

10/4/2021

**FOR YOUR INFORMATION**

2021-126/3-7

1827106

To: Fairchild Aircraft Services (Elbit Systems)  
Info: FAA (AVP-1, AVP-200, AFS-200, AFS-280, AFS-100, MKC-AEG, AIR-360, AFS-300, AFS-900), A4A, ALPA, ASAP, ATSG, CAPA, IAM, IBT, ICASS, IFALPA, IPA, NBAA, NTSB, PAMA, RAA, TWU  
From: Becky L. Hooey, Director  
NASA Aviation Safety Reporting System  
Re: SA-227 Pitch Trim Failure

We recently received an ASRS report 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](mailto:becky.l.hooey@nasa.gov).



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



## ACN 1827106

### DATE / TIME

|                    |              |
|--------------------|--------------|
| Date of Occurrence | 202107       |
| Local Time Of Day  | 0001 to 0600 |

### PLACE

|                |      |
|----------------|------|
| Altitude - MSL | 3000 |
|----------------|------|

### ENVIRONMENT

|                   |     |
|-------------------|-----|
| Flight Conditions | VMC |
|-------------------|-----|

### AIRCRAFT / EQUIPMENT X

|                          |                     |
|--------------------------|---------------------|
| Make Model Name          | SA-227 AC Metro III |
| Operating Under FAR Part | 135                 |

### COMPONENT 1

|                    |                      |
|--------------------|----------------------|
| Aircraft Component | Elevator Trim System |
|--------------------|----------------------|

### PERSON 1

|                        |              |
|------------------------|--------------|
| Function - Flight Crew | Captain      |
| Function - Flight Crew | Pilot Flying |
| Function - Flight Crew | Single Pilot |
| ASRS Report Number     | 1827106      |

### EVENTS

|                              |   |
|------------------------------|---|
| Anomaly                      | Aircraft Equipment Problem - Critical                                 |
| Anomaly                      | Deviation / Discrepancy - Procedural - Published<br>Material / Policy |
| Anomaly                      | Inflight Event / Encounter - Loss Of Aircraft Control                 |
| Detector - Person            | Flight Crew   |
| Result - General             | Flight Cancelled / Delayed  |
| Result - General             | Maintenance Action  |
| Result - Flight Crew         | Landed in Emergency Condition   |
| Result - Flight Crew         | Requested ATC Assistance / Clarification                              |
| Result - Flight Crew         | Returned To Departure Airport   |
| Result - Air Traffic Control | Provided Assistance   |

### NARRATIVE 1

When trying to level off at 3,000 ft. the trim became stuck. I proceeded to pull back power and even with doing that and being in an almost standing position with all my weight down the plane was continuing to climb I tried switching it to the opposite side trim using aux trim it was still stuck. I advised ATC. At this point my arms are starting to get tired I tried flipping the trim again to reset it. I get the trim back for maybe 20 seconds but then it freezes again at this point the plane is controllable enough to maintain altitude though I'm using a lot more muscle than usual I tell Control I need to go back to ZZZZ, ZZZZ1 airport is short and has a steep descent and ZZZZ2 is too far and I'm not sure my arms would hold out that long for the longer runway and more services. I run the QRH which reading the notes I bring flaps and gear in earlier to make the plane more controllable and land.

Trim motor bad.

Called Dispatch, Maintenance Control. Also filled out paperwork with ZZZZ airport and called their Tower.

I think memory items should include stuck trim, we have runaway but that checklist doesn't go over using flaps and gear to help you out and though once I had a second to think it made sense when you're using all your muscles to try and keep the plane from becoming uncontrollable you become very focused on just that aspect.

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## **SYNOPSIS**

SA-227 Captain reported a failed elevator trim system resulted in a return to the departure airport.