

# Vehicle/Pedestrian **Deviation Cross Feed**

## **Federal Aviation** Administration Southern Region

Volume 1, Issue 2 August 2012

# Safety Sam Asks "What's Going On?"

## lack McSwain

Airport Certification Safety Inspector

### Hey Guys,

I heard there's been a rash of Vehicle/Pedestrian Deviations (V/PD) in the Southern Region and the Certification Safety Inspectors are busier than a bee making honey issuing Letters of Investigation. I don't know all the details yet but here's a list of some of the incursions:

- A construction vehicle working on Runway 5-23, crossed Runway 14-32 without clearance from the tower.
- A meter reader was allowed onto the South Ramp by the Fixed Based Operator (FBO) to read the meter. In the drivers' attempt to reach the Air Traffic Control Tower (ATCT), she drove out onto Taxiway Echo and then onto Runway 17-35. No loss of separation.
- Two contractor vehicles entered Runway 36C, one aircraft sidestepped to another runway to avoid loss of separation.
- Engine 59 was positioned at Taxiway A3 for an Alert II emergency. After the emergency aircraft passed A3 the fire vehicle entered Runway 4 at A3 without clearance.
- Truck 210 (fire vehicle) was holding short of Runway 9L at Taxiway A5 and requested to cross Runway 9L. Ground North acknowledged the request but no clearance was issued. Shortly after that the vehicle operator reported clear of Runway 9L.
- During an aircraft emergency, Airport Vehicle 36 entered Taxiway Alpha without authorization.
- A Deputy Sheriff Vehicle proceeded on Runway 18 without authorization.

It goes on and on and on, up to 32 to be exact, and that's only since October 2011. What in the world is going on down there? Well, when I find out, I'll let you know. In the meantime, let me share a letter I received from Wreckless Willy last week along with my response.

### Dear Sam,

HELP!!!!! I have had four, count them 1-2-3-4 incidents at my airport. I am at the end of my rope. I have established procedures for access to the movement areas, I have a training program to include recurrent training. I have established consequences of non-compliance and I document everything. I just don't know what else to do. Sam please tell me you have some creative ideas or recommendations for me.

#### Wreckless Willy

### Dear Willy,

Yes I do have some ideas but they are not mine. They come from people just like you with innovative ideas and thinking outside of the box techniques to help reduce and even eliminate runway incursions. Here are just a few:

- Monthly Drivers meetings to include all users of the airport.
- Posters and Runway Safety Brochures at all FBO desks and gates. \*
- Strict procedures for access to the Movement Area and harsh penalties for those that break the rules, whether they are the driver or the person that allowed access to the movement area.
- A stringent and comprehensive Security Program to monitor and check all access points to the \* movement area. This includes FBO gates to the T- Hangers.
- Plan Safety Meetings each shift before accessing the movement areas and encourage all airport users to do the same.
- Above all, every individual entering the movement area must have an operational need to be there.

These are just a few ideas. if we don't change the atmosphere concerning Runway Incursions and V/PDs there will be a SERIOUS INCIDENT. Thank you all for the "Best Practices" and please remember.

"SAFETY IS IN OUR HANDS"

Safety Sam

# Inside this issue:

Cover Story: Safety Sam Asks "What's Going On?"	1
Building Relationships to Safety	2
Best Practices	3
Thinking Outside the Box	4
Vehicle Pedestrian Devi- ation and the SHELL Model Correlation	5
RI's YTD Date by Region	6
The A-B-Cs of V/PDs	6
Vehicle/Pedestrian Deviation Summary/ Resolution	7
V/PD Word Find	8

#### **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.

# **Building Relationships to Safety**

ARFF Fire Chief Duane F. Kann Assistant Director of Airfield Ops Bill White ATCT Front Line Manager Jenn Lemmon

A couple of years ago, representatives from Orlando International Airport (MCO) ARFF, Airfield Operations, and ATCT held a workshop to develop a new *Airport Emergency Services* Letter of Agreement (LOA). During that workshop several other topics were brought up regarding issues recently experienced in the airfield operation. None of the items rose to the magnitude of a deviation or incursion, but they were operational concerns that could potentially lead to those extremes if left unchecked. The ATCT representative offered to pull the tapes of the incidents in question so we could review exactly what took place. Items such as: Being on the wrong channel when trying to request clearances or not being heard when on the right channel; dispatched by the communications center for an aircraft emergency at the gate reported via 911 and ATCT not knowing there was a developing situation; and something as simple as an attitude sent across the radio by someone unhappy with the other agency's personnel, are a just a sampling of the types of situations we wanted to address. Unfortunately, or in the case of this example, fortunately, we could only remember the date of one of the events, but the audio had already been taped over. It was during this discussion that an idea formed which has been incorporated and followed at MCO since –Let's get our groups together on a more frequent basis to foster a stronger working relationship and discuss these minor issues often overlooked in the day to day bustle. To this extent the meetings have be highly successful, allowing us to put a face to the voice on the other end of the radio and expedite



resolutions to operational issues.

The airfield radio audio recordings are only available for approximately 45 days, so addressing items more frequently provided an ability to first, remember the exact date, and second, to capture the recordings before they were recorded over. Airfield Operations took the lead and scheduled quarterly meetings for our group (ARFF, Airfield Ops, ATCT) to discuss anything related to our operations, especially relating to staffing interactions and airfield functions. Now understand MCO already had a weekly airfield construction meeting and the required annual airfield training, but this quarterly meeting was different. It was to discuss what we could do to improve the relationships of our departments.

One of the quarterly meetings was held at ARFF with ATCT briefing each shift on the details of the newly developed LOA. Airfield Operations was also present to hear the information being shared and to add pertinent airfield discussion during the question and answer period. The ARFF personnel were asked what they had problems with on the airfield and several examples were given. Each item was investigated and a reply was given to the ARFF personnel during future meetings. The next quarter we discussed how well the LOA training session went, along with some new items which had come up due to the LOA changes. Each quarterly meeting includes discussion on development of, or adjust-

ments to, the LOA itself. Items such as; how specifically to request clearance for runway crossings, permissions on airfield access during aircraft emergencies, and other procedures for safe operations on the airfield during emergency and non-emergency operations are a few examples of the details we cover. ARFF was asked to provide presentation at the ATCT supervisor briefing

about what ARFF does and what is involved with operating the specialized firefighting vehicles. A great example of information shared was explaining how ARFF and Airfield Ops had two radios for working incidents and the ARFF vehicle is much louder than a normal vehicle. During the next quarterly meeting ATCT expressed how interested their supervisors were about the information ARFF shared and they recommended the development of a ride along program. The concept was embraced. Any new ATCT, Airfield Ops, or ARFF employee spends several hours with each of the departments



to see how their functions interrelate. The ATCT experience with Airfield Ops taught them how difficult it was to monitor two radios without a headset, especially when there was reduced ground visibility due to our often present morning fog. The ATCT staff ride along in the ARFF units gave them a first-hand understanding on how difficult it is to hear two radios over the noise of the diesel engines, even when using headsets. Each MCO ARFF unit is equipped with a headset, which greatly reduces the engine noise and feeds one radio into each ear. Both ARFF and Airfield Ops personnel gained a much deeper appreciation for the level of responsibility the ATCT personnel hold, how hectic their role can be at high traffic times, and how difficult it can be to see small vehicles on a large airfield, especially when 300' above the ground. This program has built relationships within the departments, so most of the staff know each other on a first name basis. The staffs now call each other as soon as something comes up and do not wait for the supervisors to discuss concerns at the next quarterly meeting. Many little items that would not normally make it to the supervisor level anyways are handled on the spot between the staff members, (*Continued on page 3*)

# Page 3

# Building Relationships to Safety (Cont. from page 2)

which further enhances their relationship. Other significant items brought forward now have a more complete explanation when going up through the chain of command. These items are discussed between the respective agency supervisors with audio recording available for an immediate review or at least by the next quarterly meeting.



Another benefit coming out of the quarterly discussions is the development of items to be covered at the annual Runway Safety Action Team (RSAT) workshop, required by FAA to highlight incidents jeopardizing runway safety and what actions can be taken to prevent/reduce future incidents. The RSAT workshop includes all stakeholders with airfield access so this is a much larger group. Feedback from the stakeholders on the quality of the RSAT workshop has been very positive. The user groups feel they now have an avenue to bring forward issues and hear how their concerns affect other stakeholders. They also appreciate having a forum for hearing real life examples of issues actually taking place right at MCO so they can better understand what is expected of them when operating on the airfield.

It would be great to say these programs and processes, which came from brainstorming ideas at the quarterly meetings, have completely erased all deviations and incursions; however, that would be very unrealistic. This point does lead to a final example of how the relationships built between ARFF, Airfield Ops, and ATCT provide an environment focused on airfield safety. In 2011, an ARFF unit caused a

runway incursion. Fortunately there was no accident so no injuries or damage occurred. Of course, all the official notifications and investigations were conducted as required by FAA. In addition, ARFF, Airfield Ops and ATCT met to listen to the audio recording to determine what had happened and what could be done to prevent it from occurring again. The ARFF Chief, ATCT, and Airfield Ops then met with each ARFF shift to discuss what occurred and reminded staff the proper procedures for crossing runways per the LOA. The group also discussed how the individual who caused the incursion was known to be one of the sharper ARFF vehicle operators and reminded everyone the importance of staying focused each and every time they go out on the field. The relationships built between ARFF, Airfield Ops, and ATCT through the quarterly meetings, as well as the programs that were developed or enhanced as a result of those meetings, allowed MCO to be aggressive in managing this and many other important issues. This stresses to all our personnel the importance MCO places on airfield safety and will hopefully minimize the chance of repeat incidents. Building these relationships has greatly improved interdepartmental communications and teamwork, leading to creative avenues for enhancing airfield safety at MCO.

# **Best Practices**

### Provided by airports

**RSW:** The ARFF dispatcher spends a few extra seconds during the call-taking process to ask a couple of questions about the person needing assistance. They are asked questions like "Is the patient conscious, breathing, bleeding and if so how bad?" Based on this information ARFF is able to feel comfortable that not every call needed to be treated like a heart attack. ARFF took the position that unless something was communicated to change the response that medical response was normally driven around the active runway. Based on the communications provided from dispatchers and location of the medical response crew, the ARFF Officer could override the response and have the crew cross the runway. This approach reduced runway crossing by over 75%, thus reducing the potential for disaster. As a method of compliance, the officer sends a report for each runway crossing to the Fire Chief and the Aviation Directors, which includes times, delays encountered, description of the call, and justification of the crossings.

Ed Howell, Fire Chief

**TPA:** FAA Air Traffic Control (ATC) and Airport Operations have been working together to simplify and/or clarify the procedures to access the Runway Safety Areas (RSA) at Tampa International Airport (TPA).

#### Definition

RSA is a defined area surrounding the runway prepared or suitable for reducing the risk of damage to airplanes in the event of undershoot, overshoot, or a lateral excursion from the runway. No object other than those fixed by function may be located in the RSA. The FAA defines an object as an above ground structure, people, equipment, vehicle, natural growth, terrain or parked aircraft. The dimensions of RSAs at TPA have been established at 250ft on either side of the runway centerline and 1000ft beyond each end of the runway.

#### Runway Safety Area Procedures

If conditions do not justify closure of the runway and personnel or vehicles need to enter the Runway Safety Area, they shall obtain a clearance from the tower for "access to the runway" even if their position will not place them on the actual runway pavement. The term "Runway Safety Area" shall not be used when coordinating with the tower.

**Note:** ATC personnel will not make any distinction between the Runway and the RSA. Once clearance is granted, no arrivals or departures will be authorized on that runway.

Personnel and vehicles shall report "clear of the runway" or the RSA. The term "clear of the runway" shall indicate to ATC personnel that protection is not required and that operations on the runway may continue. For example, if Airport 8 needed to pick up FOD between the runway and taxiway but is not in the safety area of said runway, Airport 8 would advise Ground Control that he was "in the grass east of the runway to remove FOD and will remain "Clear of the runway".

With respect to operations on the movement area, there has been no change in procedures. Vehicles must hold short at the mandatory hold short lines and request permission from ATC for access to and/or cross runways.

> Scott R. Loper Deputy Director of Operations

# Thinking Outside the Box

Hartsfield–Jackson Atlanta International Airport Operations Department

To decrease the number of V/PDs at Hartsfield–Jackson Atlanta International Airport, the Operations Department instituted several Runway Incursion Prevention Measures. These measures have reduced V/PDs by 75%.

- 1. Acquired and implemented the Aerobahn Surface Management System. This is a browser-based system which provides Operations a comprehensive view of Ops, ARFF, tugs and other vehicle activity. It provides real-time situational awareness for immediate decision making, as well as the tools necessary for enabling process improvements.
- 2. Developed a Ride Along Program for all new hires. This program is part of the initial airport movement area (AMA) training only and provides the trainee with 15 "ride-alongs" before taking the AMA training.
- 3. Increased the required passing grade for AMA Practical Testing from 80% to 90%.
- 4. Required all AMA applicants to pass a Map Test which requires labeling 21 major taxiways and 5 runways.
- 5. Increased the penalties based on severity resulting in up to permanent revocation of AMA license.



- 6. Standardized the Ramp Driving Course.
- 7. Provided more focused training for specific groups (i.e. ARFF, Aircraft MX, FAA MX, etc.).
- Increased awareness via bumper stickers and frequency stickers/ cards for inside vehicles.



- 9. Continued distribution of AMA Alerts and Runway Incursion Maps.
- 10. Installed thermoplastic directional signs.
- 11. Increased HOT SPOT awareness with the Fixed Based Operators.
- 12. Installed additional taxiway directional signs.



# Vehicle/Pedestrian Deviation and the SHELL Model Correlation

# Charlotte Jones

### Airport Certification Safety Inspector

In Basic Flight Physiology, Richard Reinhart defines the SHELL Model as "the relationship of human factors and the aviation environment". The four components of the SHELL (Software, Hardware, Environment, and Liveware) model or in this case, vehicle/pedestrian deviation do not act in isolation but instead interact with the human component to provide areas for human factors analysis and consideration. The SHELL model indicates relationships between people and other system components (blocks) and provides a framework for optimizing relationships between people and their activities within the aviation system that is of primary concern to human factors. In fact, the International Civil Aviation Organization described human factors as people in their living and working situations; their interactions with machines (hardware), procedures (software) and the environment about them; and their relationships with other people.



According to human factors experts, the SHELL model is a mismatch (or break down) at the crossing point of the components where information is exchanged. These breakdowns can be a source of human error or system vulnerability that leads to system



failure. In the case of vehicle/pedestrian deviations, such a system failure may be in the form of an incident/accident. Additionally, tragedies in aviation are likely to be categorized by mismatches at crossing points between system components, rather than catastrophic failures of individual components.

Human factors is the #1 leading cause of runway incursions. Errors range from forgetfulness or preoccupation to loss of situation awareness. So what does this means to you? Simply put, in terms of V/PDs, the following examples illustrate how the components of the SHELL model relate to Part 139 certificated airports

Example1- Imagine yourself as the vehicle driver who although authorized to be in the movement area and has successfully completed the required initial or recurrent training, enters an active runway without permission from the tower. In this situation, you failed to interact with the Air Traffic Controller because you were on your cell phone and not paying attention to your position on the airfield.

**Example 2** - You, a fuel truck driver who is not movement area gualified, you cross an active taxiway to get to the other

side of the airport. Instead of utilizing the access road as required by the Airport Certification Manual and Drivers Training Program, you decide it was okay to enter the taxiway and cross the runway because you looked both ways and no aircraft were landing or departing. In this situation, you failed to follow established procedures which ultimately led to poor decision making.

Both scenarios result in a V/PD. In Example 1, the crossing point breakdowns occur between Liveware (You) and Liveware (ATC). However, in Example 2 the breakdown occurs at all components and is a scenario that could easily occur at any airport. When there is a complete breakdown of components catastrophic events could occur. Therefore, it is imperative that continued emphasis be placed on the center Liveware (You) and your interaction with the remaining components rather than the component itself. Human factors begins with you; if you are at the center of the breakdown, the risk to aviation safety increases.

Since we all have an active role in aviation safety, we must continuously seek ways to improve our processes. Humans are the key ingredient to prevention of human error and workplace safety. As you strive to increase runway incursion awareness and limit V/PDs as a whole or improve aspects of your drivers training program focus on all the components of the SHELL model and how well they work together.

# Runway Incursions Year to Date by Region FY 2012 vs. Equivalent Period FY 2011

Provided by the Runway Safety Office

		FY	2012			FY 2011									
REG	OI	PD	VPD	MISC	TOTAL	REG	OI	PD	VPD	MISC	TOTAL				
AAL	2	11	6		19	AAL	3	11	9		23				
ACE	1	16	6	1	24	ACE	4	10	4		18				
AEA	26	51	23		100	AEA	24	29	15		68				
AGL	28	71	28		127	AGL	27	52	25		104				
ANE	1	11			12	ANE	3	17	3		23				
ANM	14	40	16		70	ANM	10	46	19		75				
ASO	29	95	21		145	ASO	33	99	25		155				
ASW	30	78	33	1	142	ASW	25	81	17		123				
AWP	37	173	21		231	AWP	21	147	38		206				
TOTAL	168	546	154	2	870	TOTAL	150	442	155	0	795				

Latest RI update thru 7-31-2012

**Runway Safety Program System.** The Runway Safety Program Office established a reporting and investigative system designed to address the increases in the numbers of runway incursions and surface incidents. The system is primarily used on towered airports; however, non-towered certificated airports also participate in this system. The system makes use of two forms to document the details of these events and their subsequent investigation. Form 8020-24, Preliminary Vehicle or Pedestrian Deviation Report is filed and contains the facts about an event. This form is filled out by Air Traffic Control at a towered airport and can be filled out by airport personnel at non-towered certificated airports.

When the Airport Certification Safety Inspector (ACSI) receives notification of a V/PD, he/she sends a Letter of Investigation to the certificate holder via certified mail. Form 8020-25, Investigation of Vehicle or Pedestrian Deviation Report, is completed next and includes an investigative report and, more importantly, the resolution of the circumstances surrounding the event. ACSIs use Form 8020-25 to document the investigation, develop recommended actions to resolve the causes, and close out the event.

# The A-B-Cs of V/PDs

Charlotte Jones Airport Certification Safety Inspector

If you think about it, V/PD prevention begins with and is as simple as A-B-C. Think back to your college Introduction to Speech class and the basic rules of delivery.... Accuracy, Brevity, and Clarity.

Accuracy starts the process. It not only means being correct or precise but also having the ability to perform a task with precision. When requesting access on or across a runway, provide Air Traffic Control (ATC) your exact location. It is critical that a properly trained and knowledgeable movement area driver knows the layout of the airfield. He/she must know where they are at all times and consistently demonstrate this fact when required. Your exchange of information with ATC should be precise and clear.

Brevity involves elimination of unnecessary communication. ATC is tasked with the responsibility of separating aircraft both on the ground and in the air. Nine times out of ten, the controller is relaying clearances, taxi instructions, advisories, etc. to arriving and departing aircraft. Any unplanned call may disrupt his/her rhythm. So be cognizant of this fact when you contact them with a request. Know what you're going to say before you key the mike. Be brief and concise in your delivery. Keep your request simple and straight forward, ATC will appreciate the effort.

Clarity not only entails speaking clearly but ensuring your radio is functioning properly. Watch how fast or slow you speak. Most of us are nervous when talking on the radio and we tend to speak faster because of all the nervous energy. If you notice your speech is fast, practice making a conscious effort to slow down. At times, though more rarely, people also speak too slowly. Again, make an effort to speed up. In any case, the most important thing for you is to sound natural and not forced. Keep your tone and tempo even; inflecting when necessary. Conduct a radio check with Ops or ARFF before you proceed with any request to ATC to aid in successful completion of your task. Avoid transmitting in the wind; partial mike keying, and if exposed to the elements, cover the radio to keep the transmission from being garbled. If there are other occupants in the vehicle with you, make it a standard practice to ask them to remain silent during your interchange with ATC.

So, when driving on the movement area, remember your ABCs. Accuracy, Brevity, and Clarity works best when combined together to help make your task successful. ATC will thank you later!

# 2012 Vehicle/Pedestrian Deviation Summary/Resolution

# Charlotte Jones

Airport Certification Safety Inspector

The following V/PDs which occurred in the Southern Region have been investigated and closed. To date, there have been no Class A or Class B incidents. This list is not all inclusive.

### Class C

1. Truck 210 (fire vehicle) was holding short of Runway 9L at Taxiway A5 and requested to cross Runway 9L. Ground North acknowledged the request but no clearance was issued. Shortly after that the vehicle operator reported clear of Runway 9L, having crossed at A5 without clearance with an aircraft less than a mile final same runway. JetBlue 327 and AIRBUS A320 were between one quarter and one half mile final for Runway 9L when the vehicle reported clear. The A320 landed and no loss of separation reported. Horizontal distance from approach end to A5 is more than 7,000 feet. **Resolution:** The investigation revealed the holding instruction should've been more specific. The driver was given a Notice of Violation and received 15 days suspension of driving privileges. The certificate holder conducted a thorough audit of the driver training program and found areas to enhance. All ARFF personnel received a briefing on following ATC instructions without assuming anything until explicit instructions are received and repeated.

### Class D

1. A Chevy truck and a Ford lavatory truck, operated by airline employees, entered Taxiways Tango 6, Papa, and Echo, crossing Runway 13 at Taxiway Papa, without an authorization or a clearance. Runway 13 was not active at the time and was being used as a taxiway. The Ground Controller was moderately busy at the time and did not notice the vehicles; therefore, no transmissions were made to the identified vehicles. The V/PD was discovered using ASDE-X playback. No conflicts were reported. **Resolution:** This is a violation of Part 139. Investigation revealed the driver crossed the runway without permission from ATC. The airport has a very good drivers training program and also enforcement for non-compliance. The individual's driving permit was permanently suspended and was fined \$500.

2. FAA 6 was cleared to proceed on Runway 9R for an approach light inspection and report off the runway. FAA 6 was then asked to verify off the runways. FAA 6 exited Runway 9R at Taxiway Romeo, proceeded southbound, then turned onto Taxiway Sierra and crossed Runway 18/26 without a clearance. No conflicts reported. **Resolution:** Investigation found no Part 139 violation. The airport took appropriate action following this event and followed the procedures of their airport certification manual. A warning letter was issued to both FAA employees.

3. Airport maintenance vehicle was operating on closed runway 12/30 and requested the lights to be turned on to step 3 for Runways 12/30 and 9/27. The vehicle then proceeded onto Runway 9/27 without a clearance. Ground Control instructed the vehicle to remain clear of Runway 9/27; however, the vehicle was already on the runway. There was no loss of separation. **Resolution:** The investigation revealed this deviation was a result of miscommunication. In accordance with the airport certification manual, the driver had his driving privileges revoked and was entered into retraining. Specific areas of concentration included ATC communication, airfield layout, and markings, signage and lighting procedures. The drivers training program was found to be adequate and no action was taken against the certificate holder.

4. An individual was observed crossing runway 10R and walking on Taxiway Lima. Local Controller sent JBU581 around as a precaution. Person on taxiway Lima was arrested by PBI Sheriff. **Resolution:** Investigation revealed no Part 139 violation. The individual was arrested and removed from the airport.

5. Airport62 was escorting 3 vehicles from the Air National Guard Ramp. The driver was instructed to hold short of Runway 3/21 twice, which was inactive. The second hold short instructions were not properly acknowledged by Airport62. The Ground Controller told the driver to stop when he saw the vehicle crossing the hold short line. The vehicle stopped and did not proceed onto the runway. No aircraft were in the vicinity. **Resolution:** No violation to Part 139. The driver lost his driving privileges and was reprimanded.

6. A Deputy Sheriff vehicle proceeded on Runway 18 without authorization. **Resolution:** The certificate holder was found to be in violation of Part 139. A Warning Letter was issued in lieu of enforcement action. The certificate holder took the following corrective actions:

a.) Trained all Sheriff Deputies as it relates to their duties under the Airport Emergency Plan (AEP) and escort procedures; b.) Changed the language in the AEP was changed to clarify all Sheriff Deputies will not respond past the airport fire department for any Alert until cleared to do so by the air traffic control tower; and c). Made changes to the Fire Department Standard Operating Procedures which included adding instructions for ARFF personnel to close the bay entrance doors by remote when responding to all airport operating area incidents. Signs were also installed stating "NO NAUTHORIZED PERSONNEL BEYOND THIS POINT."

7. Delta Airlines vehicle, Ford F-550, approached Runway 23 at Taxiway A4 and stopped; then proceeded across the holding position marking. ATCT sent CRJ-700 around. **Resolution:** No violation to Part 139. The certificate holder revoked the driver's access badge and suspended him from access to the airfield for 1 week. His driving privileges were suspended for one month and he completed refresher training.

### **Surface Incidents**

1. During an aircraft emergency, Airport Vehicle 36 entered Taxiway Alpha without authorization from Ground Control. Vehicle 36 was observed holding short of Runway 16R requesting a runway inspection after the emergency aircraft had landed. Vehicle 36 had not requested clearance to proceed to the runway. The vehicle proceeded on Taxiway Alpha without a clearance. **Resolution:** This event was determined to be isolated; however, is still a violation to Part 139. The certificate holder modified several training programs (monthly public safety training, annual tower communication training, and airport emergency plan training) to provide more training in the area of movement area emergency response procedures.

2. An ambulance entered the movement area at Taxiway A6 and proceeded via taxiway Alpha to Taxiway Delta where the vehicle entered the ramp area. The vehicle was not escorted by any authorized vehicles nor was the vehicle in communication with the control tower. **Resolution:** No violation to Part 139. The certificate holder followed the consequences of non-compliance as detailed in their ACM. The vehicle driver and the entire ambulance company have been banned from operating a vehicle on the airport operations area even with an escort.

# Vehicle/Pedestrian Deviation Word Find

Brian Creasy,

Program Manager, Safety Management System/Airport Certification Safety Inspector

V	S	Α	0	A	Ε	К	Α	D	Α	С	Α	D	Т	Α	0	Ζ	А	D	F	Н	L	0	S
н	N	E	L	F	A	S	A	S	L	Ζ	K	S	A	1	Т	A	V	S	1	J	A	S	A
A	J	В	A	0	Ε	А	Т	С	A	L	R	A	Ν	1	A	R	R	Α	Н	A	0	A	J
К	н	1	N	Ρ	A	0	A	F	0	A	V	С	S	Α	0	A	н	Т	A	R	Ε	A	Е
1	A	К	A	A	Ρ	A	X	P	A	M	U	P	A	Н	A	1	D	R	V	N	A	L	L
U	Α	F	С	S	Α	1	0	Ρ	Ε	R	Α	Т	I	0	Ν	Α	L	Ε	R	R	0	R	S
A	A	Ν	Т	С	F	٧	A	S	S	A	Μ	A	Ρ	В	A	L	А	Т	A	0	Ζ	Ε	A
L	1	0	Х	S	K	Т	Т	1	Т	I	0	A	L	A	Ζ	В	G	A	Т	A	Т	D	N
A	Н	L	A	L	A	Ρ	0	В	A	В	Е	Т	1	Н	W	G	Ν	1	Н	S	A	L	F
L	Α	A	F	D	В	Ν		-	24		-	-		-			-1	K	Ζ	A	L	0	Т
A	S	Т	A	A	S	۷	-									5		Α	E	L	N	н	A
S	F	Α	L	S	Ε	Α		and a	-		-		-	-				Н	Α	К	A	Е	A
0	A	Ν	Α	Μ	D	U								1.	10	1		A	0	1	A	Т	R
A	N	I	Т	S	Α	Α		-	-			3			/			F	L	G	0	A	Μ
Y	D	Т	A	С	С	K		100				57				-		Α	1	0	Т	С	1
A	Н	S	F	Е	1	U	21 <b>-</b>	-			Trank.							С	Α	N	Α	1	F
L	L	E	A	N	R	Α						-				-		Н	E	1	G	F	A
E	1	D	S	Т	R	С		-		-				-26	-	-	-	Μ	G	Α	F	L	J
F	A	V	F	Е	A	A	Ζ	В	Н	A	G	Α	S	R	A	S	E	В	Н	0	A	Т	A
A	Х	Т	L	R	В	Ζ	G	A	E	V	Ε	A	M	A	P	V	S	A	U	A	A	R	Μ
N	Ε	Н	0	L	D	I	Ν	G	Ρ	0	S	1	Т	l	0	Ν	Μ	Т	0	A	F	E	Α
н	В	R	D	T	L	A	G	A	C	U	A	Ρ	E	Μ	Ζ	D	S	A	J	X	A	C	E
Α	G	A	Α	N	A	S	A	0	L	E	A	E	N	D	L	A	D	A	A	S	1	J	Μ
1	Х	Α	Ν	Е	0	Α	Т	F	Α	Н	A	0	С	Т	Α	R	R	Ζ	0	A	A	0	Е
E	L	I	0	G	E	A	S	A	U	A	N	E	A	Н	В	A	A	Т	Т	A	L	U	R
Т	E	J	A	Ν	A	R	S	J	E	Α	Т	S	A	Α	S	Ε	Μ	A	A	Μ	R	X	A
R	Т	Α	X	J	Α	0	F	A	A	J	D	0	A	Ζ	Α	X	А	Ρ	0	Т	Α	S	Е
Clues	: biclo	with	o stoo		owlig	ht mo	untod	on to	n indi	cator	tho vo	hiclo	e limit	od to					()	C150/	5210	50	ra 5a

1. A vehicle with a steady yellow light mounted on top indicates the vehicle is limited to \_\_\_\_\_\_. (AC150/5210-5D para 5a(1) 2. Taxiways temporarily closed for construction are marked with a yellow "X" or \_\_\_\_\_(plural). (AC150/5340-1K, para 5.7; AC150/5370-2F,

para 220) 3. Mowers and other equipment must be > 200 feet from runway \_\_\_\_\_, or outside the RSA, during air carrier ops. (CertAlert 03-07)

4. Construction, to include excavations, is allowed in the runway object \_\_\_\_\_ without special provisions. (AC 140/5370-2F, para 221b)

5. A \_\_\_\_\_\_ light gun signal from the ATCT means to return to starting point on airport (for vehicles). (FAAO 7110.65U, Table 3-2-1) 6. (True/False) Airport maintenance personnel may enter the runway safety area during air carrier operations if necessary. (CertAlert 03-07)

7. Each \_\_\_\_\_\_ must provide and maintain the runway and taxiway safety areas (14 CFR Part 139.309)

8. A runway \_\_\_\_\_ involves the incorrect presence of aircraft, vehicle or person on the surface designated for aircraft takeoff or landing. (FAA Guide to Ground Vehicle Operations)

9. The 3 types of runway incursions are \_\_\_\_\_\_, pilot deviations, and vehicle/pedestrian deviations. (FAA Guide to Ground Vehicle Operations)

10. A \_\_\_\_\_\_, published in the A/FD, is a location on the movement area with a history or potential risk of collision or runway incursion. (ICAO Manual on Prevention of Runway Incursions)

11. \_\_\_\_\_\_\_ signs have a black inscription on yellow background & contain an arrow indicating the general direction to a remote location. (AC150/5340-18F, para 10)

12. Mandatory instruction signs include holding position signs and \_\_\_\_\_\_ signs. (AC150/5340-18F, para 5)

13. Surface painted hold position signs have a red background with white inscription identical to the runway holding position signs and are located 2-4 feet from the \_\_\_\_\_\_ marking. (AC150/5340-1K, para 4.5)