Central Region Airport Certification Bulletin



Bulletin: 2008-02

Subject: National V/PD Runway Incursion Summary

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Application:

This bulletin is being sent to Part 139 Airport Managers and State Aviation Directors in Iowa, Kansas, Missouri and Nebraska

Background:

Effective October 1, 2007 the FAA adopted the ICAO based definition of a runway incursion. Any unauthorized access onto a runway, or beyond the holding position marking, is a runway incursion. Previously, runway incursion only occurred if an aircraft was using a runway, or was within 1-mile final of the runway threshold, resulting in a loss of separation. Naturally, the number of runway incursions has increased using the new definition of a runway incursion, which has placed a higher emphasis on preventing runway incursions. Runway incursions are classified into A, B, C and D categories based on the severity of the incident, with Category A being the most serious.

Synopsis of V/PD Runway Incursions:

During the first quarter of FY 2008 (October 1-December 31, 2007) there were 47 runway incursions caused by vehicles or pedestrians nationwide and another 5 vehicle/pedestrian deviation (V/PD) runway incursions caused by non-pilots taxiing aircraft. There were an additional 16 incidents that did not result in a runway incursion. These V/PD surface incidents involved unauthorized vehicles and pedestrians accessing taxiways without ATC clearance.

The breakdown on V/PD runway incursions by category for the 1st quarter is as follows:

V/PD Category	1 st Quarter V/PDs
Α	0
В	1
С	15
D	31

The Category B runway incursion involved a construction vehicle driving from a closed runway onto an active runway without any communications with the tower. The vehicle entered the runway at high speed, as a Beech BE99 was on landing roll out. The controller stated that it just missed the tail of the aircraft and the vehicle turned northbound on the runway. According to Airport Manager, the intersection was properly signed and marked and all contractor personnel were trained.

Out of the 47 V/PD runway incursions during the first quarter, 23 or half of the runway incursions were related to airport authority vehicles. In these 23 V/PD runway incursions, 8 of the incursions involved vehicles being escorted. The escorted vehicles included construction vehicles (3 occurrences), snow removal equipment (4 occurrences) and mowers (1 occurrence).

Out of the 47 V/PD runway incursions, 38 were caused by vehicles and 9 were caused by pedestrians. All 9 of the pedestrian runway incursions were caused by people not authorized to be on the movement area.

A breakdown of the type of vehicles involved in the runway incursions is as follows:

Type of Vehicle	Number
Local Law Enforcement vehicles	2
Tugs (two while towing aircraft)	3
ARFF trucks	3
Construction vehicles/equipment	3
Snow removal equipment	6
Unauthorized vehicles	10
Airport maintenance/operations vehicles	11
Total	38

Five of the V/PD runway incursions involved drivers who read back hold short instructions prior to entering runways without ATC clearance. In 2 of the 5 incidents, ATC reiterated the hold short instructions a second time and the drivers read back the hold short instruction a second time. The drivers then entered the runway without ATCT clearance.

In 5 of the V/PD runway incursions, vehicle operators did not enter the runway but crossed the holding position marking without ATC Clearance. In one of the runway incursions, a snowplow operator backed across the holding position marking while plowing snow. Vehicle operators must be aware of the location of the holding position marking and ensure that no part of their vehicle is on or past the holding position marking without ATC clearance.

Out of the 47 V/PD runway incursions, only 6 occurred at night.

ACTION REQUIRED:

The attached table includes a narrative of the V/PD runway incursions nationwide during the first quarter of FY2008. The V/PDs runway incursions involving airport authority vehicles are identified in last column.

We recommend that the V/PD runway incursions be incorporated into V/PD training programs and used as examples of how easily vehicle operators can be involved in a runway incursion if not paying close attention when operating on the movement area.

In addition, airport operators are reminded that there is a V/PD Briefing PowerPoint available from FAA, which reviews best practices for vehicle operators. This PowerPoint briefing, or portions of it, should be included in the recurrent training program for personnel authorized access on the movement area. The availability of the V/PD Briefing PowerPoint was previously discussed in CE Airport Certification Bulleting 2007-5, New Runway Incursion Definition, which was issued by the Central Region Airports Division on October 11, 2007.

NATIONAL V/PD RUNWAY INCURSIONS - FY2008 - 1ST QUARTER

DATE	CAT RANK	A/C Involved		DAY	LOCAL TIME	Airport Vehicle
10/5/2007	D		An airport vehicle called Ground Control (GC) from service road at Taxiway Charlie requesting to go out on Charlie to hold short of Runway 4R and 4L at all times. GC replied "proceed as requested". The vehicle driver then proceeded to cross Runway 4L at Charlie without clearance. No conflicts reported.	Y	0832L	Y
10/11/2007	С		An airport vehicle took another ground vehicle's clearance for 35L and crossed Runway 35R from east to west onto Delta without authorization and conflicted with a Beech BE40 (military), on final same runway with clearance to land. The BE40 was issued a go around at ¾ mile final to avoid loss of separation.	~	1602L	Υ
10/12/2007	С		An airport vehicle had been cleared by Ground Control (GC) to proceed on Taxiway A and B to hold short of all runways. Subsequently, a EMBRAER E170, landing Runway 26R, informed Local Control that a vehicle was inside the hold line proceeding from the grass onto the concrete at Taxiway A6. The airport vehicle had crossed the hold short line without clearance. Closest proximity reported was 100 feet lateral.	Y	1739L	Y
10/19/2007	D		An individual apprehended by Houston police in Terminal A had entered the airport from the west and crossed Runway 15R/L and Taxiways. No conflicts reported.	N	2050L	N
10/22/2007	D		Airport vehicle escorting mowers requested to remain south of Runway 8 and west of Runway 13. Ground Control approved the operation as requested. The second mower was not in contact with GC. Local Control (LC) observed the second mower cross Runway 13 edge line and conflicting with a Mooney M20R on final same runway. The M20R pilot was issued a go around at 1 mile final to avoid loss of separation.	Y	0717L	Y

DATE	CAT RANK	A/C Involved	NARRATIVE	DAY	LOCAL TIME	Airport Vehicle
10/23/2007	D	N/A	Airport vehicle escorting vehicles to Runway 25 construction area, which crosses Runway 28L, contacted Ground Control (GC) from the construction road at west end of Taxiway H for approval. GC instructed airport vehicle and vehicles to proceed on H and hold short of Runway 28L. Airport vehicle operator read back hold short instructions. GC reiterated to the airport vehicle the hold short instructions, which driver read back. Local Control observed Airport vehicle and vehicles crossing Runway 28L without authorization. No aircraft were involved and LC released the runway to GC but no before the vehicles had already entered it.	Y	0745L	Υ
10/24/2007	С	PA31	A Piper PA31 was cleared for departure Runway 25 full length when Ground Control (GC) observed a pedestrian entering Taxiway November from the south coming from the buildings, but now on the controlled taxiway. GC then tried to turn him back using the PA system, which did not seem to turn the pedestrian. GC then advised Local Control to abort the PA31. LC cancelled PA31's takeoff clearance and pilot complied when the PA31 was approximately 1000 feet down the runway, near Juliet. The pedestrian was just about to enter the runway surface at Foxtrot when the PA31 was aborted. Pedestrian was extremely slow crossing the runway and was only mid-runway by the time the PA31 had completely exited the runway at Hotel. Distance from Hotel to Foxtrot is approximately 500 feet. A Diamond DV20 was on about a 1/2 mile final for Runway 25 when sent around for precautionary reasons since the pedestrian who had made the ramp by this time had not yet been apprehended.		1335L	N
10/25/2007	С	BE9L	An airport vehicle was instructed by Ground Control (GC) to proceed on Runway 19R and to hold short of Runway 7L. Airport vehicle acknowledged the hold short instructions. GC observed the airport vehicle not slowing and reiterated to hold short of 7L. Airport vehicle driver again confirmed holding short of 7L. Airport vehicle proceeded to cross Runway 7L and conflicted with a Beech BE9L landing 7L and near Taxiway D as the airport vehicle crossed the runway. Closest horizontal proximity reported was 2,350 feet, distance when the vehicle cleared the runway.	Y	0914L	Y

DATE	CAT RANK	A/C Involved	NARRATIVE	DAY	LOCAL TIME	Airport Vehicle
10/25/2007	D	CRJ7	A tow operator with a CANADAIR CRJ7 aircraft in tow, was told to cross Runway 8L, and then hold short of Runway 8R at Delta. Tow operator read back the hold short instructions but then proceeded to cross the hold lines for Runway 8R at Delta. A CRJ1 was holding in position on Runway 8R, but had not been cleared for takeoff. No loss of separation reported. The tow operator was instructed to continue across the runway and the CRJ1 was given takeoff clearance after the tow cleared the intersection.	Y	1104L	N
10/29/2007	С	C206	A tug operator was instructed to hold short of Runway 15 at Taxiway Charlie. Driver read back hold short correctly and proceeded to move up to the runway stopping prior to the edge line. A Cessna C206 on final Runway 15 was issued a go around at ¼ mile to avoid loss of separation. Distance from approach end 15 to Charlie is more than 6,000 feet.	Υ	1330L	N
10/29/2007	D	N/A	Two contractor vehicles (pick-up truck and front end loader) were observed by a Port Authority vehicle crossing Runway 17C at Taxiway ER without authorization. No conflicts reported. The vehicle operator told the Port Authority that they were being escorted around the south end of 17C and saw a shortcut, Taxiway ER, and decided to take it.	Υ	0836L	Y
10/29/2007	D		A POV (sedan) proceeded onto Taxiway Charlie south of Alpha 1, east on Alpha 1 and crossed Runway 18 without authorization. No conflicts reported.	Υ	0940L	N
11/1/2007	С	SF34	A SAAB SF34 was on short final to Runway 22R when the pilot reported to the Local Controller that they had oveflown a man in a brown jacket with a red hat walking in the vicinity of the approach lights (in the RSA). The SF34 landed and pilot further stated pedestrian was walking towards Runway 22R. ATCT confirmed pedestrian was in the overrun and approaching the runway walking south on the runway centerline. Inbound traffic beyond 4 miles were switched to 22L. Local authorities apprehended the individual on 22R near Taxiway A9 and then cleared the area.	Υ	0933L	N
11/4/2007	D		A bicyclist was observed on Taxiway D and crossing Runway 26R/L without authorization. No conflicts reported. Airport vehicle intercepted the individual on Taxiway C and Runway 21.	Υ	0840L	N

DATE	CAT RANK	A/C Involved		DAY	LOCAL TIME	Airport Vehicle
11/4/2007	D	N/A	A pedestrian walked across the terminal ramp on Taxiway A, proceeded southeast and crossed Runway 23 without authorization. No conflicts reported. Airport police apprehended the individual southeast of 23 on Taxiway A.	Υ	1120L	Ν
11/8/2007	С	C172	A Cessna C172, executing a stop and go on Runway 20, reported 2 pedestrians crossing the runway southwest of Taxiway Alpha 3 from west to east. ATCT instructed the C172 to abort takeoff when aircraft was near Alpha 2. Pilot of C172 complied and stopped between Alpha 2 and Alpha 3. Closest horizontal proximity reported was between 1,000 and 1,500 feet. Airport security apprehended the individuals on east side.	Y	1545L	N
11/10/2007	D	N/A	A vehicle (Ford Ranger) was observed in the run-up area for Runway 29 southbound across the approach end of 29 without clearance. No conflicts reported. Attempts by ATCT to contact the driver were unsuccessful.	Y	1225L	N
11/11/2007	D	N/A	A Piper PA12, after landing Runway 4 and while turning at Taxiway J, stopped before the hold short line and reported a flat tire and needing a spare. Ground Control instructed the PA12 pilot to hold position and he would call airport operations for assistance. A few minutes later GC observed the pilot and passenger walk down Taxiway M and cross Runway 9 to the intersection of M and K without authorization. No conflicts reported. Airport operations intercepted the individuals.	Y	1355L	N
11/14/2007	С	C172	A vehicle (Cadillac Escalade) crossed Runway 10R at Taxiway G (north to south) without authorization and conflicted with a Cessna C172 landing same runway. Pilot of C172 observed the vehicle and initiated a go around prior to touching down and as he approached Taxiway F. The C172 was at 50 feet vertical when initiating go around. Distance from F to G is 225 feet and vehicle was clear of runway prior to the C172 reaching G in a climb.	Z	1941L	N
11/16/2007	С	P28A	A Piper PA28A landed Runway 28 and was rolling out between C4 and C3 when an unauthorized vehicle entered Runway 28 at C2, proceeded west bound and exited at C1. Closest horizontal proximity reported was 2,000 feet as vehicle cleared the runway.	Y	1035L	N

DATE	CAT RANK	A/C Involved		DAY	LOCAL TIME	Airport Vehicle
11/17/2007	D	N/A	An airport crash vehicle on ARFF fire drill practice, was instructed to hold short of Runway 21. The driver read back hold short then crossed the runway without clearance. No conflicts reported.	Υ	1119L	Y
11/19/2007	С		An airport vehicle escorting 2 construction vehicles, was instructed to hold short of Runway 4/22 at A4 intersection. A CANADAIR CRJ2 on landing reported one vehicle partially past the hold short line as the CRJ2 passed A4 intersection. The vehicle stopped approximately 5-10 feet past hold line and closest proximity to runway edge line was 165 feet horizontal.	Y	1011L	Y
11/20/2007	D	N/A	Two local law enforcement vehicles entered Taxiway Alpha from the crash house, turned left onto Runway 30 without authorization or communications with ATCT and were pursuing a departing Cessna C206. The C206 had departed from intersection Alpha and was already airborne when the vehicles entered at Alpha. No loss of separation occurred. The vehicles then reversed course and exited the runway onto Alpha and then to the ramp.	Y	1500L	N
11/20/2007	D	N/A	A local law enforcement patrol car entered the departure end of Runway 21R on an access road without authorization or communications with ATCT. The vehicle proceeded to the intersection of Taxiway Delta, turned right and crossed Runway 21R and proceeded onto 21L. Vehicle then proceeded on 21L to the end and exited onto Taxiway Charlie to the ramp. No conflicts reported.	Y	1515L	N
11/26/2007	D	B744	A vehicle (equipped with yellow flashing lights) entered Runway 28 from approach end and proceeded westbound without clearance or contact with ATCT. ATCT observed the vehicle on ASDE-X and visually confirmed it was on the runway. A Boeing B747 on 10 mile final at the time was advised of a possible go around due to the vehicle. The vehicle cleared Runway 28 at Foxtrot when the B747 was 1½ mile final. ATCT reissued landing clearance and the B747 landed.	Z	0211L	Y
11/26/2007	D	N/A	A vehicle (grey van) was observed proceeding west on Taxiway E, then crossed Runway 17L and 35L at E without clearance or contact with ATCT. No conflicts reported.	Υ	1246L	N

DATE	CAT RANK	A/C Involved	NARRATIVE	DAY	LOCAL TIME	Airport Vehicle
11/27/2007	D	N/A	A pedestrian entered Taxiways Charlie and Delta then proceeded to cross Runway 26 without authorization. No conflicts reported. Airport officials apprehended the individual on the runway.	Y	1245L	N
11/27/2007	С	B737	An airport ARFF fire truck with 2 fire trucks in trail, crossed Runway 28L at Taxiway E without clearance and conflicted with a Boeing B737 landing Runway 28L. The B737 was issued a go around when over 28L landing threshold and was reported to pass "E" approximately 400 feet vertical. Fire truck 2 followed lead fire truck across the runway and fire truck 3 stopped short of the runway. The B737 passed B6 on go around as the second vehicle entered the runway, approximately 3,500 feet proximity at that point. Second vehicle cleared the runway as the B737 neared Taxiway B5 and the B737 was above 200 feet vertical by "F".	Y	1301L	Y
11/29/2007	С		A vehicle (Jeep) entered Runway 27R without clearance and conflicted with an Airbus A319 on ¼ mile final same runway. The A319 pilot reported the vehicle after landing. ATCT was never in contact with the vehicle driver. Vehicle entered 27R when the A319 was approximately 1/2 mile final. Vehicle then made a u-turn and exited into the island area north of 27R when A319 was less than 1/4 mile final. Horizontal distance from approach end 27R to intersection of 21L is approximately 1,200 feet with closest proximity estimated at 2,200 to 2,500 feet.	Y	1101L	N
11/29/2007	С	BE36	A tug, with a C172 aircraft in tow, was instructed to cross Runway 26R at Taxiway Echo and to hold short of Runway 26L. The tug crossed 26R then crossed 26L hold short line at Echo when Ground Control instructed the driver to stop. A Beech BE36 previously cleared to land 26L and at 3/4 mile final, was changed to Runway 26R to avoid loss of separation.	Y	1238L	N
11/30/2007	D	A340	A tow truck crossed the departure end of Runway 28 at Taxiway L1 to M1 without clearance. An Airbus A340 was approximately 1 mile final Runway 28 when the trucked crossed. The A340 continued inbound and landed.	Υ	1145L	N
11/30/2007	D	N/A	A vehicle entered Taxiway P1 without clearance and proceeded east bound passed the hold short lines for Runway 18. Vehicle then turned around on Runway 18 and proceeded back on P1 west bound. Airport authorities were notified and intercepted the driver. No conflicts reported.	Y	1248L	N

DATE	CAT RANK	A/C Involved		DAY	LOCAL TIME	Airport Vehicle
12/1/2007	D	N/A	An airport vehicle crossed Runway 3 at the intersection of Runway 8/26 without clearance. The closest traffic was a Learjet LJ55 beyond 3 miles final same runway. No loss of separation reported.	Y	1311L	Υ
12/2/2007	D	N/A	Snow Command vehicle was advised of a pending departure for Runway 4, which was closed at the time for snow removal. Snow Command reported all vehicles were off the runway and it was now open. LC was about to issue a takeoff clearance when a snow removal vehicle was observed still on the runway. Snow Command had the vehicle clear the runway. No conflict or loss of separations reported.	Y	1040L	Y
12/2/2007	D	N/A	ATCT instructed Snow Command vehicle to clear Runway 4 due to a CANADAIR CRJ taxiing to Runway 4 for departure. Snow Command advised that all vehicles were off the runway. ATCT then observed one snow removal vehicle still on the runway and then another vehicle enter the runway without clearance. All vehicles were then cleared from the runway. No conflict or loss of separation occurred.	Y	1152L	Y
12/6/2007	D	N/A	An airport vehicle entered Runway 18 at Taxiway C without clearance. No conflicts reported.	N	0554L	Υ
12/6/2007	D	N/A	A snowplow made a u-turn on Runway 32 from Taxiway G without clearance. No conflicts reported.	Y	1006L	Υ
12/7/2007	С	C425	Airport vehicle was instructed to hold short of Runway 3 due to inbound traffic for same runway. Airport vehile read back "hold short of Runway 3/21". A Cessna C425 was cleared to land Runway 3. Local Control then observed airport vehicle proceeding across Runway 3 at Taxiway "C" without clearance and conflicting with C425 on short final. The C425 initiated a go around and requested closed traffic as C425 was reaching the threshold. Closest horizontal proximity reported was 4,750 feet.	Y	1234L	Y
12/12/2007	D	N/A	An airport mower crossed Runway 7 at Taxiway D, south to north, without authorization or communications with ATCT. No conflicts reported. Airport operations intercepted the driver.	Y	0935L	Y
12/13/2007	D	N/A	A catering truck proceeded down Taxiway November and crossed the approach end of Runway 33 without authorization. No conflicts reported. Vehicle then proceeded on Alpha to the GA ramp.	Y	0950L	N

DATE	CAT RANK	A/C Involved	NARRATIVE	DAY	LOCAL TIME	Airport Vehicle
12/14/2007	D	B752	An airport vehicle reported to ATCT that all snow removal equipment was clear of Runway 6. While a Boeing B757 was on a 4 mile final, 2 snow plows were observed crossing the approach end of Runway 6 without authorization. Vehicles cleared and the B757 continued inbound.	Z	2034L	Y
12/16/2007	D		Runway 4R was opened and all vehicles were observed clear of the runway. An Airbus A320 was on 5 mile final. ATCT then observed ten snow removal vehicles enter Runway 4R from Runway 9 approach end without clearance. The A320 was issued a go around at 2½ mile final to avoid loss of separation.	Y	0857L	Y
12/17/2007	D	C172	A Cessna C172 was issued a take off clearance while taxiing to Runway 7. ATCT spotted a pedestrian leaving the aircraft parking area and walking towards Runway 7 via Taxiway November and then Foxtrot. Local Control immediately cancelled the C172's takeoff clearance before the Cessna had crossed the hold short lines. The C172 did not enter the runway and no loss of separation reported. ATCT notified airport management of the pedestrian's position. The pedestrian then crossed Runway 7 and was apprehended by airport personnel on Taxiway Alpha.	Y	1217L	N
12/18/2007	D		A POV was observed proceeding on Taxiway Juliet southeast bound without authorization. Vehicle then turned northbound onto Runway 19R. No conflicts reported. Driver was intercepted by airport personnel.	Y	0948L	N
12/19/2007	D	B712	An airport fire response vehicle while making a turn on Taxiway B10, crossed the hold short line for Runway 26L without authorization. Local Control was in the process of issuing a takeoff clearance to a Boeing B717 for Runway 26L when he observed ARFF 2 crossing the hold line. LC interrupted the transmission and instructed the B717 to hold in position on 26L. B717 pilot acknowledged. No loss of separation reported.	Y	1200L	Y

DATE	CAT RANK	A/C Involved	NARRATIVE	DAY	LOCAL TIME	Airport Vehicle
12/19/2007	В		Runway 16/34 is closed and under construction. Taxiway A has been temporarily converted into Runway 17/35. A construction vehicle (Chevy pick-up truck) originating from the closed runway, proceeded via Taxiway Delta to Runway 17 without any communications with the tower. The vehicle entered the runway at high speed, as a Beech BE99 was just passing Taxiway D on landing roll out Runway 17. The controller stated that it just missed the tail of the aircraft and the vehicle turned northbound on the runway. According to Arpt Mgr, the intersection is properly signed and marked and the contractor informed him that all were trained.	Y	1043L	Υ
12/28/2007	С		An airport snowplow backed over Runway 17R departure end (Taxiway Mike 1) hold short lines while performing snow removal activities. A Swearingen SW4 was cleared for takeoff on Runway 17R full length. The SW4 rotated approximately 3,000 feet from departure point and the closest proximity was over 9,000 feet on the runway surface. The hold short line is 260 feet from the runway edge line.	Y	0727L	Y