

12/18/2023

FOR YOUR INFORMATION

2023-209/3-13

2043754

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

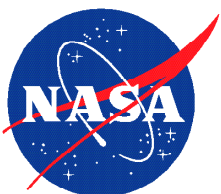
Info: FAA (AVP-1, AVP-200, AFS-260, AFS-800, AFS-200, AIR-360, AIR-780, MKC-AEG, ANM-100), AMFA, AOPA, ASAP, ATSG, GAMA, IAM, IBT, ICASS, NBAA, NTSB, PAMA, TWU

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

Re: Cessna 182 Autopilot Servo Anomaly

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 2043754

DATE / TIME

Date of Occurrence	202309
Local Time Of Day	1201 to 1800

PLACE

Locale	ZZZ.Airport
State	US
Altitude - AGL	1000

ENVIRONMENT

Flight Conditions	VMC
Weather	Turbulence

AIRCRAFT / EQUIPMENT X

Make Model Name	Skylane 182/RG Turbo Skylane/RG
Operating Under FAR Part	91

COMPONENT 1

Aircraft Component	Autopilot
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PERSON 1

Function - Flight Crew	Pilot Flying
Function - Flight Crew	Single Pilot
ASRS Report Number	2043754

EVENTS

Anomaly	Aircraft Equipment Problem - Critical
Detector - Person	Flight Crew
Result - General	Maintenance Action
Result - Flight Crew	Overcame Equipment Problem

NARRATIVE 1

I flew a short cross-country VFR flight on a bumpy warm afternoon. I engaged the auto-pilot and it seemed to operate properly. During descent I disengaged the auto-pilot, heard the auto-pilot disengagement alert sound and noticed that the yoke was difficult to turn to the left. In flight, I was focused on flying the landing pattern and attributed the steering difficulty to the current atmospheric conditions. I was able to wrestle the yoke and land safely. Upon subsequent pre-flight, I noticed that the yoke, when turned to the left, would seem to get hung up, such that you had to force the wheel to the left. I found a local A&P/IA at the airfield (ZZZ). He and I troubleshooted the problem and found that something inside the servo mechanism was broken. If you held the mechanism in your hand and turned it over, you could hear something rolling around on the inside... like a ball bearing or broken part. Upon removal of the servo, the controls moved freely (yoke + ailerons). The A&P/IA installed an overhauled, certified part from Company. We did not open the broken servo to see what had failed, since it was sealed with a certified inspection sticker (and because it would void my ability to get a credit for returning the 'core'). The part that failed is KS-271C, original equipment on my 1998 182S, recently purchased, with full annual inspection at the end of Month Year. So the part that failed was 25 years old. My concern is that this failure caused a potentially dangerous situation in which the primary flight controls are not fully operational.

SYNOPSIS

C-182 pilot reported flight controls were difficult to move in flight. After landing, ground inspection revealed autopilot servo malfunction.