

Aviation Investigation Final Report

| Location: | Longmont, Colorado | Accident Number: | DEN02LA107 |
|-------------------------|--------------------------------------|----------------------|-------------|
| Date & Time: | September 7, 2002, 16:00 Local | Registration: | N4381V |
| Aircraft: | Cessna 195 | Aircraft Damage: | Substantial |
| Defining Event: | | Injuries: | 2 None |
| Flight Conducted Under: | Part 91: General aviation - Personal | | |

Analysis

As the airplane slowed following landing, the pilot attempted to turn right onto a taxiway using full right rudder. The airplane made a sudden 90 degree left turn, scraping the right wing tip, and came to a halt. Using differential braking, the pilot taxied back to the hangar. The tail wheel cables were found separated.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: separation of the tail wheel cables, resulting in a loss of directional control.

Findings

Occurrence #1: AIRFRAME/COMPONENT/SYSTEM FAILURE/MALFUNCTION Phase of Operation: LANDING - ROLL

Findings

1. (C) LANDING GEAR, STEERING SYSTEM - SEPARATION

2. (C) DIRECTIONAL CONTROL - NOT POSSIBLE - PILOT IN COMMAND

Factual Information

On September 7, 2002, at 1600 mountain daylight time, a Cessna 195, N4381V, registered to and operated by Colorado Aero Services LLC of Boulder, Colorado, was substantially damaged when the airplane ground looped during taxi at Vance Brand Airport (2V2), Longmont, Colorado. The commercial pilot and his passenger were not injured. Day visual meteorological conditions prevailed, and no flight plan had been filed for the local personal flight being conducted under Title 14 CFR Part 91. The flight originated at Greeley, Colorado, at 1530.

The pilot had flown to the Greeley-Weld County Airport earlier that day. After refueling, he returned to Longmont and landed on runway 29 without incident. He said that as the airplane slowed during rollout, he raised the flaps and unlocked the tail wheel and attempted to turn right on taxiway A2, using full right rudder. The airplane made a sudden 90 degree left turn, scraping the right wing tip, and came to a halt. Using differential braking, the pilot taxied back to his hangar.

On September 12, 2002, an FAA inspector inspected the airplane and found substantial damage to the outboard right wing spars, right wing tip, and horizontal stabilizer.

The pilot said that his insurance company adjuster found the tail wheel cables had separated.

| Certificate: | Commercial | Age: | 59,Male |
|---------------------------|--|-----------------------------------|--------------------|
| Airplane Rating(s): | Single-engine land | Seat Occupied: | Left |
| Other Aircraft Rating(s): | None | Restraint Used: | |
| Instrument Rating(s): | Airplane | Second Pilot Present: | |
| Instructor Rating(s): | None | Toxicology Performed: | No |
| Medical Certification: | Class 3 Valid Medicalw/ waivers/lim | Last FAA Medical Exam: | May 29, 2001 |
| Occupational Pilot: | UNK | Last Flight Review or Equivalent: | September 12, 2000 |
| Flight Time: | 708 hours (Total, all aircraft), 87 hours (Total, this make and model), 49 hours (Last 90 days, all aircraft), 27 hours (Last 30 days, all aircraft), 5 hours (Last 24 hours, all aircraft) | | |

Pilot Information

Aircraft and Owner/Operator Information

| Aircraft Make: | Cessna | Registration: | N4381V |
|----------------------------------|------------------------------|-----------------------------------|-----------------|
| Model/Series: | 195 | Aircraft Category: | Airplane |
| Year of Manufacture: | | Amateur Built: | |
| Airworthiness Certificate: | Normal | Serial Number: | 7303 |
| Landing Gear Type: | Tailwheel | Seats: | 4 |
| Date/Type of Last Inspection: | October 2, 2001 Annual | Certified Max Gross Wt.: | 3350 lbs |
| Time Since Last Inspection: | 53 Hrs | Engines: | 1 Reciprocating |
| Airframe Total Time: | 4458 Hrs at time of accident | Engine Manufacturer: | Jacobs |
| ELT: | Installed, not activated | Engine Model/Series: | R-755-S |
| Registered Owner: | Colorado Aero Services LLC | Rated Power: | 330 Horsepower |
| Operator: | | Operating Certificate(s) Held: | None |

Meteorological Information and Flight Plan

| Conditions at Accident Site: | Visual (VMC) | Condition of Light: | Day |
|----------------------------------|----------------------------------|---|-------------------|
| Observation Facility, Elevation: | BJC,5670 ft msl | Distance from Accident Site: | 23 Nautical Miles |
| Observation Time: | 15:46 Local | Direction from Accident Site: | 160° |
| Lowest Cloud Condition: | Scattered / 80 ft AGL | Visibility | 50 miles |
| Lowest Ceiling: | Broken / 200 ft AGL | Visibility (RVR): | |
| Wind Speed/Gusts: | 12 knots / | Turbulence Type Forecast/Actual: | / |
| Wind Direction: | 310° | Turbulence Severity Forecast/Actual: | / |
| Altimeter Setting: | 30.14 inches Hg | Temperature/Dew Point: | 30°C / 11°C |
| Precipitation and Obscuration: | No Obscuration; No Precipitation | | |
| Departure Point: | Greeley, CO (GXY) | Type of Flight Plan Filed: | None |
| Destination: | Longmont, CO (2V2) | Type of Clearance: | None |
| Departure Time: | 15:30 Local | Type of Airspace: | Class G |

Airport Information

| Airport: | Vance Brand 2V2 | Runway Surface Type: | Concrete |
|----------------------|-----------------|---------------------------|-----------|
| Airport Elevation: | 5052 ft msl | Runway Surface Condition: | Dry |
| Runway Used: | 29 | IFR Approach: | None |
| Runway Length/Width: | 4800 ft / 75 ft | VFR Approach/Landing: | Full stop |

Wreckage and Impact Information

| Crew Injuries: | 1 None | Aircraft Damage: | Substantial |
|------------------------|--------|-------------------------|-----------------------|
| Passenger Injuries: | 1 None | Aircraft Fire: | None |
| Ground Injuries: | N/A | Aircraft Explosion: | None |
| Total Injuries: | 2 None | Latitude, Longitude: | 40.163612,-105.163055 |

Administrative Information

| Investigator In Charge (IIC): | Scott, Arnold |
|--------------------------------------|--|
| Additional Participating Persons: | Mark A Schofield; FAA Flight Standards District Office; Denver, CO |
| Original Publish Date: | April 1, 2003 |
| Last Revision Date: | |
| Investigation Class: | <u>Class</u> |
| Note: | |
| Investigation Docket: | https://data.ntsb.gov/Docket?ProjectID=55730 |

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The NTSB does not assign fault or blame for an accident or incident; rather, as specified by NTSB regulation, "accident/incident investigations are fact-finding proceedings with no formal issues and no adverse parties ... and are not conducted for the purpose of determining the rights or liabilities of any person" (Title 49 *Code of Federal Regulations* section 831.4). Assignment of fault or legal liability is not relevant to the NTSB's statutory mission to improve transportation safety by investigating accidents and incidents and issuing safety recommendations. In addition, statutory language prohibits the admission into evidence or use of any part of an NTSB report related to an accident in a civil action for damages resulting from a matter mentioned in the report (Title 49 *United States Code* section 1154(b)). A factual report that may be admissible under 49 *United States Code* section 1154(b) is available <u>here</u>.