

# NEWSLETTER

## Airports Edition

### Cars and Pedestrian All Over Our Runways – What Can We Do?

by Mike Meigs

Runway incursions due to vehicle or pedestrian deviations (VPD) were up 70% in Fiscal Year 2011 over the previous year in the FAAs Northwest Mountain Region. The results in FY-2012 so far are even worse. What can you as an airport operator do to help keep our runways safe? Let's first look at some statistics

Out of 31 incursions due to VPDs over the past 18 months:

- ❖ 15 were due to tenants of the airport that were not authorized to be on the movement area – 8 were vehicles and 7 were pedestrians.
- ❖ 10 VPD incursions were committed by airport employees authorized to drive on the airfield.
- ❖ 6 incursions were related to construction projects on the movement area.

Tenants and visitors to tenants are the biggest problem area. Federal regulations do not require airports to train non movement area drivers or tenants. However, for everyone's safety, Runway Safety recommends you provide awareness of the following items to all tenants and visitors:

- **Movement area marking location and meaning:** Keep it simple – do not cross the yellow line. Employ plain language signage in areas where vehicles and pedestrians are likely to leave the non-movement area.



- **How to recognize when approaching a runway:** Educate people on how to recognize a runway hold line and sign. Do they understand what white numbers on pavement mean, and that all runway markings are white.



- **Runways are a dangerous place:** Tell them about the high speed nature of runways – and how even if a pilot sees a car or pedestrian – they may not be able to avoid a collision.

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## Cars and Pedestrian All Over Our Runways cont...

Incursions by airport employees are often the results of distractions inside vehicles. Studies have shown that taking phone calls, even on handheld devices, reduce driver's performance – much the same as too much alcohol. Does your airport have policies to restrict the number of distractions drivers encounter while on the movement area?

Construction related incursions are often the result of breakdowns in communications about boundaries of the work area, or in escort procedures.

Drivers sometimes assume that the surface that was closed last night is again closed – without verifying the information. They might also assume they can cross a barricaded route – as barricades sometimes mark an area that can be crossed traffic permitting – and sometimes protect runways – which can never be entered. Plain language signage and rigorous daily briefings to all drivers can help to reduce the chance of an incursion during your project.

Runway Safety is asking each Airport District Office to meet with airport sponsors and to review VPD prevention efforts. There will be posters, brochures and other tools available to help sponsors reduce the chance of a runway incursion. Do your part and help us to keep runways free of unwanted visitors at your airport!

## Revised Advisory Circular Introduces New Concepts and Requirements for Taxiway Design

by Mike Meigs

Airport geometry can have a big influence on the rate of runway incursions at an airport. The FAA office of airports has recognized this for a long time – resulting first in an engineering brief and now in the long awaited change 17 to advisory circular 150/5300-13, airport design.

Change 17 introduces some key concepts in taxiway design, as well as identifying airport geometries which should be avoided. Most changes are in chapter 4, and the introduction paragraph (401) states that "the airfield design

process focuses on **safety first, then efficiency and capacity**". Airport sponsors and design consultants should make themselves familiar with these new concepts and requirements. A few key concepts and requirements are discussed here:

**Three-node principle:** taxiway intersections are to be designed so that there are only three directions to proceed beyond the intersection, straight ahead, right and left. In addition, intersections at 90 degrees are preferred.



## Revised Advisory Circular Introduces New Concepts cont...

**Entrance taxiways:** entrance taxiways (end of runway) shall be built at 90 degrees to runway – and will not be built beyond the end of a runway. The taxiways should be built such that the fuselage in the largest aircraft will be lined up 90 degrees to the runway hold line when holding short.

**Runway/taxiway interface:** taxiways which enter or cross the runway should be at 90 degrees whenever possible, and angles less than 45 degrees are discouraged (except for the standard 30 degree high speed).

Wide expanses of pavement are no longer permitted – as they make signage difficult to see for pilots and lead to confusion.

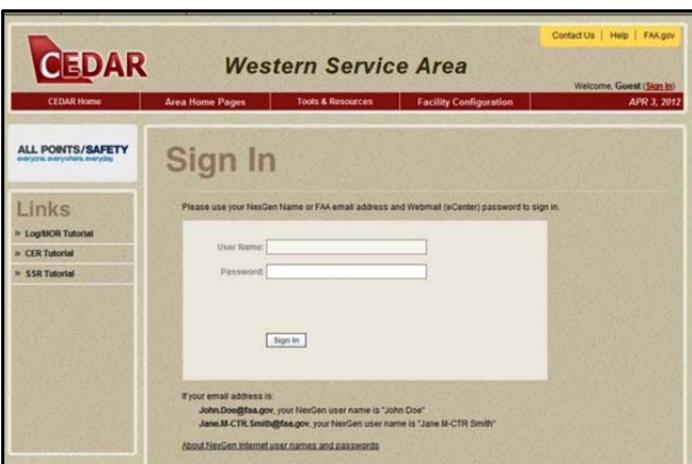
**Bypass taxiways:** bypass taxiways now require islands to separate each runway entrance. Each entrance must have it's own taxiway designation and signage. This means each island must have it's own signage.

**Geometry to avoid:** figure 4-3 spans three pages and contains representations of problem airport geometry that is to be avoided in future designs, and identified for improvement in existing airport layouts. **How many of these figures look like your airport?**

These concepts are a sample of the new guidance. The new guidance requires existing airport locations designated as hot spots to be reconfigured at the next opportunity. The northwest mountain region airports division is engaged in collecting requirements for updating airport geometries, and is working with the regional runway safety team in doing so. If you have questions, contact the runway safety office and/or your local airports district office.

## CEDAR is More Than Just Something That Smells Good in Your Closet by Mike Meigs

Those of you that have worked with the FAA for any period of time know that we love our acronyms. CEDAR is a new acronym that stands for “Comprehensive Electronic Data Analysis and Reporting”.



CEDAR is a new reporting system for Aviation System events that was implemented by the Air Traffic Organization on January 30, 2012. Why would you as an airport operator care about the latest acronym brought to you by the ATO? Because all runway incursions and surface incidents are now reported via this new system.

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## CEDAR is More Than Just Something cont...

CEDAR has two primary types of reports. Electronic Occurrence Reports (EOR) involves possible losses of airborne separation and is detected using software. The software automatically sends an EOR to the Quality Assurance office for evaluation. The second type of report is a Mandatory Occurrence Report (MOR). MORs are entered by controllers at the facility level manually, and transmitted electronically to the Quality Assurance Office.

The number of events, both EORs and MORs, that are being reported far exceed the events that the facilities have reported in the past. This was intentional, as the ATO wants more data to be able to identify safety risk in the National Airspace System.

How is this new system different? In the past, when a possible runway incursion was observed by a controller in an ATCT – the controller in consultation with the facility Quality Control staff would decide whether or not an incursion had occurred. If they felt an incursion and a possible pilot or vehicle/pedestrian deviation occurred, the facility would file the preliminary FAA Form 8020-XX. The preliminary would be faxed to the FAA Regional Operations Center – and then to the FSDO or Airports as appropriate. This would typically be done within 3 hours of the event, and triggered the notification process to FAA management.

In the new system, facilities no longer make the call as to whether an event was a runway incursion – and whether a pilot or vehicle/pedestrian deviation occurred. That is done by the Service Area Quality Assurance (QA) office, which is part of ATO Safety and Technical Training. The facilities report possible events as an MOR. The QA office then has one **business** day to review the MOR and take action. QA is staffed only during administrative hours. If the MOR is a possible PD or VPD, QA may request tapes or collect other information, and facilities have 2 business days to provide the information. Once they have enough information to make a determination, then the FAA Form 8020-XX is filed and faxed to the ROC.

As a result of the new process – it may be up to 10 calendar days before the Form 8020-XX is filed. This new reporting system has also disrupted the notification process for runway incursions and other events. The ATO is working hard to optimize the new system, and is already seeing the benefits of increased reporting. Possibly serious events involving breakdowns by pilots and controllers are coming to light that would not have been reported in the past – enabling us to take proactive measures to reduce risk in the system. While ATO works out the kinks in the new system - ask your local ATCT manager to ensure that possible surface events are brought to your attention as soon as they are reported as MORs.

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## Looking for Runway Safety Training Materials?

The ANM Office of Runway Safety has over 22 varieties of free training Materials including, the Runway Safety Collection DVD, an Airport Ground Vehicle Operations booklet, and laminated Signs and Markings Placemats. Most materials are kept in stock. In stock items are shipped via US Mail within one week of order receipt. Please allow extra Time for large orders or out of stock items.

Can't find what you're looking for? The Office of Runway Safety is here to help you develop the proper training materials for your facility. Please Contact us for more information.

To request Runway Safety Publications or Materials  
Please contact Fay Loos: (425) 917-6649 or [fridayati.ctr.loos@faa.gov](mailto:fridayati.ctr.loos@faa.gov)

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# Upcoming Runway Safety Events

- April 13, 2012 – Flight Instructor Refresher Clinic at Boise, ID
- April 14, 2012 – Flight Instructor Refresher Clinic at Salt Lake City, UT
- April 14, 2012 – Flight Instructor Refresher Clinic at Denver, CO
- April 16 – 18, 2012 – FAA Northwest Airports Conference, Seattle, WA
- April 27, 2012 – Local Runway Safety Action Team meeting at Spokane International, WA
- May 15, 2012 – Local Runway Safety Action Team meeting at Great Falls, MT
- May 16, 2012 – Local Runway Safety Action Team meeting at Helena, MT
- May 17, 2012 – Local Runway Safety Action Team meeting at Billings, MT
- May 21, 2012 – Local Runway Safety Action Team meeting at North Bend, OR
- May 22, 2012 – Local Runway Safety Action Team meeting at Eugene, OR
- May 23, 2012 – Local Runway Safety Action Team meeting at Redmond, OR
- May 30, 2012 – Local Runway Safety Action Team meeting at Grand Junction, CO
- May 31, 2012 – Local Runway Safety Action Team meeting at Pueblo, CO
- June 1, 2012 – Local Runway Safety Action Team meeting at Colorado Springs, CO
- June 12, 2012 – Regional Runway Safety Action Team meeting at Salt Lake City, UT
- June 14, 2012 – Local Runway Safety Action Team meeting at Ogden, UT

Dates are subject to change. Please contact the ANM Office of Runway Safety at (425)917-6786 for confirmation.

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