

CALLBACK

From NASA's Aviation Safety Reporting System



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Aviation Do-Overs

Aviation is and always has been an enchanting and captivating endeavor. It tempts with the notion of perfection, but delivers counterfeits of imperfection, error, and tolerance, however small their magnitudes. Whether you are a professional or enthusiast and aviation is a vocation or avocation, perfection assumes roles of universal ambition and unachievable prize. It is a noble, worthy, seductive paradox that lures and hovers nearby, but always lurks just out of reach.

Aviation safety has improved dramatically over time, and we are proficient at the discipline, but we still err. We practice all manner of risk-reward analysis and Crew Resource Management (CRM). We develop amazing skills to find, trap, and prevent mistakes and to mitigate the hazards, threats, and errors that do sneak by. And yet, from time to time, each of us makes a decision, accomplishes a procedure, or takes an action that is somehow not our best performance.

This month, *CALLBACK* looks at incidents in which operators likely have wished some actions or decisions were rescindable and could be done over. Examine the human and other contributing factors in each undesirable situation. Extrapolate what could have resulted, and humbly savor the lessons, which might feel closer to home than we all would like to admit.

Part 91 – A Hazardous Oversight

This small jet pilot began the flight with an oversight. The situation clearly worsened before it improved.

■ *My planned flight was from ZZZ1 to ZZZ2. Due to a deviation from my standard operating procedure, I left the towbar attached to the aircraft, causing a loss of rudder control and the aircraft to bank at 45 degrees upon takeoff. This continued for approximately 20 minutes, and at that time, I had the right engine flameout. After the flameout, I regained better control of the aircraft and was able to successfully land at ZZZ. I had [requested priority handling] with ZZZ Approach. I do not believe this was an accident, as there was no visible damage to the aircraft or any injuries. I intend to better follow my SOPs, including not allowing the tow vehicle to be moved without removing the towbar from the aircraft and moving the towbar to a safe location.*

Part 91 – Observant, Proactive, Professional

This Bell BH47 examiner pilot observed a pilot in another aircraft experiencing multiple alleged proficiency issues. The proactive helicopter pilot may have averted a collision.

■ *I was practicing in a Bell 47 helicopter with another flight instructor...at ZZZ airport. There was no other traffic at the airport. ... We heard an aircraft report on the radio that they were entering the pattern for ZZZ1. ... The same voice then stated that they were entering the pattern for ZZZ. I...did not feel comfortable taking off, because the [pilot] reporting inbound did not seem to know where [they were]. We advised on the CTAF frequency that we were conducting hover operations in the grass east of Runway Y. There was no response. It was then that I saw the Cessna 172 pass just north of Runway XX at approximately 500 to 700 feet. The Cessna pilot advised that [they were] entering the pattern for Runway Y. I thought this to be strange, as the wind favored Runway XX, and that was the longer runway. ... I wanted to move away from the runway and remain on the ground as not to disturb the airflow for the obviously new pilot that was about to land. I hovered the helicopter to a point that was approximately 100 feet from the runway near the segmented circle for the wind sock. I positioned the aircraft facing south so that we could watch the airplane approach and land. As the pilot did not seem to have very good control of the aircraft on final approach, I stated that if [the aircraft] were to come toward us, I would lift off from the ground and proceed toward the trees just to our east. It then appeared that the pilot suddenly noticed the set of wires that cross approximately 400 feet prior to the runway. The aircraft pitched up suddenly, apparently to avoid the wires, then dropped to the runway in a very uncontrolled state. After the first bounce on the runway, the aircraft drifted out of control to the east and onto the grass. The airplane continued out of control directly toward our aircraft. We lifted off just before the airplane continued directly through where we had just been stationary on the ground. ... It then continued down the grass, swerving to avoid a runway edge light as it re-entered the runway. We contacted the flight club that owns the aircraft to advise them of the possible unsafe pilot and potential aircraft damage from the hard landing.*

Part 121 – To Go or Not to Go Around

After this B737 flight crew was alerted by Tower, the approach quickly deteriorated. Windshear and related factors blurred the decision to go around or not go around.

From the Captain’s report:

■ *We were on final for the ILS Runway XX into ZZZ, and the Tower reported a windshear alert of 15 knots on the departure end of Runway XX. We could see rain showers west of the end of Runway XX. The ATIS reported thunderstorms southwest, moving northeast of the airport. The previous regional jet aircraft reported some speed fluctuations, but landing was normal. Below 1,500 feet, Tower reported a windshear alert at the approach end of the runway with winds at 14 knots and gusts to 23. I requested a sidestep to Runway XXL, which was clear, but was told, “Unable,” due to an aircraft on a two-mile final on Runway XXL. The First Officer continued the approach with the autopilot off and was on speed...until about 300 feet, when the airspeed started to increase with the power at idle and caused the flaps to retract to 25. We got the “TOO LOW TERRAIN” callouts, but continued to a normal landing, as the rain showers had now moved toward the departure end of the runway. We did not want to perform a go-around into that weather. It was a normal landing, on speed. On rollout, we encountered moderate rain by the exit taxiway.*

From the First Officer’s report:

■ *Showers and a 15-knot loss of airspeed were reported on the departure end of Runway XX.... Winds were from the west at 14, gusting to 23. Our 30-flap reference speed was 149 knots, and our target speed was 164.... I was back on airspeed of 164 and on glidepath before runway threshold.*

Part 121 – One Thing Led to Another

An ERJ-175 flight crew describes a confusing and convoluted sequence of events during an approach where CRM and SOP performance is questioned by both pilots.

From the Captain’s report:

■ *The flight was vectored to base for an RNAV approach while flying with full automation. The vectors brought us inside the fix that the FMS had been extended off of. I failed to direct the pilot monitoring (PM) to advance the FMS to a fix in front of us or to activate vectors. This caused the aircraft not to capture the final approach course, so I had to manually turn the aircraft back toward the final approach course. By the time we got back on course, we were significantly high, and the FMS still didn’t capture*

the course. I directed the PM to go gear down, flap 3, then flap full. I then mistimed my attempt to get on glideslope by dropping the nose too quickly after disengaging the autopilot, overspeeding the flaps. Unable to regain glideslope, I elected to discontinue prior to 1,000 feet. As I did so, I directed the PM to go flap 4 and cycle the FMS forward. I believe my direction to sequence the FMS at this point was a key error, since it distracted [the PM] from getting the flaps retracted quickly. When the PM struggled to sequence the FMS, I opted to hit Takeoff/Go-Around (TO/GA) [mode] and do a go-around instead of discontinue. I was hand-flying and did not pull the nose up quickly enough, so the aircraft rapidly accelerated to the point we almost oversped the flaps again. I overrode the autothrottle to slow the aircraft, and we immediately got an EGPWS warning, surprising us both. After a split second of shock, I climbed rapidly to honor the warning. We then stabilized, caught our breath, and were vectored back around for a landing.

From the First Officer’s report:

■ *At around base, the pilot flying (PF) had me clean up the approach from a waypoint behind us. I suggested that we would not capture lateral guidance this way, but the PF said we would. We were cleared for the approach, but the aircraft did not capture lateral or vertical guidance.... No approach callouts were performed, because the course was never alive and [glidepath] was never alive. No missed approach altitude was set, due to the same reason.... I did not hear the missed approach callout, so I said, “Missed approach, flap 4,” and the PF said, “Positive rate, gear up.” I suggested he press TO/GA. I noticed that we were descending, and the flight director guidance was in its standard pitch up attitude for a go-around, so I suggested we pitch up. The PF did not pitch up, so I took the controls and pitched up, then handed controls back after we were established on a climb.... I called, “Autopilot on, autothrottle on,” because I noticed that those were not on, and it would increase situational awareness if those were on. I switched over to Approach, and they asked if we were climbing. I said we were, and they started vectoring us. At this point, the autopilot and autothrottles were on, and I continued monitoring the trajectory of the airplane. We were vectored on downwind. On base, the PF had me clean it up from a waypoint behind us. I suggested vectors to final.... We may have gone through final again, I do not recall precisely.... By 1,000 feet we were stabilized and cleared to land, so we continued and landed and taxied normally.*

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ASRS Alerts Issued in December 2023	
Subject of Alert	No. of Alerts
Aircraft or Aircraft Equipment	3
Airport Facility or Procedure	11
ATC Equipment or Procedure	9
Hazard to Flight	1
Other	2
TOTAL	26

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December 2023 Report Intake	
Air Carrier/Air Taxi Pilots	5,189
General Aviation Pilots	1,335
Flight Attendants	1,119
Military/Other	492
Controllers	331
Mechanics	222
Dispatchers	195
TOTAL	8,883