

CALLBACK



From NASA's Aviation Safety Reporting System

Number 355

July 2009

What Would You Have Done?

ASRS continues to receive feedback from **CALLBACK** readers that our “interactive” issues (requiring readers to assess possible solutions to reporters’ problems) are thought-provoking and educational. On this month’s front page, you will find a selection of incident report excerpts (the “first half of the story”), followed by several plausible answer choices. Select the answer choice for each incident that seems the best course of action. On the back page, you will find the “rest of the story” – the actions actually taken by reporters to resolve their situations.

Keep in mind that reporters’ actions may not always represent optimal safety solutions, and that these incidents are intended to foster further thought and discussion.

Situation #1: “Our Airspeed Was at the Lowest Allowable” (A320 First Officer)

■ The ILS to Runway 36L was NOTAM’ed out of service, so we expected to do a [nighttime] visual to Runway 36L. We came in fairly high on a left downwind and reported the field in sight. Approach cleared us for the visual and told us to maintain 3,600 feet until ‘north of the air base.’... The Captain called for ‘gear down’ and entered a very steep bank to turn left base, but I realized we would be rolling out WELL left of centerline, and we were starting to get low with a high descent rate. The Captain seemed totally flustered and I was sure he was looking at something other than the actual runway. On about a 5-mile final, could see the PAPI and all the lights were red, and our airspeed was at the lowest allowable speed (VLS)....

What would you have done?

- Called for a go-around
- Alerted the Captain to being left of centerline and very low.
- Assumed control of the aircraft.
- ???

Situation #2: “Pilots Were Slowing Way Down” (Local Controller)

■ While working Local Control South...on a predominantly arrival favored runway, the South Final Approach Contoller was running successive arrivals very tight down to minimum separation. Wake turbulence was involved in nearly every arrival seeing that nearly every arrival was either a heavy jet or B757. Compression factor from a 5-mile final inbound was extra cumbersome due to strong headwinds and gusts, and it seemed like pilots were just overall slowing way down inside the 5-mile final...

The B737 that this report applies to checked onto my frequency at a 16-mile final and I initially issued traffic 6

miles ahead, heavy B767, report it in sight. The B737 began to search for traffic while I continued working other traffic on the frequency. The preceding B767 began to slow way down at this point as he reached the FAF and I saw that indeed the following B737 would need to slow down as well, or call the traffic in sight for a visual approach just like all the other aircraft I had been handling in that fashion. At this point I did not use speed control on the B737 because he was well outside of my ‘FAF/5 miles’ jurisdiction, not to mention Approach was filling the final behind him very tight as well, and I did not want to interrupt the sequence with a very slow aircraft...Once the B737 reached a 10-mile final, I made an additional traffic call to see if he had the heavy in sight. The B737 reported the field in sight and again I prompted him that I needed him to ‘report only traffic please.’ At this point the preceding heavy B767 had reached a 2-mile final and the B737 was at a 7-mile final all according to the Tower Display Workstation radar scope....

What would you have done?

- Advised the trailing B737 he had 10 seconds to report the B767 in sight.
- Instructed the trailing B737 to reduce to minimum approach speed.
- Canceled the trailing B737’s approach clearance.
- ???

Situation #3: “Found Throttle Completely Disconnected” (Beech Bonanza Pilot)

■ On the first leg of a 2-leg trip, the throttle felt slightly loose, like it needed tightening. Made note to check when we got home. Couldn’t find anything wrong during preflight or run-up for second leg. Uneventful trip home at 6,000 feet. [I] left throttle wide open as usual. Began descent...Advised airport in sight about 10 nm out. Approach cleared me for a visual Runway 14L and handed me off to Tower. Near airport, tried to slow, found throttle completely disconnected, could move lever forward and aft, but no change in manifold pressure. Since other controls worked properly, decided to land using prop, gear, and flaps to control speed. Tower cleared me to land on Runway 14L. Entered left base. Airspeed on final about 110 knots (versus 90 knot target). Attempted to land despite higher speed, but aborted landing after bouncing twice. Advised Tower going around, throttle problem. Told to make right traffic, plan for Runway 14R. Acknowledged change in runways, continued climbout, began climb, and selected gear up. Gear lights stayed green, red ‘in transit’ light never came on, rate of climb lower than normal....

What would you have done?

- Assumed gear-down indications were correct and tried another approach.
- Departed the pattern for troubleshooting.
- Declared an emergency with the Tower.
- ???

| ASRS Alerts Issued in May 2009 | |
|--------------------------------|---------------|
| Subject of Alert | No. of Alerts |
| Aircraft or aircraft equipment | 6 |
| Airport facility or procedure | 6 |
| ATC equipment or procedure | 3 |
| Company policy | 2 |
| Maintenance procedure | 2 |
| Total | 14 |

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/>

| May 2009 Report Intake | |
|--------------------------------|-------------|
| Air Carrier/Air Taxi Pilots | 2241 |
| General Aviation Pilots | 842 |
| Controllers | 59 |
| Cabin/Mechanics/Military/Other | 396 |
| TOTAL | 3538 |

The Rest of the Story - The Reporter's Actions



Situation #1: "Our Airspeed Was at the Lowest Allowable" (A320 First Officer)

- **The Reporter's Action:** Alerted the Captain to being left of centerline and very low.

Do You Agree?

■ ...I said 'I show you WELL left of centerline and very low.' Just then, the Airbus voice called out 'Speed, Speed.' The Captain added lots of power and was trying to climb when I realized that the speed brakes were deployed to the Full Up position. I told the Captain this as I immediately retracted them, and then things went back to normal.

The contributing factors were: 1) The lack of an ILS approach to a 'black hole approach' over water at night. 2) Our relative unfamiliarity with the airport led to confusion about where the 'air base' was and what altitude we should be at. I think Approach should always reference approach fixes, DMEs, or 'miles to the field' when giving altitudes. 3) The speed brakes cause virtually no vibration on the Airbus. The only indication that they were out was the small amber 'Speed Brake' indication on the ECAM page. During this approach we never saw the message since we were primarily looking outside....

Situation #2: "Pilots Were Slowing Way Down" (Local Controller)

- **The Reporter's Action:** Canceled the trailing B737's approach clearance.

Do You Agree?

■ ...I canceled the trailing B737 approach clearance, told him to maintain 1,500 feet and fly present heading. I gave the B737 one last chance while he was still in a position to land safely to see the heavy on short final, and when he said...that he 'had the field' I told him to climb and maintain 3,000 feet and turn right heading 120 to break him away from the approach sequence...Quality Assurance at my facility proceeded to investigate the situation only to find that a loss of separation did indeed occur, as I was about 20 seconds late in canceling the B737's approach clearance allowing him to get within 4.7 miles of the heavy B767 instead of the required 5 miles....

Situation #3: "Found Throttle Completely Disconnected" (Beech Bonanza Pilot)

- **The Reporter's Action:** Departed the pattern for troubleshooting.

Do You Agree?

■Told Tower I wanted to depart pattern and troubleshoot before trying another landing. Tower said squawk 1200 and handed me back to Approach. Told to maintain VFR at or below 3,500 feet, asked for souls and fuel on board, and approved frequency change so I could contact local FBO/Beechcraft maintenance shop. Discussed situation with maintenance manager via relay through FBO line manager. Decided nothing we could do about throttle airborne, OK to land using remaining controls, after verifying gear was down/locked. Reviewed Pilot Operating Handbook, pulled gear motor breaker, removed handle cover, deployed handle, and turned about 25 turns in wrong direction. Greens lights went off and red light came on. Turned handle about 25 turns in the correct direction, red light went out and green lights came back on. Maintenance manager agreed gear must be down. Switched back to Approach and advised ready to land but engine might quit once on ground. Declined offer to have equipment standing by. Approach gave heading back to airport, cleared visual Runway 14R and handed me off to Tower. Tower cleared me to land and advised other traffic they might have to switch runways. Set up for extended final, slowed to about 80 knots, had passenger crack door open, and set down as gently as possible. Landing gear held...Thanked Tower for help, taxied to ramp and shut down.

Next work day, mechanic found throttle cable arm loose on throttle body. Torqued self-locking throttle control arm nut, found it could turn 1/3 of full turn. Replaced nut and torqued...Mechanic checked landing gear. Couldn't replicate problem raising gear. Suspects bounces might have temporarily jarred one of the [landing gear] squat switches.

Lessons learned:

- 1) Don't postpone maintenance involving key systems or controls.
- 2) Don't hesitate to advise ATC if a problem develops.
- 3) If required to go around and having problems with other systems or controls, consider leaving gear down to minimize variables.
- 4) Plan extended final if uncertain about speed control.
- 5) Learn more about aircraft systems.
- 6) Double-check [gear handle] turn direction before using manual gear extension procedure.
- 7) Find a better way to communicate with maintenance while airborne.