ALERT BULLETIN

AB 2019:8/3-5
5/10/2019
1597541

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

INFO: FAA (AVP-1, AVP-200, AFS-280, AFS-800, AFS-200, MKC-AEG, ANM-100, AQS-230), AMFA, AOPA, ASAP, ATSG, GAMA, IAM, IBT, ICASS, NBAA, NTSB, PAMA, TWU

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

SUBJ: C206 Rudder Cable 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 following:

ASRS received a report from a C206 pilot describing control difficulties shortly after takeoff that were later found to be related to failure of a rudder cable. Reporter stated the aircraft veered left after takeoff even with right rudder pedal fully depressed. Reporter further stated the aircraft was landed without incident and post-flight inspection revealed the right rudder cable had failed.

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 Dennis Doyle at (408) 541-2831 or email at dennis.j.doyle@nasa.gov

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

ACN: 1597541

Time
Date: 201811
Local Time Of Day: 0601-1200

Place
Locale Reference.Airport: ZZZ.Airport
State Reference: US

Environment
Flight Conditions: VMC

Aircraft 1
ATC / Advisory.Tower: ZZZ
Make Model Name: Cessna Stationair/Turbo Stationair 6

Component 1
Aircraft Component: Rudder Control System

Person 1
Function.Flight Crew: Pilot Flying
ASRS Report Number: 1597541

Events
Anomaly.Aircraft Equipment Problem: Critical
Anomaly.Inflight Event / Encounter: Loss Of Aircraft Control
Detector.Person: Flight Crew
Result.General: Maintenance Action
Result.Flight Crew: Overcame Equipment Problem
Result.Flight Crew: Took Evasive Action
Result.Flight Crew: Returned To Departure Airport
Result.Flight Crew: Regained Aircraft Control
Result.Air Traffic Control: Provided Assistance

Narrative 1
Rudder felt normal when it was moved by hand. A flight control check [was performed] before the autopilot was engaged and after the autopilot was disengaged [and] checked good during the "Before Takeoff Check" as well. The plane taxied normal with rudder controls to runway. Takeoff roll seemed normal, center line was maintained and there was no verbal cue to indicate an issue from the pilot flying. Upon rotation, the plane immediately yawed to the left. The [pilot] immediately gave controls to the [instructor] pilot. The [instructor] pilot received the flight controls with full right rudder already depressed and the plane was already veering off the left side of the runway with no ability to correct it. [Instructor] pilot continued the takeoff and began a climbing left turn to avoid obstacles. In the climb, the [instructor] pilot contacted Tower and told them "Aircraft X has lost flight controls," Tower confirmed what was said; [instructor] pilot advised that "Aircraft X would need time [to] figure things out." An emergency was never declared, but Tower gave priority. Tower suggested that once the plane was under control, RWY XXL was available. After two left circles, [instructor] pilot was able to regain some control and circle to RWY XXL to land. The plane was controllable with the rudders on the ground, and after inspection, it was found that the right rudder cable come in contact with the air conditioning system, arced/burnt, and broke.

Synopsis
C206 pilot reported a loss of control on takeoff due to failure of the rudder cable.