

CALLBACK

From NASA's Aviation Safety Reporting System



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'Slip Slidin' Incidents from ASRS

In our many years of reading ASRS reports, we've found that mentions of "slides" and "slips" frequently culminate in unfortunate outcomes. As you would expect, some of these incidents are weather-related, but many others are not. In our November issue, we offer a broad sampling of recent 'slip-slidin' incidents, including air carrier runway and taxiway excursions, cabin crew miscues, slippery maintenance procedures, and GA takeoff and landing mishaps.

Slip slidin' away

Slip slidin' away

You know the nearer your destination

The more you're slip slidin' away.

(Paul Simon)

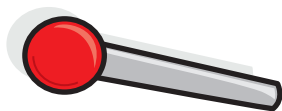
Ex-pe-DICEY

Icy runway conditions and unexpected engine performance combined to make an MD-80's takeoff roll "dicey."

■ *The aircraft weight was 113,000 pounds and the stabilizer trim setting was 3.7. Fifty-four passengers were on board. Only two were in First Class. There were several inches of snow on the ground as well as snow and ice on the ramp, taxiways, and the runways. While taxiing to Runway XXL, the Tower cleared us for an 'expedite' takeoff due to traffic on final for [crossing] Runway XY. As we entered the runway, the Captain pushed the throttles forward. I noticed that the right engine accelerated rapidly to approximately 1.4 EPR while the left engine remained at idle power. As the aircraft approached the centerline of the runway, I noticed that the aircraft was not turned to align with the runway heading. I alerted the Captain to the situation and looked over to see if he was OK. He retarded the throttles to idle, turned the nose wheel steering further right and began to apply the brakes. The aircraft slid off the left side of the runway at a low speed...[and] stopped at the runway edge.*

I believe the incident was caused by ice on the runway. The low weight on the nose wheel and asymmetric thrust due to slow acceleration of the left engine were contributing factors. I recommend loading the aircraft with a greater forward center of gravity when snow or ice exist on the airport. I also recommend that the Ground and Tower controllers be prohibited from issuing 'expedite' clearances when ice and snow are on the airport.

The Big Red Knob



A B767 Flight Attendant reported a "slip"—a skill-based error resulting from diverted attention—which subsequently led to a "slide."

■ *Landed without incident. Taxied and parked at gate. Seatbelt sign went off and I unbuckled and went to Door 1R and waited for the Purser to say 'disarm.' Purser was looking for jetbridge.*

It arrived, he said 'disarm.' I turned to my door and inadvertently reached and pulled the large silver handle with the red knob labeled 'PULL.' The slide deployed.

Possible factors contributing to this error are that I have [low] seniority. I have flown on the aircraft 3-4 times. My trip assignment was open-ended and I was distracted in not knowing upon arrival what the remainder of my assignment would be. I was discussing this with my flight partner and thinking about having to contact scheduling. While I was intent on my disarming abilities, I realized my mistake one second too late after grabbing the wrong handle... When I turned to disarm, the big red knob saying 'PULL' grabbed my attention, and I pulled it....

A "Perfect Storm"

An air carrier Captain described weather and airport conditions that were a set-up for post-landing problems.

■ *Landed with runway contaminated with ice/rain. Aircraft stopped OK with autobrakes. During rollout, Tower suggested 180 degrees on runway and back-taxi to Taxiway R. Attempted left 180 turn at Taxiway U on Runway 24R. Three-fourths of the way through turn, aircraft began sliding forward...I attempted to stop, but aircraft continued moving. I reversed engines which stopped forward movement. When I stowed reverse buckets, aircraft began sliding forward again. Reversed engines again. Had to keep engines at reverse idle to keep aircraft stationary. Airport Operations brought our ground crew to us with chocks. Problem was no sanding of taxiways/ramp with pavement ice and rain at 33° F...Hooked up tug and tow bar. Shut down engines. Sand trucks laid path of sand on taxiway and we were towed in behind sand trucks all the way across ramp to gate....*

'Perfect Storm' conditions: Freezing rain on pavement, rain at 33° F not warm enough to melt ice, airport operator only sanded center 50 feet of Runway 24R, no sand used on taxiways or ramps until we ordered it.

Jack of All Trades

For a Maintenance Technician, a gear-swing check on a B737-700 went wrong when hurry-up pressures and distraction led to an oversight.

■ *I was working on aircraft that was in the hangar for the night for a C-check. I was assigned by my Lead to work the right wing. The first thing that had to be done was jack the aircraft and perform a gear-swing for a functional check. I started setting up the right wing to be jacked. I removed the screw that holds the jack pad plug to the wing. After I removed the screw, I attached the jack pad to the bottom of the wing without removing the plug. Tightened the jack pad, seated the jack and started raising the aircraft at the same time and rate as the others. As the aircraft started coming up and there was some weight on the jack pad, the bolt that held the jack pad in place sheared and the jack slid forward, puncturing a hole in the bottom forward part of the wing.*

We found that I failed to remove the jack pad plug from under the wing. I have jacked other aircraft many times and this particular time I got in a hurry and had other things going through my mind....

ASRS Alerts Issued in September 2009	
Subject of Alert	No. of Alerts
Aircraft or aircraft equipment	7
Airport facility or procedure	3
ATC equipment or procedures	4
Maintenance procedure	1
TOTAL	15

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September 2009 Report Intake	
Air Carrier/Air Taxi Pilots	2528
General Aviation Pilots	977
Controllers	18
Cabin/Mechanics/Military/Other	299
TOTAL	3822

Wind, Rain, and Soap

Maintenance personnel may work on aircraft inside hangars or shops, or outdoors in extreme weather including rainstorms, snow, and icing. Having to work quickly while still observing safety standards can be challenging. Here's a Technician's report of how wind, rain, and soap combined to make a tug's movement treacherous.



■ *I pulled the B737 aircraft onto the hangar wash rack with a tug and disconnected the tow bar from aircraft. I backed the tug up and began to move out from the front of the aircraft between the power cord cradle and the right forward portion of the aircraft. While steering/guiding the tug/tow bar combination forward through the normal exit path, my hand slipped on the wet and soapy steering wheel which caused the tug to make contact with the right nose landing gear door. The door required replacement per Aircraft Maintenance Manual...*

Contributing factors: wind, rain, and soap. The area in which to remove the pushback tug from in front of a parked aircraft on the wash rack is very limited. Poorly designed wash rack with limited equipment movement area.

“You Have the Controls!” (Why to Keep Your Airplane in Trim)

Following a hair-raising takeoff incident, a Cirrus SR20 Instructor felt responsible for failing to verify a routine preflight task.

■ *While on departure from Runway 22 at approximately 500 feet AGL, my student's seat apparently unlatched and slid to the full aft position with control yoke still in hand. The aircraft pitched violently upwards, stall warning horn and then light buffeting at most without a clean stall. I was looking for traffic off to my right side when I heard the seat 'click,' and then I looked over to see his seat sliding back with his feet up in the air. The pitch-up occurred instantly. My reaction was to grab the control yoke and push it forward as my student simultaneously shouted, 'You have the controls!' We lost no more than 50 feet and I was able to regain control of the airplane after attaining a safe airspeed. He was initially quite shaken. We were then able to continue the flight lesson without further incident.*

Lessons learned: As PIC of a dual training flight, it is my responsibility to ensure the safety of the flight. This means not taking for granted the successful completion of 'routine' tasks,

such as the latching of a seat, without verifying it...Secondly, I think that this event shows that even with all the double-checks in the world, unexpected and unwelcome things can still happen. I presented this situation to my student as a practical application of a power-on departure stall. We discussed the recovery procedure as well as what was unique to this situation—if you are pulled from the controls, release them—the airplane will return to its trimmed position. In this case, releasing the controls would have effectively been a 'reduction in back pressure....'

Horns and Hollers

In the “no good deed goes unpunished” category, here is a Mooney 20 pilot's story of how attention to a young passenger's flight aspirations led to an embarrassing aftermath.



■ *We began a sight-seeing flight...I had two teenage passengers, one of which was wanting to become a private pilot. We flew maneuvers and over familiar sites. [Later] I entered the left downwind for runway. I noticed my young passenger was looking at the actions I was taking with regard to prop, fuel, and trim, so I began to explain what I was doing. As I was explaining, I called to turn base and then final. I was [on] a little shorter final than I would have liked, so I explained that I was slipping the plane to lose a little altitude. At the time the plane was full rich, prop was full RPM, and flaps were set. I then turned on the electric fuel pump and became fixated on greasing the landing for my young passengers. I noticed that my float distance was more than normal but speed was good...In my mind I was maintaining a short field landing proficiency, so when the stall horn went off I was so close to the ground that I paid it no attention. Then I heard a second horn as I throttled all the way back and thought that it was strange, but the horn pitch was the same as the stall horn. Moments later I heard the faint sound of the antenna dragging. It was only another second or two and I realized what I had done...We slid down the centerline and I turned the rudder to try to get us off the runway. Moments later we came to rest just off the runway. I immediately turned all power off and the passengers exited the plane quickly. The plane sustained relatively minor damage to the underbelly.*

Having now had an experience that I never thought I would have, my advice would be to make the GA public aware of the devices available that will give you a verbal command to check gear. For a minimal amount of expense, you would not have to rely on the interpretation of a horn. It is my personal opinion that such an awareness would all but stop gear-up landings.

Our reporter was referring to a verbal gear warning system for GA aircraft that can be heard in headsets or over the cabin speakers.