

CALLBACK

From NASA's Aviation Safety Reporting System



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Expect the Unexpected



“Expect the unexpected” is blunt philosophy that aviation both teaches and demands. It is also sound wisdom that larger than life aviators have heralded to all who fly since the dawn of aviation itself.

In an aircraft, the element of surprise can briefly degrade one’s decision and reaction times. If an unexpected event occurs, pilots and crews must be ready and equipped to resolve the issue and conclude the situation. Training and experience hammer home that point, which is also fundamental in threat and error management. A quote often credited to Gene Cernan, Apollo 17 commander and most recent human to have walked on the moon, captures the philosophy and its importance. “Prepare for the unknown, unexpected, and inconceivable...after 50 years of flying I’m still learning every time I fly.”

This month, *CALLBACK* shares a small sample of reports illuminating unexpected events that occurred across various phases of flight. Observe events; then consider the reporters’ situational awareness, thoughts, actions, and emotions.

Part 91 – The Takeoff

On a quiet VMC day, a Glasair private pilot encountered this unexpected threat during an otherwise unremarkable takeoff.

■ *...It was a quiet day at this uncontrolled GA [General Aviation] field. No traffic in the pattern and my airplane was the only one moving on the ramp. After warming up the engine, I proceeded to taxi for departure on Runway XX. After doing run-up checks, I checked for incoming traffic on base or final, made my radio call, and rolled out onto the runway. I checked ahead while advancing the throttle and commencing the takeoff roll. I was shifting my view back and forth from out in front to the engine instruments and airspeed. As I was accelerating to rotate speed, my pitch attitude changed a little bit due to running over a small hump in the runway. At that time, I was able to see a white pickup on the runway in front of me. Insufficient room to stop, but I was able to rotate and lift off. I do not know how much clearance there was between my airplane and the truck. After returning to the airport, I found out that an airport employee had given permission for an individual to drive out onto the active runway to look for a hubcap!*

Supposedly, this individual had a handheld radio, but admitted to not making a radio call before driving onto the active runway. Individual claims that he did not hear my radio call. In my aircraft, my eye level is about five feet off the ground when seated. During acceleration, the nose of the aircraft comes up enough to partially obstruct my forward vision. This was several days after a snowstorm, so there were large white areas on either side of the runway and in the background. The runway had recently been repainted, and various runway markings were bright white. Very hard to pick out a completely unexpected white pickup. Maybe I should have seen the pickup sooner, but consider myself lucky to have seen the unexpected obstruction in time to avoid it. The airport operator should never allow anyone to drive on the runway that is not a county employee with the appropriate Ground Ops training. Any time a county vehicle is on the runway, there should be plenty of warning by radio. If there is even a possibility of a conflict with an aircraft, the vehicle should not enter the runway safety area. The county employee should have known better.

Part 135 – The Climb

During the climb, an air taxi Challenger 350 First Officer experienced an escalating threat, subsequent to its initial mitigation in the crew’s response via checklist and SOP.

■ *During climb...crew noticed electrical flickering and anomalies. Our initial response is to level the climb and troubleshoot. We initially monitored the situation, which was intermittent and led us to the Unexpected Electrical Indications Checklist. This checklist was completed per SOP, and the decision was made to continue monitoring electrical indications and system, as it seemed the issue had self-corrected. Momentarily after, as we continued our climb to higher, the issue continued, and we were alerted with multiple and varying EICAS messages regarding the electrical system. These notifications included L (R) BATT OFF, [and] L (R) GEN OFF electrical faults. The crew immediately decided the issue was true and decided to divert.... During descent, more EICAS alerted us with messages: R GEN FAIL, L GEN FAIL, APU GEN FAIL, L BATT FAIL, R BATT FAIL. We acknowledged these and continued our descent.... The crew acknowledged our fuel load, which would require us to land*

overweight (roughly 2,000 lbs.). We accepted this, given the alternative of total electrical loss. The rest of the approach phase, landing phase went per SOP and crew and... passenger made it into the ramp safely. Cause: Electrical wiring, faults, etc. Suggestions: Maintenance.

Part 121 – The Approach

During a night VMC approach, this commercial fixed wing Captain encountered an unexpected threat that may not have been considered. Some worthy sentiments were then offered.

■ While on RNP M 15 into ASE (Aspen) prior to TRNGL, the RNAVE was activated prematurely causing a loss of lateral and vertical navigation while descending into terrain. This was unanticipated, and my first thought was to execute a discontinue procedure, so I reached up to disarm the approach - which was already not active anymore. There was a moment where I struggled to decide what to do, as every discontinue procedure I had briefed had lateral guidance still existing in the FMS. I spent some time processing the situation, then executed a missed approach by pressing the takeoff/go-around (TO/GA) button, calling flaps 2 and gear up. Since we were prior to the FAF we then set a higher altitude and used Heading Mode to roughly follow the runway track while climbing at Vac [Approach Climb Speed], utilized Enhanced Ground Proximity Warning System on Primary Flight Display to avoid terrain, and then we began a right turnout to the missed approach holding point. We tried to reload the approach for lateral and vertical guidance, but due to time constraints, were unable to do so safely. Our lowest altitude was above the DA, and we were not aligned with the runway to safely begin the balked landing procedure. We returned to Center and received vectors to the IAF and repeated the approach with no further issues. Cause: Late night, long duty day, closed Tower, and a complicated approach procedure. Suggestions: While it is probably unlikely to avoid this situation in the future, reinforcing the importance of briefing when the RNAVE is supposed to be activated would help to mitigate this in the future. Also, training reloading of the approach and sequencing the next point could be useful to allowing for a smoother go-around/missed approach. Finally, briefing discontinue procedures with no lateral guidance would help if there isn't enough time to reload the approach safely to have a plan in place in the event of loss of lateral navigational guidance.

Part 121 – The Landing

This air carrier MD-11 First Officer experienced an unexpected threat during the landing that exemplifies the wisdom of expecting the unexpected at any time.

■ Arriving in ZZZ, an automated ACARS message requested an autoland be performed for aircraft currency. We attempted to perform an autoland to Runway XXL from an ILS approach. The approach was stable, configured, and the FMA (Flight Mode Annunciator) indicated DUAL LAND. Weather conditions were well within the autoland limitations, and there were no deferred maintenance items that could have limited the performance of the autopilot. At the appropriate points on the approach, the FCC (Flight Control Computer) commanded ALIGN, FLARE, and RETARD. At an altitude of approximately 30 to 20 feet, the autopilot pitched up as if to flare, but before the main wheels touched down the autopilot abruptly pitched down several degrees as if it were de-rotating. The autopilot then disconnected without command. I assumed manual control, but the aircraft touched down firmly on the runway and bounced. We both called, "GO AROUND." I advanced the throttles, held the pitch, and pressed the TO/GA switch. We recovered the airplane using the bounced landing procedure taught to us in training and then using the go-around procedure. We returned for another approach and manual landing to the same runway. The Captain entered the failed performance of the airplane to perform an autoland in the logbook as well as to describe the firmness of the touchdown. Both we and Maintenance verified visually that we avoided damaging the aircraft or scraping the tail before we left the airplane. I do not believe any limitations were exceeded, but want to include this report to add to the value of the program and for safety awareness. I was surprised how quickly the situation turned from stable to unstable and hope this report will help express the need to stay vigilant and be ready for the unexpected. One item of importance is that Tower and...Approach made an inquiry about the cause of the go-around. I realize they have a job to report the go-around, and to their credit, they didn't immediately jump in to start asking questions of us. But, because the cockpit becomes very busy during a go-around and distractions are a real threat, the only good time to ask that question is by the Ground Controller after we are safely on the ground when the crew can collect their thoughts on the matter together with open discussion. The Ground Controller can disseminate it to all interested parties.

The reports featured in CALLBACK are offered in the spirit of stimulating thought and discussion. While NASA ASRS does not verify or validate reports, we encourage you, our readers, to explore them and draw your own conclusions.

ASRS Alerts Issued in April 2026	
Subject of Alert	No. of Alerts
Aircraft or Aircraft Equipment	9
Airport Facility or Procedure	23
ATC Equipment or Procedure	14
Maintenance Procedure	1
Hazard to Flight	2
Other	3
TOTAL	52

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April 2026 Report Intake	
Air Carrier/Air Taxi Pilots	4,965
General Aviation Pilots	1,579
Flight Attendants	1,502
Military/Other	1,032
Controllers	347
Mechanics	281
Dispatchers	175
TOTAL	9,881