



Aviation Investigation Final Report

Location:	Tucson, Arizona	Accident Number:	LAX01LA138
Date & Time:	April 3, 2001, 09:30 Local	Registration:	N21394
Aircraft:	Cessna 180	Aircraft Damage:	Substantial
Defining Event:		Injuries:	3 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The single-engine airplane impacted brush and trees during takeoff from a 850-foot-long private airstrip. The private pilot stated he noticed a momentary loss of engine power shortly after takeoff power was applied. The engine power returned for the remainder of the takeoff roll; however, since the aircraft lost some acceleration at the beginning of the takeoff, the "remainder of the field was required to obtain flying speed." The airplane started to climb, but the airplane's tail impacted a bush at the end of the airstrip and "slowed the aircraft to stall speed." The pilot attempted not to stall the airplane before it impacted two trees. The engine was test run at the salvage facility following the accident. The engine ran through various power settings, including maximum power, with no anomalies noted.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: the pilot's failure to attain and maintain a sufficient airspeed, which resulted in an inadvertent stall/mush.

Findings

Occurrence #1: LOSS OF CONTROL - IN FLIGHT
Phase of Operation: TAKEOFF - INITIAL CLIMB

Findings

1. (C) AIRSPEED - NOT OBTAINED/MAINTAINED - PILOT IN COMMAND

2. (C) STALL/MUSH - INADVERTENT - PILOT IN COMMAND

Occurrence #2: IN FLIGHT COLLISION WITH OBJECT

Phase of Operation: DESCENT - UNCONTROLLED

Findings

3. OBJECT - TREE(S)

Factual Information

On April 3, 2001, at 0930 mountain standard time, a Cessna 180 single-engine airplane, N21394, sustained substantial damage when it collided with bushes and trees on departure from the Palo Verde Ranch private airport, Tucson, Arizona. The airplane was registered to and operated by the pilot under the provisions of 14 CFR Part 91 as a personal flight. The private pilot and two passengers were not injured. Visual metrological conditions prevailed and no flight plan had been filed for the local flight, which was originating at the time of the accident.

According to the pilot's written statement, he was departing to the west on the 850-foot-long private airstrip. The pilot reported he applied and obtained full engine power at the start of the takeoff roll. Shortly thereafter, he noticed "a momentary uncommanded decrease of thrust." The engine power returned for the remainder of the takeoff roll; however, since the aircraft lost some acceleration at the beginning of the takeoff, the "remainder of the field was required to obtain flying speed." The airplane started to climb, but the airplane's tail impacted a bush at the end of the airstrip and "slowed the aircraft to stall speed." The pilot attempted not to stall the airplane and flew the airplane in level flight for 200 - 300 feet. The airplane then impacted two trees.

The airplane impacted the first tree with the landing gear and fuselage. The airplane's left wing contacted the second tree, and the airplane spun around 180 degrees. The airplane impacted the ground tail first before coming to rest.

The engine was test run at the salvage facility following the accident. The engine ran through various power settings, including maximum power, with no anomalies noted.

Pilot Information

Certificate:	Flight engineer; Private	Age:	41, Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	July 25, 2000
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	May 11, 1999
Flight Time:	697 hours (Total, all aircraft), 613 hours (Total, this make and model), 625 hours (Pilot In Command, all aircraft), 5 hours (Last 90 days, all aircraft), 4 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N21394
Model/Series:	180	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	18050728
Landing Gear Type:	Tailwheel	Seats:	4
Date/Type of Last Inspection:	June 23, 2000 Annual	Certified Max Gross Wt.:	2650 lbs
Time Since Last Inspection:	30 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	4832 Hrs at time of accident	Engine Manufacturer:	Continental
ELT:	Installed, not activated	Engine Model/Series:	O-470-L
Registered Owner:	Dino Cocchi	Rated Power:	230 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:	TUS,2643 ft msl	Distance from Accident Site:	19 Nautical Miles
Observation Time:	09:55 Local	Direction from Accident Site:	165°
Lowest Cloud Condition:	Few / 800 ft AGL	Visibility	10 miles
Lowest Ceiling:	Broken / 800 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	12 knots / 20 knots	Turbulence Type Forecast/Actual:	/
Wind Direction:	180°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.88 inches Hg	Temperature/Dew Point:	22°C / 5°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Tucson, AZ (N/A)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	08:40 Local	Type of Airspace:	Class G

Airport Information

Airport:	Palo Verde Ranch N/A	Runway Surface Type:	Dirt
Airport Elevation:	3200 ft msl	Runway Surface Condition:	Dry
Runway Used:	26	IFR Approach:	None
Runway Length/Width:	850 ft / 50 ft	VFR Approach/Landing:	None

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	2 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	3 None	Latitude, Longitude:	32.5,-110.916664

Administrative Information

Investigator In Charge (IIC):	Baily, Frank
Additional Participating Persons:	Jim Guthrie; Federal Aviation Administration; Scottsdale, AZ
Original Publish Date:	November 25, 2003
Last Revision Date:	
Investigation Class:	Class
Note:	The NTSB traveled to the scene of this accident.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=52021

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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 [here](#).