



Aviation Investigation Final Report

Location: South Lake Tahoe, California Accident Number: GAA16CA465

Date & Time: September 5, 2016, 13:30 Local Registration: N738GK

Aircraft: Cessna TR182 Aircraft Damage: Substantial

Defining Event: Loss of control on ground **Injuries:** 2 None

Flight Conducted Under: Part 91: General aviation - Personal

Analysis

The pilot reported that during landing the airplane floated half way down the runway, so she decided to perform a go-around. During the go-around, the pilot reported that airplane would not climb initially and one wheel touched down on the runway, which "threw the airplane off kilter." Subsequently, the airplane did start to climb, but the flight path was over the grass to the right of the runway, so she forced the airplane down in the grass ahead. During the touchdown, the nose gear collapsed and the airplane nosed over.

During a postaccident interview with the National Transportation Safety Board investigator-in-charge, the pilot reported that during the go-around, she retracted the flaps to 20 degrees, but she forgot to remove the carburetor heat because she normally flies fuel-injected airplanes.

The fuselage, both wings, and vertical stabilizer sustained substantial damage.

The pilot reported no preaccident mechanical malfunctions or failures with the airplane that would have precluded normal operation.

The pilot's operating handbook for the accident airplane states in part:

Balked Landing

- 1. Power FULL THROTTLE and 2400 RPM [revolutions per minute].
- 2. Carburetor Heat COLD.
- 3. Wing Flaps RETRACT to 20 degrees.
- 4. Climb Speed 75 KIAS [knots indicated airspeed].
- 5. Wing Flaps RETRACT slowly after reach 75 KIAS.
- 6. Cowl Flaps OPEN.

About the time of the accident, at the accident airport, an automated weather observing system reported the wind to be variable at 6 knots, a temperature of 66 degrees Fahrenheit(19 Celsius), and a dew point

of 26 degrees Fahrenheit (-3 Celsius). The airport's elevation was 6,268 feet above mean sea level (MSL) and the density altitude was 8,108 feet above MSL.

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 during an attempted go-around, which resulted in a runway excursion and a nose over. Contributing to the accident was the pilot's failure to remove the carburetor heat during the attempted go-around in high density altitude conditions.

Findings

Aircraft Directional control - Not attained/maintained

Personnel issues Aircraft control - Pilot

Personnel issues Forgotten action/omission - Pilot

Environmental issues High density altitude - Effect on equipment

Air intake - Incorrect use/operation

Environmental issues (general) - Contributed to outcome

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Factual Information

History of Flight

Landing area overshoot
Loss of lift
Loss of control on ground (Defining event)
Runway excursion
Nose over/nose down
Collision with terr/obj (non-CFIT)

Pilot Information

Certificate:	Private	Age:	50,Female
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	3-point
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 2 Without waivers/limitations	Last FAA Medical Exam:	September 23, 2014
Occupational Pilot:	No	Last Flight Review or Equivalent:	December 23, 2015
Flight Time:	(Estimated) 245 hours (Total, all aircraft), 22 hours (Total, this make and model), 118 hours (Pilot In Command, all aircraft), 31 hours (Last 90 days, all aircraft), 2 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Passenger Information

Certificate:		Age:	Male
Airplane Rating(s):		Seat Occupied:	Right
Other Aircraft Rating(s):		Restraint Used:	3-point
Instrument Rating(s):		Second Pilot Present:	No
Instructor Rating(s):		Toxicology Performed:	No
Medical Certification:		Last FAA Medical Exam:	
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:			

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Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N738GK
Model/Series:	TR182	Aircraft Category:	Airplane
Year of Manufacture:	1979	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	R18200925
Landing Gear Type:	Retractable - Tricycle	Seats:	4
Date/Type of Last Inspection:	July 22, 2016 100 hour	Certified Max Gross Wt.:	3100 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	4486.8 Hrs at time of accident	Engine Manufacturer:	Lycoming
ELT:	Installed	Engine Model/Series:	O-540-J3C5D
Registered Owner:	UNIQUE EQUIPMENT LEASING LLC	Rated Power:	235 Horsepower
Operator:	West Air Aviation	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	KTVL,6268 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	20:53 Local	Direction from Accident Site:	0°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	6 knots /	Turbulence Type Forecast/Actual:	/ None
Wind Direction:		Turbulence Severity Forecast/Actual:	/ N/A
Altimeter Setting:	30.01 inches Hg	Temperature/Dew Point:	19°C / -3°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	BISHOP, CA (BIH)	Type of Flight Plan Filed:	None
Destination:	South Lake Tahoe, CA (TVL)	Type of Clearance:	None
Departure Time:	11:35 Local	Type of Airspace:	Class E

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Airport Information

Airport:	LAKE TAHOE TVL	Runway Surface Type:	Asphalt
Airport Elevation:	6268 ft msl	Runway Surface Condition:	Dry
Runway Used:	18	IFR Approach:	None
Runway Length/Width:	8541 ft / 100 ft	VFR Approach/Landing:	Go around;Traffic pattern

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:	38.898612,-119.993888(est)

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Administrative Information

Investigator In Charge (IIC):	Gerhardt, Adam
Additional Participating Persons:	Aaron Southerland; FAA; Reno, NV
Original Publish Date:	December 5, 2016
Last Revision Date:	
Investigation Class:	<u>Class</u>
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=93954

The National Transportation Safety Board (NTSB) is an independent federal agency charged by Congress with investigating every civil aviation accident in the United States and significant events in other modes of transportation—railroad, transit, highway, marine, pipeline, and commercial space. We determine the probable causes of the accidents and events we investigate, and issue safety recommendations aimed at preventing future occurrences. In addition, we conduct transportation safety research studies and offer information and other assistance to family members and survivors for each accident or event we investigate. We also serve as the appellate authority for enforcement actions involving aviation and mariner certificates issued by the Federal Aviation Administration (FAA) and US Coast Guard, and we adjudicate appeals of civil penalty actions taken by the FAA.

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 here.

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