

4/25/2025

FOR YOUR INFORMATION

2025-96/3-7

2222564

To: Textron Aviation (Cessna), FAA (AFS-100)

Info: FAA (AVP-1, AVP-200, AFS-260, AFS-800, AFS-200, AIR-360, AIR-780, MKC-AEG, ANM-100), AMFA, AOPA, ASAP, ATSG, GAMA, IAM, IBT, ICASS, NBAA, NTSB, PAMA, TWU

From: Becky L. Hooey, Director
NASA Aviation Safety Reporting System

Re: Cessna CE680 Landing Gear Warning Audible Alerts

We recently received ASRS reports describing a safety concern that may involve your area of operational responsibility. We do not have sufficient details to assess either the factual accuracy or possible gravity of the report. It is our policy to relay the reported information to the appropriate authority for evaluation and any necessary follow-up. We feel you should be aware of the enclosed deidentified report.

To properly assess the usefulness of our alert message service, we would appreciate it if you would take the time to give us your feedback on the value of the information that we have provided. Please contact Dr. Becky Hooey at (408) 541-2854 or email at becky.l.hooey@nasa.gov.



Aviation Safety Reporting System
P.O. Box 189 | Moffett Field, CA | 94035-0189



ACN 222564**DATE / TIME**

Date of Occurrence	202503
Local Time Of Day	0001 to 0600

PLACE

Locale	ZZZ.Airport
State	US

AIRCRAFT / EQUIPMENT X

ATC / Advisory - Tower	ZZZ
Make Model Name	Citation Latitude (C680A)
Operating Under FAR Part	91

COMPONENT 1

Aircraft Component	Indicating and Warning - Landing Gear
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PERSON 1

Function - Flight Crew	Captain
Function - Flight Crew	Pilot Flying
ASRS Report Number	222564

EVENTS

Anomaly	Aircraft Equipment Problem - Less Severe
Anomaly	Deviation / Discrepancy - Procedural - Published Material / Policy
Anomaly	No Specific Anomaly Occurred - Unwanted Situation
Detector - Automation	Aircraft Other Automation
Detector - Person	Flight Crew
Result - General	Maintenance Action
Result - Flight Crew	Diverted
Result - Flight Crew	Landed in Emergency Condition
Result - Flight Crew	Requested ATC Assistance / Clarification
Result - Air Traffic Control	Provided Assistance

NARRATIVE 1

This report is being filed to point out a possible problem with the CE680A and probably the CE680 landing gear warning system where I believe both type aircraft share the same logic circuits and similar audible warning systems.

The following incident occurred during a ferry flight from ZZZ1 – ZZZ where we received an unsafe gear indication during the approach phase at ZZZ. The flight took place aboard Aircraft X from ZZZ1 – ZZZ with a follow-on divert to the long/wide Runway XX at ZZZ2 in reasonably descent IMC conditions. I'd like to give a shout-out to our Company safety and training departments for their many years of productive and results oriented recurrent briefings on various safety incidents and the proper ways to bring those to safe conclusions, and a special shout-out to trainers for all of the fine preparation they've given all of the Company's aircrews over the years. I honestly felt comfortable and well prepared for the situation I experienced.

This incident occurred during a non-revenue flight. I was acting as PF and was occupying the right seat. On approach to ZZZ RNAV Runway XY around XA:10, during gear extension a few miles prior to ZZZZZ we received a CAS message GEAR DISAGREE L with a yellow X on the left gear indicator of the Multi-Function Flight Display

(MFD). We elected to stop descent prior to FAF, execute the missed approach, climbing back to 4,000. While PM worked the QRH for the associated CAS, I requested a climb to 6,000 since there was no turbulence at that altitude. ATC also began vectoring us prior to reaching MAP holding point. PM was directed to the EMER / Abnormal Section N1 – Gear Will Not Extend which he completed, but resulted in no change to our gear condition. Yes, the RED Alternate Gear Extension Handle was pulled at that time. Once we determined we had a more serious problem we requested a climb to 11,000 in anticipation that PIC (PM) would need to make a call to Chief Pilot (internet does not work below 10k and this Latitude is not SATCOM equipped). We [requested priority handling] with ATC around this time. Initially ATC began vectoring us toward ZZZ3 since it was our filed alternate, but after some discussion PM and I elected to begin heading to ZZZ2. PIC (PM) called Chief Pilot to discuss, while I flew aircraft and obtained weather for ZZZ2 (140/13, 5 SM 010 BKN, 12/11, 29.97). PIC told me later that Chief Pilot wanted weather to divert to ZZZ4, but both he and I agreed ZZZ2 was a much better option (long/wide runway, Airport Rescue and Firefighting (ARFF) available, wouldn't shut down a busy airport. We asked ATC to phone ZZZ2 Tower to have ARFF roll Fire Rescue and have FBO provide a tug since we would be stopping on the runway. We then flew an RNAV Runway XX approach to a 200-foot Height Above Touchdown (HAT) passing over the runway so Operations / Tower could confirm our gear configuration. During approach as flaps were brought to full the "LANDING GEAR, LANDING GEAR" audible warning began to sound continuously to the point it became distracting and difficult to hear radio. We elected to retract flaps to 2 (less than 24°) and fly Vref +20 to silence audible warning, but began receiving it again below 500 feet AGL per Cessna's Gear Warning Annunciation System detecting that not all landing gear were down. Warnings continued all during the low approach and did not extinguish until above 500 feet AGL during the go-around / missed approach. Tower told us they could see all 3 landing gear down, but we continued along the lines that the left main might not be fully LOCKED. ATC cleared us back to ZZZZ1 for the second approach for full stop landing. During that time PM and I reviewed QRC for Ground Evacuation. We also discussed the gear warning problem and began to look for a Circuit Breaker (CB) that could be pulled to keep it silent. In the end we elected to not pull any CBs since there was no QRH procedure calling for one and doing so may put us in a worse situation. To mitigate the gear warning problem, we agreed to fly the final approach segment at flaps 2, Vref +20 until 500 AGL then put flaps to full and suffer through the continuous gear warnings from that point forward. With flaps full, and wind gusts on final of +/- 10 knots, I elected to keep Vref+10 until 100 feet then gradually pull throttles to idle as I approached the 1000 feet markers. I Initially wanted to land on or near 1000 feet but the gusts + extra speed resulted in a longer touchdown which was fine since we had [a lot] of runway to work with (by design). I felt it best to touch down softly on the right main first then slowly bring the left down in case it was unlocked, which is also why we chose Runway XX for the direction of crosswind for the wing-low method of landing. Landing and roll-out was normal since left gear was actually down and locked. I transferred controls to PIC (left seat) and he brought aircraft to a stop on the runway using speed brakes, Thrust Reversers (TRs), and minimal braking. We completed a normal engine shutdown with APU. The "LANDING GEAR, LANDING GEAR" aural warnings continued, making it difficult to hear ATC radio calls. I exited aircraft to tell Fire Chief all was OK and that the [priority handling] could be cancelled, and to remind them a tug would be needed. I then completed a quick postflight walkaround. When coming to the left main gear I ducked into the gear well to see if there was anything obviously wrong with the gear (brakes were barely used during landing and not hot). I pressed on the GEAR UPLOCK micro switch which is visible just behind the gear uplock assembly. Upon entry to the cockpit the LANDING GEAR warning was no longer sounding and all gear indicated 3 green. The PIC confirmed that it had silenced 30 seconds earlier around the time I had pressed the uplock micro switch. We still elected to have the aircraft towed to the service center. We debriefed maintenance about the discovery of the uplock micro switch silencing the gear warnings and bringing the gear indication back to normal. He indicated this was the most probable cause of our problem.

On the subject of the landing gear warning system. In my opinion this needs to be addressed by Cessna to implement some type of silencing mechanism (CB most likely) that can be pulled to silence the warnings for situations like this. The pulling of this breaker would be an added step to the QRH. The constant blaring of

“Landing Gear, Landing Gear” is very distracting and could lead to some other link in a chain of events that could lead to an actual accident and possible loss of life. Something like a missed go-around call, or Tower telling crew the aircraft or brakes are on fire or something similar could be missed when clear communications break down.

As you can see from the above explanation, the actual [event] and the accompanying extra work was not really that difficult, but the distraction caused by the unrelenting squawking coming from the landing gear unsafe indication was such a distraction on the first approach and low pass that it caused us to contemplate attempting a fix (pulling a CB) just to make our situation more tenable and less uncomfortable. After some discussion, thoughtful contemplation and more than 40 years of combined cockpit experience we chose to not go down that path for fear of introducing an unexpected future problem. Will this be the same result with another crew? Maybe not. Pilots like to fix things and this was a thing needing fixing at that moment.

This is also not the first time the “Landing Gear, Landing Gear” warnings have caused a distraction for me. Back 2 years ago I filed an event report for ZZZ5 and ZZZ6 which both occurred on the same day, where telecom transmissions in the area interfered with our radio altimeter causing it to jump to 0 feet AGL setting off the landing gear warning system (RAD ALT below 500 feet AGL gear not down) which blared “Landing Gear, Landing Gear” and interfered with our ability to hear Approach / Tower radio calls until the point we put the landing gear down to silence the alerts (yeah, and you have to remember to disconnect the autothrottles before they go into landing RETARD mode). These audio alerts are quite loud, distracting and compete with ATC radio audio, which really is a good thing if one forgets to drop the landing gear prior to landing. But what if the situation warrants the opposite? The need for silencing the landing gear warnings when appropriate.

I can understand if Cessna comes back with a response that they do not wish to make any changes to the system. OK, but a NOTE, CAUTION, or WARNING needs to be placed in the Gear Will Not Extend QHR, alerting the crew to the instances when the warnings will sound and possible audio mitigation strategies when this occurs. Also a note that the audio alerts will continue even after landing and engine shutdown.

I personally would like to see a Gear Audio Warning (CB) placed on one or both CB panels that could be pulled when directed by a checklist. I’m not asking for a switch or a silence button, because I don’t think it appropriate that a gear warning silencer should be that easy nor that convenient. A CB has that certain “don’t go there unless directed” kind of thought process, but it’s at least available when appropriately needed.

NOTE: I flew the Sovereign for 10 years prior to cross training into the Latitude, thus the above reference that both aircraft most likely share the same problem.

SYNOPSIS

C680A Captain reported receiving an unsafe gear indication and the subsequent audible warning system that kept blaring during approach was distracting and made communication with ATC difficult. The flight crew proceeded to divert and safely landed.