CALLBACK
From NASA's Aviation Safety Reporting System

Issue 415 August 2014

The Go-Around Decision

What Would You Have Done?

Once again CALLBACK offers the reader a chance to “interact” with the information given in a selection of ASRS reports. In “The First Half of the Story” you will find report excerpts describing the event up to the decision point. You may then use your own judgment to determine the possible courses of action and make a decision regarding the best way to resolve the situation.

The selected ASRS reports may not give all the information you want and you may not be experienced in the type of aircraft involved, but each incident should give you a chance to exercise your aviation decision-making skills. In “The Rest of the Story…” you will find the actions actually taken in response to each situation. Bear in mind that they may not necessarily represent the best course of action. Our intent is to stimulate thought and discussion related to the type of incidents that were reported.

The following reports all involve a situation in which the pilots had a choice between landing or going around to run an Abnormal checklist. In these, as well as most other irregular situations, an assessment of the problem and associated factors can help integrate the use of checklists with other adaptive problem solving techniques. Immediately going into the “Light on—Start checklist” mode may cause a pilot or flight crew to overlook other important elements of the situation.

As one of the human factors researchers at NASA Ames said, “Checklists should not be used as a replacement for common sense. The first item on every Abnormal or Emergency checklist should be 'Brain…Engage'.”

Situation #1 B757 Captain’s Report

It was a visual approach. We had an ATC speed request of 180 knots to the Final Approach Fix and then slowed and selected Flaps 30 under 168 knots. Flaps went to the 20 position and then we got the TE and LE Disagree caution lights. We were on glideslope, on the VASIs, and in a position to land with the appropriate airspeed.

What Would You Have Done?

Situation #2 B757 Captain’s Report

On an ILS approach we received a TE FLAP Disagree light and EICAS while configuring for final landing with the runway in sight.

What Would You Have Done?

Situation #3 B757 Captain’s Report

Runway was in sight on final at approximately 1,400 feet AGL. Flying Pilot called for Flaps 30, Landing checklist. I selected Flaps 30 and noticed an EICAS message “Trailing Edge Flaps.” The flaps remained at 25 with the flap handle selected to 30. I asked the Flying Pilot if he noticed any “roll” in one direction or the other? He said, “No.” I then selected the flap handle back to 25 and informed him of the Trailing Edge Flaps EICAS message. At this point we were at 1,000 feet AGL and stable on final.

What Would You Have Done?

Situation #4 B737-700 First Officer’s Report

The Captain was the Pilot Flying and I was Pilot Monitoring. While configuring for landing, the Captain noticed the forward amber LE FLAPS TRANSIT light illuminated and called it out. I looked up at the overhead LE Devices Indicator and saw that the number one SLAT FULL EXTEND light was not illuminated green. I notified the Captain of this. We were descending via the glideslope on the visual with gear down and Flaps 15, somewhere between 2,000 feet and 1,000 feet AGL.

I stated that we will need to go around and work out the problem. The Captain indicated that he had been in this situation before and we were fine to land.

What Would You Have Done?

Situation #5 B737 Captain’s Report

On approach at approximately 2,500 feet, we selected Thermal Anti-Ice (TAI) for the engines as we began to enter icing conditions (a cloud deck from approximately 2,500
feet to 800 feet). This was the first time during the flight that we used the TAI. The Number Two engine TAI showed a disagreement indication, a bright light on the overhead panel and a yellow indication on the engine instruments. We cycled the TAI several times to no avail. Fuel available was approximately 6,900 lbs. There was at least a 200-300 mile flight to find non-icing conditions.

What Would You Have Done?

The Rest of the Story

Situation #1 B757 Captain’s Report
The Reporter’s Action

I elected to land with Flaps 20. I had the First Officer confirm the airspeed for Flaps 20. We landed on centerline, on speed, and in the landing touchdown zone. Approach was stabilized.

Situation #2 B757 Captain’s Report
The Reporter’s Action

We elected to discontinue our approach to run the TE FLAP Disagree checklist. ATC provided vectors while we configured the plane for a Flaps 20 approach as the checklist directed. We coordinated with ATC for the ILS to a runway with more favorable winds. This took much longer than anticipated with the final result being a VOR approach at the last minute. We set up for the new approach, but did not see the runway at minimums and had to again go missed approach. By this point our fuel state was becoming a greater concern than the non-standard configuration for landing so we requested immediate vectors back to the ILS Runway XX as the winds were once again favorable for that approach. We ended up breaking out early and were able to then fly a Flaps 20 landing in visual conditions.

Situation #3 B757 Captain’s Report
The Reporter’s Action

I elected to land rather than go around in order to run the QRH checklist since the flaps were at 25 with no noticeable roll. Once on the ground we attempted to retract the flaps but they remained at 25. I’m not really sure if the flaps would have retracted if we had attempted a go-around.

Situation #4 B737-700 First Officer’s Report
The Reporter’s Action

The approach was continued to a landing.

From the Captain’s report on the same incident:

I elected to continue, carry a higher speed and land the aircraft. After landing, the First Officer was questioning my decision and looked in the QRH. According to the QRH we should have gone around and come back with Flaps 15 for landing. I made the call to land and not to go back into the overcast. A Mechanic met the aircraft and found the number one slat was extending; however, we were not getting the indication.

Situation #5 B737 Captain’s Report
The Reporter’s Action

The “correct” response would have been to go around, climb to a non-icing altitude and run the QRH. But, given our knowledge of the system and the QRH procedures combined with a thin cloud deck, we chose to continue the approach rather than waste fuel on what would have been a futile attempt to “fix” the issue. In short, we knew we were going to have to descend through the cloud deck with the TAI inoperative no matter what.

We checked that the TAI valve circuit breaker was in and we landed without incident.