



Vehicle/Pedestrian Deviation Cross Feed

Federal Aviation Administration Southern Region

Volume I, Issue I
October 1, 2011

Safety Sam: I'M BACK!!!!!!!

Jack McSwain
Airport Certification Safety Inspector

Hello everybody, Safety Sam here. The Southern Region has initiated this newsletter to help mitigate runway incursions, which by the way, happens to be on the rise. With your help and the help of my friend Wreckless Willy, I will share with you some of the actual incidents and findings throughout the Southern Region. We will look at these situations with a light-hearted attitude keeping in mind the seriousness of safety at all times. Remember my fate is in your hands. If you think my article is helpful and informative let us know. If you feel the opposite **too bad, so sad!** Let's get this party started!



- Caller, this is Safety Sam, how may I help you?

Willy: Sam this is Willy (Wreckless Willy) I just got a phone call from my cert inspector

and she wanted to know about an aircraft that took off from my closed runway. I didn't know what she was talking about. She said she would be issuing a letter of investigation. Dude, I could be fined, I could lose my certificate, I may be fired!

Sam: Willy, calm down. Did you find out what happen?

Willy: Yes.

Sam: Well tell me the facts.

Willy: The tower taxied and cleared an aircraft for take-off from an intersecting taxiway on a closed runway. I can't control what the tower does, can I?

Sam: Willy, was the runway NOTAMed closed?

Willy: Yes.

Sam: Was it marked closed?

Willy: Yes.

Sam: Was the taxiway barricaded so no aircraft had access to



the runway?

Willy: Well, Uhhmm, no, but the tower knew it was closed.

Sam: Willy, tower personnel are human so they make mistakes.

The airport operator is responsible for determining the need for visual aids to indicate a runway or taxiway closure. Things to consider are reason and duration of closure, airfield configuration, and the existence and hours of the control tower. Advisory Circular 150/5370-2 gives guidelines and specifications for marking and lighting closed or temporarily-closed runways and taxiways. Remember, the certificate holder has the responsibility for ensuring safety at their airport.

Willy: Okay Sam, I get it now.

Sam: That's all for today folks. Get out there and **Make it Safe!**

Inside this issue:

It 's About Time to be Number Nine!	2
The Importance of Training and Awareness	2
An ARFF Emergency Doesn't Mean a "Blanket Clearance"	2
Southern Region 2011 VPD Summary	3
RI's YTD Date by Region FY 2011 vs. Equivalent Period FY 2010	4
Situational Awareness and Complex Geometries	4
V/VPD Crossword	5
Safety – A Personal Responsibility	6

Runway Incursion Definition & Classification

Category "A". A serious incident in which a collision was narrowly avoided.

Category "B". An incident in which separation decreases and there is significant potential for collision, which may result in a time critical corrective/evasive response to avoid a collision.

Category "C". An incident characterized by ample time and/or distance to avoid a collision.

Category "D". An incident that meets the definition of a runway incursion such as incorrect presence of a single vehicle, person, or aircraft on the protected area of a surface designated for the landing and take-off of aircraft but with no immediate safety consequences.

V/VPD Recipe: Unauthorized Access, A Recipe for Disaster

Charlotte Jones
Airport Certification Safety Inspector

Ingredients:

- I unsecured AOA gate
- I untrained vehicle operator
- I cell phone
- I active runway

Directions: At an unmanned and unsecured gate, enter the airport operations area (AOA) at the General Aviation Ramp in a privately owned vehicle. While talking on the phone enter the movement area via Taxiway Charlie

and proceed on the runway heading west. Exit the runway seconds before BULLSAIR67 rotates and the aircraft pitches up and lifts into the air. Exit the AOA behind a catering vehicle at a secured gate.

Serving: The controller observed the vehicle just as it exited the runway. During the take-off roll, as the pilot approached 90 knots, he noticed the vehicle vacate the runway at Taxiway Juliet.

Review: This recipe is perfect for catastrophe and fortunately there were no injuries. Investigation revealed the unsecured gate was reported a week prior and should've been closed/ barricaded until repaired.

Note: For safer results, limit access to movement and safety areas to those pedestrians and ground vehicles necessary for airport operations.

It 's About Time to be Number Nine!

Patrick L. Rogers II
Lead, Airport Certification Safety Inspector

Many would like to be number one, but when it comes to V/PDs, we want to be number nine. Out of the nine FAA regions, Southern ranked number two on the list of having the most runway incursions caused by vehicles or pedestrians. Though better than being number one, in FY 2011 we were 14 incident behind the number one region.

So how do we become number nine? By preventing all runway incursions? Not exactly. Every region had at least three VP/Ds. Having said that, all we have to do is reduce our number to less than three. Easier said than done, but we are not that far off. Southern Region recorded 30 V/PDs. That

would mean better education and training for only 27 people, right? It doesn't sound that hard, but the problem is we don't know who the next 27 people will be. Therefore you must reach out to everyone at your airport and educate them on the seriousness of such an event.

All personnel with access to the movement and safety areas must be trained prior to being granted access. Teach everyone to treat the runway environment like a loaded gun. Always check to ensure your safety is on at all times. Double check; ask the tower for clarification; don't be in a hurry to get to your desired

location (target) on the airfield; don't be distracted by cell phones, the radio, or assume anything. Pay close attention to the General Aviation ramps and contractors. Does your local Fixed Base Operator let any and everyone through the gate? Are contractors being provided appropriate training? Escorts only work if the escorted follows the leader and obeys all instructions.

Get the word out about Runway Safety. Let's get out of second place and make a new headline that the Southern Region is number nine. It's about time!



The Importance of Training and Awareness

Herman L. Smith III
Airport Certification Safety Inspector

14 CFR Part §139.303(c) states that each certificate holder must train all personnel who access movement and safety areas. This training must be completed prior to the initial performance of their duties and at least once every 12 consecutive calendar months.

How many times have you heard someone say "Oh I don't need training, I have been doing this forever"? Well, believe it or not, experienced and tenured airport personnel commit runway incursions. They too are shocked to learn that on any given day, anyone is capable of committing a V/PD.

Airports are constantly changing and the airfield environment is a significant and complex part of those changes. Whether it be because of more aircraft operations, the addition of new signs and markings, construction, or a new group of air traffic controllers, we must live and breathe training and awareness.

Training is what keeps us proficient and helps avoid complacency. Being aware of your surroundings is what keeps you alive. Don't let a V/PD today ruin your tomorrow. Complacency only profits

undertakers. If you feel your airport's Drivers Training Program is lacking, now is the time to take action. Let's make ourselves number one in the program accountability process. Ask yourself this question, "How can I improve my program's efficiency?" Solicit airport tenants for ideas; after-all, everyone plays a role in safety. Incorporate new ideas into your training program, monitor its effectiveness, and amend as needed. Make every effort to prepare airport personnel for the challenges of driving on the airfield.



An ARFF Emergency Doesn't Mean a "Blanket Clearance"

Jim Price
Airport Certification Safety Inspector

Fortunately, aircraft emergencies are infrequent at most airports, but they ARE the reason ARFF is there. Just because you're in an emergency vehicle with lots of lights flashing and sirens blaring isn't permission to move about on the airfield at will. Until such time as you receive authorization to proceed to set up positions, or to an aircraft incident location, ARFF at towered airports must be cleared by ATCT personnel. If you're at a non towered airport, you have to see and be seen and make the self announced traffic on Common Traffic Advisory Frequency. Don't

let the heat of the battle cause you to lose focus on safety. It slows down response when you've got an airplane stuck in the back window of your vehicle, and it is certainly bad form to kill people you're trying to rescue! Remember, safety is first priority for you, your crew and the people using the airport.

And speaking of communicating, don't get caught hearing what you expect to hear on the radio...use "active" listening. Pay attention to what the ATCT *actually* says,

not what you want or expect to hear. Be safe, pay attention, keep your head on a swivel and remember anything you do on the airport can get you killed, including doing nothing.





Southern Region 2011 V/PD Summary

Charlotte Jones

Airport Certification Safety Inspector

The following are actual V/PDs.

Class C:

Three minutes after an initial V/PD, another police vehicle entered the airport and preceded across Taxiway Bravo and Runway 17L onto Taxiway Golf and conflicted with a BE-20 cleared for take-off. The police vehicle continued to Runway 17R. [Failure to obtain radio communication with and approval from ATC](#)

A tug with aircraft in tow was repositioning from Ramp 1 to Ramp 5 via Taxiway Echo. The tug operator was instructed to hold short of Runway 19 at Echo which was read back correctly. ATCT personnel observed the tug approaching Runway 19 at a high rate of speed and the controller instructed the tug driver to stop. The tug came to a stop past the hold short lines for Runway 19 and 50 feet from the runway edge thus conflicting with a LR-35 landing the same runway. The LR-35 rolled past Echo intersection where the tug had stopped. Runway width is 100 feet. [Failure to comply with ATC instruction](#)

An ARFF vehicle crossed Runway 22 at Taxiway Alpha without authorization. Loss of separation lost with a CRJ departing Runway 22. [Failure to obtain radio communication with ATC](#)

Class D:

An air carrier employee contacted Ground Control requesting to reposition an aircraft from Cargo 1 to Cargo 4. Both of the spots are located north of Runway 35. Minutes later, the employee reported clear of Runway 35. The employee had proceeded from Cargo 1 to Cargo 4 which requires the aircraft to cross Runway 35. The employee crossed the runway without ATC approval. Furthermore, the aircraft was taxied by a non-piloted employee. [Unauthorized access to the movement area](#)

Vehicle 1 called Ground Control

requesting clearance to cross Taxiway Alpha to Lima and remain on the Taxiway for 1+30 to lay sod. Ground Control instructed Vehicle 1 to cross Taxiway Alpha to Lima and remain clear of Runway 23 at all times. Vehicle 1 acknowledged and advised he would remain clear of Runway 23. Ground Control later observed Vehicle 1 proceeding past the hold line on Taxiway Lima. Ground Control advised Vehicle 1 that he had crossed the hold line on Taxiway Lima and that was considered as being on the runway. Ground Control then observed Vehicle 1 reposition his vehicle on Lima clear of the runway. [Failure to maintain situation awareness](#)

Aircraft was issued a go around due to personnel past the hold line on Taxiway Delta. [Unauthorized Access](#)

Construction vehicle, working on Runway 18-36 crossed Runway 1-19 without ATCT clearance. No aircraft involved. [Unauthorized Access](#)

An air carrier ramp tower notified ATCT that a truck had just crossed the approach end of Runway 04. Runway 04 was inactive at the time. Minutes later, ATCT was advised airport operations and police were on scene. The vehicle was a vendor that was leaving the air carrier's ramp from north to south. Airport personnel advised that the vehicle should have proceeded via the access road but instead crossed the runway via Taxiway Hotel. [Unauthorized Access](#)

A police vehicle entered the airport and preceded onto Taxiway Bravo and Runway 17L then onto Taxiway Golf and Runway 17R without clearance or contact from the ATCT. No conflict with departing/arriving aircraft. [Failure to obtain radio communication with and approval from ATC](#)

One minute after the first incident a third police vehicle entered the airport and preceded onto Taxi-

way Bravo and Runway 17L then onto Taxiway Golf and Runway 17R without clearance or contact from the ATCT. No conflict with departing/arriving aircraft. [Failure to obtain radio communication with and approval from ATC](#)

Two minutes after the first incident, a second police vehicle entered the airport and preceded onto Taxiway Bravo and Runway 17L then onto Taxiway Golf and Runway 17R without clearance or contact from the ATCT. No conflict with departing/arriving aircraft. [Failure to obtain radio communication with and approval from ATC](#)

Tower observed vehicle on Taxiway Juliet crossing Runway 24 without clearance. ATCT alerted airport security who pursued but was unable to catch the vehicle. [Unauthorized Access](#)

Airport operations personnel were notified of wildlife near the air national guard ramp. The individual was given permission to cross Runway 8R to get to the area. After crossing Runway 19, the individual chased the wildlife which then ran toward Runway 8L. As the wildlife crossed Runway 8L Airport operations personnel failed to stop and crossed Runway 8L without clearance. [Failure to maintain radio communication with and approval from ATC](#)

A pedestrian crossed the approach end of Runway 18L without authorization. No conflict reported.

An aircraft and a tug vehicle were heading northbound holding short of Runway 36R. The aircraft was on Delta 1 and the tug on Delta 2. The controller instructed the pilot to cross Runway 36R at Delta 1 and to hold short of 36L at Hotel. The pilot read back the clearance and at the end of aircraft transmission a partial read back was heard saying "Hotel Tug." The

controller was unsure of who read back the A pedestrian crossed the approach end of Runway 18L without authorization. No conflict reported. [Failure to obtain radio communication with, and approval from ATC](#)

An aircraft and a tug vehicle were heading northbound holding short of Runway 36R. The aircraft was on Delta 1 and the tug on Delta 2. The controller instructed the pilot to cross Runway 36R at Delta 1 and to hold short of 36L at Hotel. The pilot read back the clearance and at the end of aircraft transmission a partial read back was heard saying "Hotel Tug." The controller was unsure of who read back the clearance and reissued the clearance again to the pilot. The controller then observed the tug crossing Runway 36R at Delta 2 without clearance. The controller instructed the tug operator to expedite across. [Failure to maintain situation awareness and radio communication](#)

A POV entered the airport property and drove across Runway 22 at Taxiway Lima without communication with the tower. The vehicle pulled off in the grass and stopped after crossing the runway. Airport operations responded to the incident. [Unauthorized Access](#)

An airport vehicle was instructed to hold short of Runway 10 at E1/F1 which was read back. The vehicle operator was anticipating clearance to cross and did not see any aircraft then became confused. By the time he realized he had crossed the hold bars without clearance, the driver stated the best action for him was to continue across the runway. [Loss of orientation](#)

A pedestrian walked from Bravo Ramp onto Taxiway Charlie via Alpha and crossed the hold line for Runway 17 without authorization. The pedestrian was approximately 10 feet past the hold lines on Charlie3 when stopped by airport personnel. No conflicts reported. [Unauthorized Access](#)



Runway Incursions Year to Date by Region FY 2011 vs. Equivalent Period FY 2010

Provided by the Runway Safety Office

FY 2011					
REG	OE/D	PD	VPD	OTH	TOTAL
AAL	3	14	10		27
ACE	5	13	5		23
AEA	33	37	19		89
AGL	33	63	28		124
ANE	4	21	3		28
ANM	11	60	22		93
ASO	35	114	30		179
ASW	25	94	22		141
AWP	27	171	44		242
TOTAL	176	587	183	0	946

FY 2010					
REG	OE/D	PD	VPD	OTH	TOTAL
AAL	4	22	12		38
ACE	3	28	10		41
AEA	19	38	20		77
AGL	27	81	31		139
ANE	8	21	3		32
ANM	17	71	13		101
ASO	34	118	21		173
ASW	26	90	25		141
AWP	18	160	44		222
TOTAL	156	629	179		964

Current as of 30 Sep 11

Situational Awareness and Complex Geometries: Where Are You?

Charlotte Jones

Airport Certification Safety Inspector

Situation awareness (SA) involves being aware of what's happening around you to understand how information, events, and your own actions will impact your goals and objectives, both now and in the near future. According to numerous experts, lacking SA or having inadequate SA has been identified as one of the primary factors in accidents attributed to human error. Therefore, SA is especially important in work domains where the information flow can be quite high and poor decisions may lead to serious and fatal consequences (e.g. V/PDs).

Airport geometry summarizes airport layout. Airports with complex geometries have criteria such as multiple crossing runways, short taxi routes/time compression, possible confusion while taxiing or driving, numerous runway/taxiway

ing, numerous runway/taxiway intersections, and parallel or closely aligned runways.

A direct correlation can be made between situation awareness, complex geometries and V/PDs. In the airport environment, it's important to know where you are at all times, especially in the movement areas. Imagine this, at a very busy airport, Airport 3 requests permission to cross Runway 9R from Taxiway Foxtrot West and then north onto Taxiway Whiskey. The ground controller conducts a quick scan of the runway and approach prior to granting permission. Unbeknownst to the controller, Airport 3 is actually located at Foxtrot, west of Runway 3L. Before acknowledging the controller's approval, Airport 3 makes a quick scan of the area and realizes his actual location. He advises the controller

to disregard his previous request and relays a corrected request. He receives approval and exits the movement area. Later that evening, the controller and Airport 3 discuss the adverted runway incursion.

Here's the situation: The airport averages over 150 departures in one hour and has three sets of parallel runways with complex pavement intersections and distracting airport conditions. The ground controller was extremely busy and failed to visually re-affirm Airport 3's location prior to authorizing the crossing. Fortunately, Airport 3 followed operational procedures and looked for visual cues (signs and markings) before he moved the vehicle beyond the hold sign in order to verify his

location. Is this an everyday practice at your airport?

Being proactive is part of SA. If you hear the sound of running engines, look around. If an aircraft is taxiing in your direction, take the most expeditious route and exit the area without waiting to be instructed by Air Traffic Control (ATC). When on the runway, continuously look in the rear view mirror for aircraft on approach and exit the runway as soon as possible. Form a partnership with ATC and together be the safety eyes and ears on the ground and in the air.

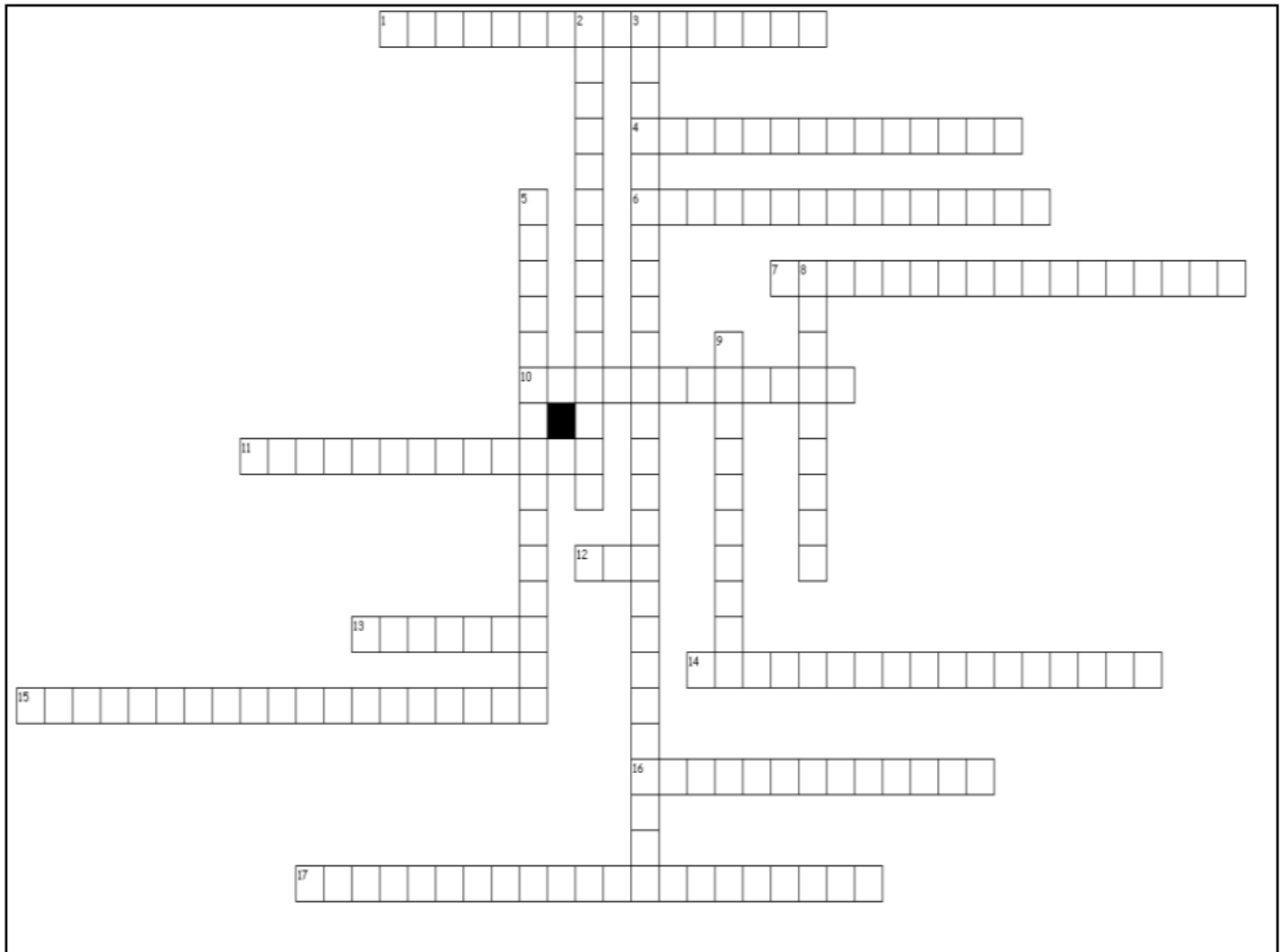
We have to get out of the mind-set of saying, "No matter how hard we try, we will have accidents," and into "We will not have accidents."

— Federico Peña, U.S. Transportation Secretary, Safety conference speech, January 1995



Vehicle/Pedestrian Deviation Crossword

Lisa Burrows, Safety Risk Management Specialist



Across

1. Visual aids used to navigate on the airfield (3 words).
4. Unauthorized movement within the airport movement area caused by a pilot or person operating an aircraft under its own power (2 words).
6. Any occurrence at an aerodrome involving the incorrect presence of an aircraft/person/vehicle on the protected area of a surface designated for landing/take-off of aircraft (2 words).
7. Grants permission or authorization to move in controlled areas of airfield (3 words).
10. _____ of noncompliance (pl.).
11. Review of causes and contributing factors of a vehicle/pedestrian deviation.
12. Unauthorized access to movement area by a vehicle or pedestrian. (abbreviation)
13. Other than a pedestrian deviation.
14. Punitive measure that an airport operator takes against the deviator (2 words).
15. Place where scheduled air carriers land and depart (2 words).
16. Permission to move in controlled areas of the airfield.
17. Notification from an ACSI requesting information about a Vehicle/Pedestrian Deviation at certificated airports (3 words).

Down

2. Program for those using vehicles on the airfield. (2 words)
3. FAA airports branch that investigates V/PD for Part 139 certificated airports (4 words).
5. Unauthorized movement within the airport movement area (runway excluded) (2 words).
8. The questioning of a deviator.
9. Deviation other than vehicle.

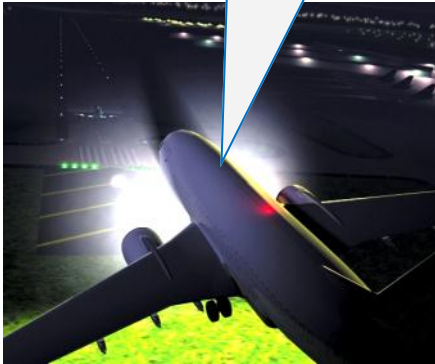


FAA Southern Region,
Airports Division
P.O. Box 20636
Atlanta, GA 30320

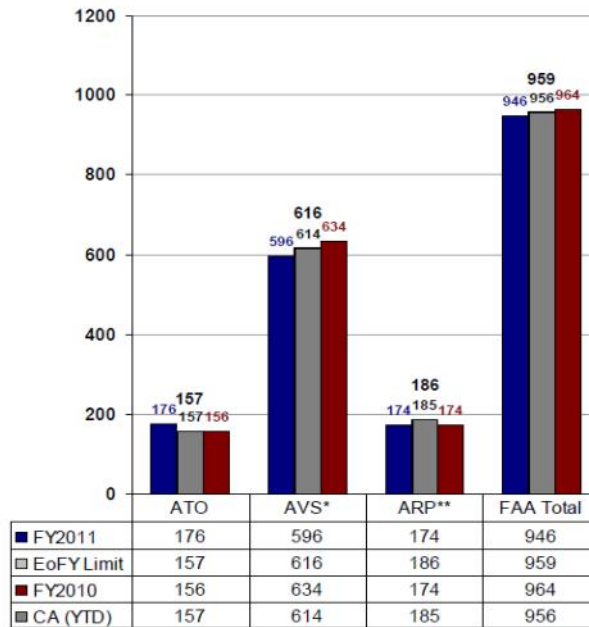
Phone: 404-305-6700
Fax: 404-305-6730

Regional Operations Center
24-hour Accident and Incident Response
(404) 305-5180

Uh... Tower, I think there's
somebody on the runway ...



Runway Incursion Performance Daily tracking Chart FY11



KEY:
 FY2011 – Cumulative Runway Incursions in FY year to date (YTD)
 EoFY Limit – End of Fiscal Year (Performance standard not to be exceeded in FY11)
 FY2010 – Cumulative Runway Incursions for the same YTD period in FY10
 CA – Cumulative Allotment (Cumulative Prorated Schedule – not to exceed FY11 performance standard)
NOTE:
 All data presented here are preliminary and subject to change.

Runway Incursion Distribution Definitions:
 ATO – Includes all OE/OD Runway Incursions.
 *AVS – Includes all PD and maintenance taxi Runway Incursions.
 **ARP – Includes all V/PD Runway Incursions except maintenance taxi.
 FAA Total – Sum of the three performance figures.

Safety – A Personal Responsibility

Brian Creasy
Program Manager, Safety Management System/Airport Certification Safety Inspector

Implementation of a safety management system (SMS) program at an airport doesn't necessarily lead to the safest operation possible. Airport operators can do everything right; identify hot spots, incorporate lessons learned into their drivers training program, etc. However, even the best programs and processes for identification and management of hazards don't guarantee the best result. Whether or not your airport has implemented a formal SMS program, personnel operating on the airport are human and sus-

ceptible to human error. A simple mistake by a vehicle operator is all it takes to create a V/PD, or worse, an aircraft accident. Human error has been and will continue to be one of the leading causes of V/PDs.

We, as aviation professionals, must take personal responsibility for the safety of our actions. Whether we realize it or not, we perform safety assessments each and every day....every time we cross the street, commute to work, or plan weekend activities we analyze hazards and risks at

some level. The same holds true while performing your duties on the airport. Be aware of your surroundings at all times. If you receive permission from ATC to cross a runway, scan the runway before crossing (air traffic controllers are human too). Safety is everyone's responsibility. Don't be complacent...it only takes one mistake to not only ruin your day but potentially affect many lives.

Overall incursion rate
4 per 100K movements



Runway crossings:
25% of all incursions
5% of all movements

Incursion rate:
20 per 100,000 crossings

"An ounce of prevention is worth a pound of cure."

—Benjamin Franklin

