ALERT BULLETIN

AB 2025:3/3-1
2/26/2025
2185166

TO: Aspen Avionics

INFO: FAA (AVP-1, AVP-200, AFS-300, AFS-260, AFS-800, AFS-200, MKC-AEG, ANM -100, AIR-360), AMFA, AOPA, ASAP, ATSG, GAMA, IAM, IBT, ICASS, NBAA, NTSB, PAMA, TWU

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

SUBJ: Aspen EFD1000 Anomalies

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 following:

ASRS received a report from a Cessna 340 pilot describing issues with the Aspen EFD1000 electronic flight display unit that presented flight control challenges. Reporter stated the unit malfunctioned in cruise flight, resulting in an uncommanded bank and dive. Control was ultimately reestablished, but the reporter stated it was a very dangerous situation.

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 2185166	
DATE / TIME	
Date of Occurrence	202411
Local Time Of Day	1801 to 2400
PLACE	
Locale	ZZZ.TRACON
State	US
Altitude - MSL	10000
ENVIRONMENT	
Flight Conditions	IMC
Weather	Rain
AIRCRAFT / EQUIPMENT X	
ATC / Advisory - TRACON	ZZZ
Make Model Name	Cessna 340/340A
Operating Under FAR Part	91
COMPONENT 1	
Aircraft Component	Flight Dynamics Navigation and Safety
COMPONENT 2	
Aircraft Component	Autopilot
PERSON 1	
Function - Flight Crew	Single Pilot
ASRS Report Number	2185166
EVENTS	
Anomaly	Aircraft Equipment Problem - Critical
Anomaly	Inflight Event / Encounter - Loss Of Aircraft Control
Detector - Person	Flight Crew
Result - Flight Crew	Diverted
Result - Flight Crew	Overcame Equipment Problem
Result - Flight Crew	Regained Aircraft Control
NARRATIVE 1	

Upon entering cruise flight the aircraft's electronic flight display (Aspen EFD1000) malfunctioned, during which time the Autopilot made an unexpected 30 degree bank turn to the right and began to dive the airplane. The Autopilot disconnected after making such inputs. The Aspen EFD continued to provide unreliable information for the next 10 minutes, during which time the vacuum AI instruments became unreliable as well, resulting in multiple partial panel unusual attitudes being corrected with a steam gauge altimeter and DG. The situation was remedied with no loss of property or personnel, ultimately utilizing the resources on the ground from ATC to find an airfield with VFR weather.

From a pilot's standpoint, the unstable flight and unusual attitudes resulted from my failure to immediately correct the unexpected change introduced by the Autopilot. I am solely responsible for this failure. Extensive unusual attitude training during my primary flight training and subsequent type/recurrents saved my life.

While this emergency ultimately had a positive ending, it took every ounce of talent and training within the cockpit of the aircraft that night. This would not have been a fair fight for a low time instrument pilot. The Special Airworthiness Information Bulletin (SAIB) regarding Aspen, should be revisited and expanded.

SYNOPSIS

C340 pilot reported a failure of the electronic flight display system during cruise flight in IFR conditions that resulted in an in-flight upset. After correcting the upset by referencing backup instruments, the pilot was able to regain control and proceed to VFR weather where a safe landing was accomplished.