

Number 254

October 2000

Passenger 'Saves'

Unruly and abusive passengers are getting a lot of media attention these days for their disruption of commercial flights. But ASRS also hears about unsung passenger heroes whose vigilance is responsible for bringing hazards to the attention of the crew. From holes to leaks to dings, passengers can provide early warning of aircraft equipment problems that might otherwise escape detection until a serious hazard develops. Some recent examples from ASRS files:

■ During taxi for takeoff, a storm passed over the field. When the storm had passed we departed. During the storm, peasized hail fell intermittently. A passenger deplaning [at destination] remarked that there were dents and holes in the "flaps." Maintenance was immediately notified and confirmed the passenger's observation.

In other cases, the timing of passenger input can pose a credibility problem for the flight crew:

■ Just prior to takeoff, Flight Attendant notified us that a passenger thought he may have seen a 'hole' in one of our turbine blades. This seemed impossible, as the engines were running at this time and a 'hole' would be impossible to see. After getting more information from the Attendant, the passenger stated he had seen this hole prior to engine start. Since 10 minutes had elapsed from engine start until the passenger actually said anything about this, it seemed illogical. If a passenger was truly concerned, it seemed they would have mentioned it immediately... Cockpit crew decided this was probably just another passenger "crying wolf" and elected to continue takeoff. All engine parameters were normal during the $2^{-1}/_{2}$ hour flight.



Subsequently, during ground inspection following flight, [maintenance] found 2 turbine blades on the left engine with nicks in them. Lesson learned: sometimes a passenger may actually know what they are talking about – and we need to consider this information pertinent

and act accordingly.

Another incident shows how passenger observation can be a safety factor during crew swaps and aircraft changes.

On descent, we were advised by our company that we would have an unscheduled aircraft change [at destination]. When we arrived at our new aircraft, the Captain I was trading aircraft with advised me that the autopilot was inoperative. He also told me that a passenger had observed fluid coming from the right wing. He said he had called contract maintenance to inspect the wing. The other Captain then...wrote a discrepancy in the aircraft logbook describing what the passenger had seen, then departed to the aircraft that we had left at another gate. Approximately 10 minutes later, the mechanic came to the cockpit and informed me that there was fuel in a dry bay area on the right wing. I called our company maintenance control office and had the mechanic explain what he had found. After he had finished, our maintenance office informed me that the aircraft was Out of Service...

Any leak in the forward wing upper surface pylon attach area is serious. The "other" Captain took the correct actions in documenting the problem and having the reported fluid leak checked.

Emergency Connections

The problem with new technology is that it often works in unexpected ways – or not at all. An air carrier Captain offers a thoughtful commentary on how an onboard medical emergency might have been more smoothly handled.

■ Medical emergency at 12,000 feet MSL on STAR [arrival]. Lead Flight Attendant advised flight deck crew that a 10-yearold boy was experiencing an apparent severe allergic reaction. The Flight Attendants were being assisted by a Registered Nurse and wanted to administer [antihistamine]. Our new cabin "airphone" medical clinic contact did not work. I contacted our Flight Dispatcher on the radio and requested a phone patch to medical clinic.

ATC was advised of our problem. We were now well into the approach phase below 10,000 feet, with the usual altitude and heading changes. We were IFR in the clouds. ATC assigned us Runway 30L to facilitate our arrival. I began to reprogram the approach...since we were initially assigned 30R. Considerations were getting the airplane on the ground safely and quickly, obtaining clinic concurrence prior to administering the drug, [and] making sure both pilots were attending to primary tasks.

I set up the observer's jackbox and had the Flight Attendant talk to the clinic on the #2 radio. This resulted in two inexperienced radio operators attempting to converse with each other. The process took too long, but the end result was satisfactory. If I had this situation again, I would use the Dispatcher to relay information to the [clinic] and then back to the aircraft...

A possible drawback to using Dispatch to relay medical information is that ground-based medical personnel might find it difficult to evaluate indirect information. If time and equipment permit, a phone patch between assisting onboard medical personnel, Dispatch, and ground-based clinicians might be the most effective means of communication during an inflight medical emergency.

ASRS Recently Issued Alerts On
A320 flight control flutter incident
Reported laptop computer interference with navigation
L25 Loss of pressurization attributed to door seal defect
BE20 wheel bearing corrosion due to cleaning solution
ATC response to a passenger misconduct emergency

A Monthly Safety Bulletin from The Office of the NASA Aviation Safety Reporting System, P.O. Box 189, Moffett Field, CA 94035-0189 http://asrs.arc.nasa.gov/

August 2000 Report Intake	
Air Carrier / Air Taxi Pilots	2127
Controllers	55
Cabin/Mechanics/Military/Other	176
TOTAL	3099

The Hurry-Up Syndrome Revisited

Past ASRS research has documented that the "hurry-up syndrome" – any situation in which pilot performance is degraded by a perceived or actual need to rush the completion of cockpit tasks – often results in downstream safety incidents. In practical terms, this means that omissions or oversights made during pre-flight and taxiout often manifest themselves during takeoff and departure.

A cargo pilot's report to ASRS shows how the hurry-up syndrome and complacency can lead even an experienced pilot to make a novice's error – in this case a wrong-direction departure:

■ The departure ATIS was calling for departure on Runway 8L. I was cleared to taxi and hold short of 8L at intersection D for intersection departure behind company jet traffic. Tower cleared me for takeoff and I proceeded to turn onto the runway and started takeoff roll. At approximately 500 feet AGL, Tower informed me I had departed Runway 26R and to turn right to 360° and then on course. No traffic conflicts occurred, and there was no shortage of runway as taxiway D is at the midpoint of a 10,000 foot runway.

From the beginning of the taxi for takeoff, I was rushing for departure and preoccupied with my departure preparations. I was late and the weather was moderately low, all factors that increased my anxiety and haste to depart. I am very familiar with the airport and I believe this allowed complacency to set in. The departure from midfield made it difficult for the ATC controller to anticipate my mistake... [Also] the company jet did not take off in front of me, but crossed Runway 8L/28R on the way to the south set of runways. No other aircraft were taking off or landing, which would have warned me of my mistake.

✓ Allowing oneself to be rushed increases chances for mistakes to happen and go unnoticed.

 \checkmark Be suspicious and think through intersection departures. Check heading indicator on line-up to verify departure runway. <u>Slow down</u> to allow the controller to stay in the loop and help avoid mistakes.

Candy Drops

As colorful stockpiles of candy in grocery store aisles signal the approach of Halloween and other fall holidays, several

ASRS reports remind us that confections in the cockpit may not always bring sweet endings. From a GA pilot whose "candy drop" turned into a real dud:

Events began with a descent into Low Altitude Flight (1000 feet AGL) in order to fly close to a family outing. This was at my family's farm which was out in the country, and I desired to drop a bag of candy out as fun gesture. After 3 passes, I proceeded to turn for a 4th and dropped to 500 feet AGL in order to make the drop... After the drop was made and all was clear, I proceeded to add full throttle to depart and to land at [home] field. The adding of full throttle only produced a maximum 1800 RPMs. I pulled carb heat, applied full mixture, full throttle, and checked mag position. I was unsuccessful with power recovery and now was descending below 500 feet AGL. Power lines and trees became a big concern. I cleared powerlines easily but brushed the top of the trees. At this time I knew a forced $\$ landing was needed. I proceeded to land in the nearest pasture, making a clean landing. Once I had completely stopped the airplane, I called ATC to inform them of my location and good condition...

I had a certified mechanic do a thorough check of the engine and structure... The mechanic informed me that

the aircraft was in normal condition and airworthy... I feel that the conditions leading up to the forced landing are now clearer. Even with temperatures over 85°F, the high humidity and slower flight led to carburetor icing... Application of carb heat started to occur but without much altitude, [and] there was not sufficient time for the ice to melt.

Advice from the School of Experience: "Fly the airplane first."

Another GA pilot who experienced engine problems and an off-airport landing also reported a candy connection:

■ ...Approximately 2-3 minutes after going through 4700 feet to 5500 feet, the engine quickly lost RPM... I attempted to restart, checked fuel shutoff, checked throttle, checked mixture, checked ignition, checked carb heat. After following these procedures, I had to make an off-airport emergency landing in a farmer's field. Pilot and passengers suffered no injuries... I believe a bag of candy sitting over fuel shutoff valve on floor between seats may have inadvertently shut off or restricted [fuel] flow in some way. However, fuel valve was 'on' when checked during restart procedures.