



National Transportation Safety Board Aviation Accident Final Report

Location:	Riverside, CA	Accident Number:	LAX04LA199
Date & Time:	05/01/2004, 0955 PDT	Registration:	N195AF
Aircraft:	Cessna 195	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 None
Flight Conducted Under:	Part 91: General Aviation - Personal		

Analysis

The airplane veered off the runway and impacted a ditch during the landing roll. The pilot had completed 10 three-point practice touch-and-go takeoff and landings without mishap, and was attempting his last landing of the day. During the landing roll, the airplane drifted off the centerline to the right. The pilot attempted to counteract the drift by applying left rudder pressure. The airplane continued to veer in a right arc off the side of the runway and encountered a ditch. The airplane impacted terrain, pushing the engine into the firewall and forcing the cockpit floor upward. The pilot reported no mechanical malfunctions with the airplane prior to impact. Later, the pilot stated that the factors that he thought contributed to the accident were a quartering right tailwind, lack of left tail wheel steering, impeded rudder control, pilot error/lack of experience for not attempting to steer via the use of differential braking, and the presence of a ditch in close proximity to the runway. He reported that there was a 4-knot right quartering tailwind from 070 degrees. A Federal Aviation Administration inspector examined the airplane and found no evidence of a malfunction or failure with the brake, control, or ground steering systems. The accident flight was the pilot's first solo flight in the make and model, although he had previously accumulated about 140 hours in the same make and model.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: the pilot's failure to maintain directional control, resulting in a veer off the runway and collision with terrain.

Findings

Occurrence #1: LOSS OF CONTROL - ON GROUND/WATER
Phase of Operation: LANDING - ROLL

Findings

1. (C) DIRECTIONAL CONTROL - NOT MAINTAINED - PILOT IN COMMAND
2. GROUND LOOP/SWERVE - ENCOUNTERED - PILOT IN COMMAND

Occurrence #2: ON GROUND/WATER ENCOUNTER WITH TERRAIN/WATER
Phase of Operation: LANDING - ROLL

Findings

3. TERRAIN CONDITION - DITCH

Factual Information

On May 1, 2004, about 0955 Pacific daylight time, a Cessna 195, N195AF, veered off the runway and impacted a ditch during the landing roll at the Riverside Municipal Airport, Riverside, California. The pilot was operating the airplane under the provisions of 14 CFR Part 91. The private pilot, the sole occupant, was not injured; the airplane sustained substantial damage. The local flight departed Riverside about 0745. Visual meteorological conditions prevailed, and a flight plan had not been filed.

During a telephone interview with the National Transportation Safety Board investigator-in-charge (IIC), the pilot stated he was executing practice touch-and-go takeoffs and landings on runway 27 [100 feet wide]. He had completed 10 three-point landings without mishap, and was attempting his last landing of the day. During the landing roll out, the airplane drifted off the centerline to the right. The pilot attempted to counteract the drift by applying left rudder pressure. The airplane continued to veer in a right arc off the side of the runway and encountered a ditch. The airplane impacted terrain, pushing the engine into the firewall and forcing the cockpit floor upward. The pilot reported no mechanical malfunctions with the airplane prior to impact.

In a written statement, the pilot reported that he thought there could have possibly be a problem with the right brake and/or tail wheel. He disassembled and examined the right brake and tail wheel, finding no evidence of mechanical malfunction of the brake and locking tail wheel assembly. He did find that, with the tail wheel strut oleo in the midrange position, the steering cables appeared to be misadjusted. He thought that the cable used to turn the tail wheel to the right was the proper length and tension, but the cable used to turn the tail wheel left was loose, and hanging with excess slack. He also noted that the rudder control was impeded in traveling left, due to a tab on the tail cone fairing being bent upward. He did not notice this impediment in flight and stated that the airplane turned to the left normally.

The pilot further stated that the factors that he thought contributed to the accident were a quartering right tailwind, lack of left tail wheel steering, impeded rudder control, pilot error/lack of experience for not attempting to steer via the use of differential braking, and the presence of a ditch in close proximity to the runway. He reported that there was a 4-knot right quartering tailwind from 070 degrees.

A Federal Aviation Administration (FAA) inspector examined the airplane after the accident occurred. He stated that he found no evidence of preexisting mechanical malfunction or anomaly. He noted that the brakes and tires were in good condition, with no evidence of excessive wear or bald spots. He reported that this was the pilot's first solo flight in the make and model, although he had previously accumulated about 140 hours in the same make and model.

Pilot Information

Certificate:	Private	Age:	39, Male
Airplane Rating(s):	Single-engine Land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 Valid Medical--w/ waivers/lim.	Last FAA Medical Exam:	07/24/2003
Occupational Pilot:		Last Flight Review or Equivalent:	09/17/2003
Flight Time:	195 hours (Total, all aircraft), 143 hours (Total, this make and model), 17 hours (Last 90 days, all aircraft), 3 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N195AF
Model/Series:	195	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	7651
Landing Gear Type:	Tailwheel	Seats:	5
Date/Type of Last Inspection:	12/01/2003, Annual	Certified Max Gross Wt.:	3350 lbs
Time Since Last Inspection:	4 Hours	Engines:	1 Reciprocating
Airframe Total Time:	4800 Hours as of last inspection	Engine Manufacturer:	Jacobs
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	R755-B2
Registered Owner:	Tandem Flight LLC	Rated Power:	275 hp
Operator:	Frederick W. Murdock III	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	RAL, 818 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	0953 PDT	Direction from Accident Site:	0°
Lowest Cloud Condition:	Clear	Visibility	10 Miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	4 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	300°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.07 inches Hg	Temperature/Dew Point:	28° C / 5° C
Precipitation and Obscuration:			
Departure Point:	Riverside, CA (RAL)	Type of Flight Plan Filed:	None
Destination:	Riverside, CA (RAL)	Type of Clearance:	VFR
Departure Time:	0745 PDT	Type of Airspace:	Class D

Airport Information

Airport:	Riverside Municipal Airport (KRAL)	Runway Surface Type:	Asphalt
Airport Elevation:	818 ft	Runway Surface Condition:	Dry
Runway Used:	27	IFR Approach:	None
Runway Length/Width:	5401 ft / 100 ft	VFR Approach/Landing:	Full Stop; Traffic Pattern

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	33.951667, -117.445000

Administrative Information

Investigator In Charge (IIC):	Jeff Rich	Report Date:	04/28/2005
Additional Participating Persons:	Eric Jackson; Federal Aviation Administration; Riverside, CA		
Publish Date:			
Investigation Docket:	NTSB accident and incident dockets serve as permanent archival information for the NTSB's investigations. Dockets released prior to June 1, 2009 are publicly available from the NTSB's Record Management Division at pubinq@ntsb.gov , or at 800-877-6799. Dockets released after this date are available at http://dms.nts.gov/pubdms/ .		

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