NATCA).

To support FAA and industry efforts to improve the safety of airport surface operations, ASRS strongly encourages pilots who experience runway incursions to report these events to the Program, and to participate in the runway incursions study.

ASRS Recently Issued Alerts On…
A runaway prop incident involving a BAE 4100
Bird strike and fire hazards at a Georgia airport
B757-200 rudder ratio system failure during takeoff
Radio reception ("deadspot") problems on a runway
MD-88 engine/gear damage from a blown recapped tire

May-July 2000 Report Intake	
Air Carrier / Air Taxi Pilots	6605
General Aviation Pilots	2053
Controllers	284
Cabin/Mechanics/Military/Other	570
TOTAL	**9512**

See-and-Avoid – Applies to Runway Ops, Too

On the front page of this month's issue, we describe a joint FAA/ASRS study of runway incursion events at non-Tower, or closed-Tower, airports. The following report, submitted to ASRS by a B-727 Captain, has all the ingredients of the type of event we would like to learn more about – one in which established procedures still were not enough to avert a near-collision on the runway.

■ *Due to a mechanical problem, our flight [air carrier X] departed after the Tower closed for the night. We complied with our company's "non-Tower" procedures found on our commercial chart page. The First Officer called Center prior to taxi for our clearance using the VHF #2 radio. The First Officer then made a "taxiing to Runway 09" call on the CTAF using the VHF #1 radio.*

Upon reaching the end of Runway 09, the First officer called "taking the active" on CTAF. As we lined up, we heard air carrier Y announce his taxiing on the CTAF. The First Officer then called "beginning takeoff roll" on CTAF and Center's frequency. I transferred aircraft control to the First Officer and we began rolling between 80-100 knots. We heard air carrier Y announce his intentions for an intersection takeoff (Taxiway A) on Runway 27. The First

Officer and I both had the air carrier Y in sight, and as we neared V_1 (rotate speed) we saw that he was not going to stop prior to entering the runway. The First Officer expedited rotation and we went over air carrier Y by approximately 300 feet as he entered the runway. During this time, I tried contacting air carrier Y on CTAF, but he did not respond.

Soon after clearing him, we heard him query Center if they just had someone take off. Center told him of our departure, and air carrier Y wanted to know why we hadn't made any calls on the CTAF. We told Center that we had in fact made calls that went unanswered by air carrier Y. I also told Center we had heard air carrier Y, but he evidently hadn't heard us. Air Carrier Y said something about the volume on his radios, and that "he guesses he's just used to having [airport] to himself at that time of night"…

One thing, however, was not done. I can understand missing some radio calls, but I cannot understand how someone taxies onto a runway without visually clearing it – especially when the Tower is closed. ◢

ASRS Web Site Reports Recently Updated

For the past few years, ASRS has offered a selection of database incident reports at its web site, **http://asrs.arc.nasa.gov**/. ASRS recently updated the web site reports to include database reports from the current year. The topics represented are those most frequently requested by air carrier, general aviation, cabin crew, maintenance, and ATC personnel.

Each report "set" consists of 50 recent database records on a specific topic. At the beginning of each report set is a note of introduction, guidelines for using ASRS data, and a list of standard abbreviations and definitions used in ASRS database records. Reports have been screened to assure their relevance to the topic description.

The report set files are in Adobe's Portable Document Format (PDF), which requires the Adobe Acrobat Reader version 4.0 software to view and print. The Adobe software is free, and a link is provided to the Adobe web site for those who need to download the Acrobat Reader.

Following is a partial listing of the 27 ASRS report sets recently updated:

✈ **Air Carrier (FAR 121) Flight Crew Fatigue Reports**

✈ **Commuter and Corporate Flight Crew Fatigue Reports**

✈ **Cabin Attendant Reports**

✈ **Maintenance Reports**

✈ **Air Traffic Controller Reports**

✈ **Rotary Wing Aircraft Flight Crew Reports**

✈ **General Aviation Flight Training Reports**

✈ **Commuter and GA Icing Incidents**

✈ **Runway Incursions**

✈ **Land and "Hold Short" Incidents**

✈ **Checklist Incidents**

✈ **CRM Issues**

✈ **Fuel Management Issues**

✈ **In-flight Weather Encounters**

✈ **Non-Tower Airport Incidents**

✈ **Passenger Electronic Devices**

✈ **Pilot/Controller Communications**

✈ **TCAS II Incidents**

✈ **Wake Turbulence Encounters** ◢