



Aviation Investigation Final Report

Location:	San Martin, California	Accident Number:	GAA17CA367
Date & Time:	June 24, 2017, 17:15 Local	Registration:	N524BF
Aircraft:	Cessna 182	Aircraft Damage:	Substantial
Defining Event:	Fuel starvation	Injuries:	1 Minor
Flight Conducted Under:	Part 91: General aviation - Skydiving		

Analysis

The pilot reported that he departed for a parachute jump flight with 12 gallons of fuel onboard. He added that, after the parachute jumpers exited the airplane about 10,500 ft mean sea level (msl), he initiated a left spiraling descent back to the airport. He further added that he "heard and felt the engine start [to] quiet down as if it was shutting down." He then began to make right descending turns and verified that the fuel selector was in the "both" position. He added that the cylinder head temperature was decreasing, so he switched back to left descending turns and that the "fuel starvation due to banking happened two more times."

The pilot reported that he entered left downwind about 4,000 ft msl, pushed the throttle and mixture controls full forward, and determined that the "engine wasn't producing much power." He added that, during short final, he realized the airplane was too low, so he landed the airplane on a highway "on-ramp." During the forced landing, the airplane impacted a guard rail and a post.

The airplane sustained substantial damage to the fuselage and both wings.

The pilot reported that he "suspected engine power loss due to fuel exhaustion."

During a postaccident examination, the Federal Aviation Administration inspector drained about 12 gallons of fuel from both wing tanks and the gascolator. In the Description section of the Cessna 182A Owner's Manual, it states that there are 1.5 gallons of unusable fuel per fuel tank (3 gallons) and that, when not in level flight, there are an additional 3.5 gallons of unusable fuel per fuel tank (10 gallons).

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 a proper glidepath on approach for landing, which resulted in an impact with a guard rail and post. Contributing to the accident was the pilot's failure to ensure that sufficient fuel was onboard for nonlevel flight, which resulted in fuel starvation.

Findings

Personnel issues	Aircraft control - Pilot
Aircraft	Descent/approach/glide path - Attain/maintain not possible
Aircraft	Fuel - Fluid level
Personnel issues	Fuel planning - Pilot
Environmental issues	Fence/fence post - Contributed to outcome

Factual Information

History of Flight

Enroute-descent	Fuel starvation (Defining event)
Emergency descent	Landing area undershoot
Emergency descent	Collision with terr/obj (non-CFIT)

Pilot Information

Certificate:	Commercial	Age:	30, Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Single
Other Aircraft Rating(s):	None	Restraint Used:	Lap only
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 1 With waivers/limitations	Last FAA Medical Exam:	April 4, 2017
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	February 14, 2017
Flight Time:	(Estimated) 434 hours (Total, all aircraft), 78 hours (Total, this make and model), 334 hours (Pilot In Command, all aircraft), 78 hours (Last 90 days, all aircraft), 38 hours (Last 30 days, all aircraft), 3 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N524BF
Model/Series:	182 A	Aircraft Category:	Airplane
Year of Manufacture:	1957	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	34331
Landing Gear Type:	Tricycle	Seats:	1
Date/Type of Last Inspection:	Unknown	Certified Max Gross Wt.:	2950 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	CONT MOTOR
ELT:	Installed	Engine Model/Series:	O-470 SERIES
Registered Owner:	THINKING CAP AVIATION LLC	Rated Power:	230 Horsepower
Operator:	San Jose Skydiving Center	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	KE16,283 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	00:15 Local	Direction from Accident Site:	162°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	6 knots / None	Turbulence Type Forecast/Actual:	/ None
Wind Direction:	150°	Turbulence Severity Forecast/Actual:	/ N/A
Altimeter Setting:	29.92 inches Hg	Temperature/Dew Point:	25°C / 15°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	SAN MARTIN, CA (E16)	Type of Flight Plan Filed:	None
Destination:	San Martin, CA (E16)	Type of Clearance:	VFR
Departure Time:	16:45 Local	Type of Airspace:	Class G

Airport Information

Airport:	SAN MARTIN E16	Runway Surface Type:	Concrete
Airport Elevation:	283 ft msl	Runway Surface Condition:	Dry
Runway Used:		IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	Forced landing;Traffic pattern

Wreckage and Impact Information

Crew Injuries:	1 Minor	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Minor	Latitude, Longitude:	37.087223,-121.599166(est)

Administrative Information

Investigator In Charge (IIC):	Benhoff, Kathryn
Additional Participating Persons:	Wilbert J Robinson; FAA; San Jose, CA
Original Publish Date:	September 7, 2017
Last Revision Date:	
Investigation Class:	Class
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=95440

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