## NATIONAL TRANSPORTATION SAFETY BOARD

Office of Aviation Safety Washington, D.C. 20594

November 4, 2020

**Attachment 1 – Crew Statements** 

## **OPERATIONAL FACTORS**

**DCA20LA013** 





Status

NEW ► CLOSED ►

## IRREZZZZ: IRREGULARITY REPORT -> RUNWAY/TAXIWAY EXCURSION

	Categorize	Add Contac	t	Advance Status	Reply N	ow	View History
Role		Pos	Name	9	Loc	Email	
To System	n Administrator	Emp/Gnd Sft					
CC System	n Administrator	Dir Fght Ln Ops					
CC Second	dary Respondant	AEMOC					
CC Second	dary Respondant	AEMOC					
To Read-O	Only Admin	Emp/Gnd Sft					
CC Second	dary Respondant	Director					
To Design	ated Recipient	Emp/Gnd Sft					
To System	n Administrator	Emp/Gnd Sft					
CC Submit	tting Pilot	N/A					
CC System	n Administrator	Dir Flight Ops					
To Design	ated Recipient	Emp/Gnd Sft					

One Line Summary +4125 runway excursion

## **Event Description**

Nov. 11, 2019

Flight Number 4125

Airplane: N619AE

The first approach we see the runway (10L). The tower tells us to go around. We set up for the approach to R10L. We intercept the localizer and continue approach we get cleared. We are told to contact tower at the final approach fix. Cleared to land. RVR 5000. The tower advised Braking action 5/5/5. At that time I informed the Captain I saw the ground. Weather was overcast. I see the approach lights. I say continue. We broke out of the clouds around 350 plus or minus. I call runway in sight. The approach was stable. Captain says landing. Autopilot came off slightly above minimums. The wind was 350 at 15, gusting 20. Runway had snow and, we determined after the event, possibly ice underneath. We touchdown with the wind correction. Normal landing. We started swerving at about 80 indicated to the right and then we get back on centerline. Then to the left. I said you need to get back on centerline. We kind of get back on but then aircraft swerves more to the left. We were about 50-60 knots. At this time we experienced an uncommanded swerve toward the taxi turn off N1, and slid off the runway. Tower asks if we need assistance. I said, "we do". I contacted the FA and she said everyone seemed to be Okay. Captain got on the PA told the passengers to remain seated. I contacted ops told them we went off the runway. Tower gave us an emergency radio frequency to contact. I told them 41 souls on board. At this time we were getting multiple cautions and warning, The warnings were gear fail, and SPS was going off. Shut down engine one and two. APU was running. Emergency services arrived. The fireman asked if everyone was okay and if needed assistance. I was in constant contact with emergency services through the plug in. They said that it looked like the right landing gear collapsed. Ran the evacuation checklist. The flight attendant opened the door. We waited for the shuttle buses to arrive. We unlocked the cockpit door and deplaned. A couple of the passengers said, "Thank you." None of them seemed harmed or shaken up. The F

I got out of the plane and the taxiway was very icy. I noticed the right landing wheel collapsed and the wing was touching the ground.

Keywords

Assoc Keywords

There are no keywords associated with this debrief.

Message History

There are no messages affiliated with this debrief.

Notes

Page 2 of 2

Save Notes

ENY4125

- Do you recall hearing any braking reports from ATC other than 5/5/5? No
- What is the policy/guidance if a braking action report is less than "good"? Discuss the required landing distance as well as any potential limitations, and determine if there is sufficient runway length at the arrival airport.
- What is the guidance on which report is controlling, the 5/5/5 or a pilot report of "poor"? The reported braking action, 5/5/5, is controlling. The PIREP should be considered.
- What are the crosswind limitations for the airplane on a dry runway? a contaminated runway? Dry = 30 kts GrMedium Braking Action = 20 kts

Poor Braking Action = 20 kts

• What do you consider a contaminated runway to be?

A runway is contaminated when; 25% of the required length is covered by 1/8" of standing water, slush or wet snow, more than 3/4" of dry snow, compacted snow or ice.

• How do you calculate the landing performance on a contaminated runway?

Using the Landing App, we input all the required parameters including reported braking action to determine the landing distance. We then multiplied by 1.15 for to account for an additional 15%

• You stated the tower provided you with 5/5/5, did you hear anything else being transmitted on the frequency about the runway condition? If so, what else did you hear? I don't recall.

- What were you trained in regard to rudder effectiveness with thrust reversers? Rudder effectiveness is reduced with the use of thrust reverse.
- What was your training on use of brakes and reverse thrust on a contaminated runway? Apply brakes evenly with constant and continuous pressure, while maintaining centerline and then use max reverse to 80 knots and then as needed and to prevent runway excursion.
- Were there any mechanical irregularities with the airplane? Not that I am aware of.

• During the go-around did the control column feel heavy, considering it has a smaller bell crank for the elevator?

I don't recall feeling any irregularity during the go around.

First Officer

• Do you recall hearing any braking reports from ATC other than 5/5/5?

I remember that the tower reported "good" braking action before Taxiway N3 and "3" past taxiway N3.

• What is the policy/guidance if a braking action report is less than "good"?

The guidance is to use thrust reversers if a braking action report is "medium" or "poor".

• What is the guidance on which report is controlling, the 5/5/5 or a pilot report of "poor"?

A pilot report is advisory, the 5/5/5 is controlling.

• What are the crosswind limitations for the airplane on a dry runway? A contaminated runway?

The crosswind limitations for a dry runway is max demonstrated, which is 30 knots. For a contaminated runway, it is 10 knots.

• What do you consider a contaminated runway to be?

I consider the runway to be "contaminated" when more than 25% of the required field length, within the width being used, is covered by:

- 1. more than 1/8th inch of standing water, slush, or wet snow;
- 2. more than 3/4 inch of dry snow;
- 3. compacted snow; or
- 4. ice.
- How do you calculate the landing performance on a contaminated runway?

Now that the Landing Data App has been approved by the FAA, I use it to calculate the landing performance. (Before the app was approved, I used flip cards in the Quick Reference Handbook provided by the company.) The calculation takes into account items like: runway condition, the kind of plane, landing weight, wind correction, the current winds at the airport, and the flap settings that the captain said he intended to use during the approach briefing. This calculation provides the runway length that is needed for the approach and landing.

I then brief the captain with the appropriate landing speeds and landing distance that is needed for the approach. We later confirm the landing speeds in the descent checklist and the landing distance in the approach briefing.

• You stated the tower provided you with 5/5/5, did you hear anything else being transmitted on the frequency about the runway condition? If so, what else did you hear?

I wrote above that the tower reported "good" braking action before Taxiway N3. I also recall the tower saying that, after N3, the runway was categorized as a 3.

• What were you trained in regard to rudder effectiveness with thrust reversers?

I was trained to reduce the rudder when the thrust reverser is applied.

• What was your training on use of brakes and reverse thrust on a contaminated runway?

I was taught that the maximum reverse thrust must be used when the use of thrust reversers will prevent a runway excursion or when landing on a runway with "medium" or "poor" braking action.

• Were there any mechanical irregularities with the airplane?

I was not aware of any mechanical irregularities.

• During the go-around did the control column feel heavy, considering it has a smaller bell crank for the elevator?

I was the pilot monitoring. I do not know whether the control column felt heavy.