



Aviation Investigation Final Report

Location:	Manchester, California	Accident Number:	GAA17CA230
Date & Time:	April 12, 2017, 10:51 Local	Registration:	N7945V
Aircraft:	Cessna 180	Aircraft Damage:	Substantial
Defining Event:	Fuel exhaustion	Injuries:	1 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot reported that, during cruise flight, the engine "quit" while at 1,500 ft above ground level. He added that he landed the airplane in a large, flat pasture, but during the landing, the airplane nosed over. The airplane sustained substantial damage to the tail and wings.

In a telephone conversation with the recovery specialist, the pilot reported that the fuel tanks had not been breached during the landing, and he recovered 1.5 gallons of fuel from the right fuel tank and 2.5 gallons of fuel from the left fuel tank.

The airplane was equipped with an engine monitoring unit. About 1 hour 13 minutes of data were recorded during the accident flight. The data showed a sudden decrease in exhaust gas temperatures and cylinder head temperatures for all cylinders about the same time. For further information, see the JPI Engine Monitoring Unit data plot in the public docket for this accident.

The 1967 Cessna 180 Owner's Manual states, in part:

"2.5 gallons [in] each tank [is] unusable in normal flight maneuvers."

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be:

The pilot's improper preflight fuel planning, which resulted in fuel exhaustion and the total loss of engine power.

Findings

Aircraft	Fuel - Fluid level
Personnel issues	Fuel planning - Pilot
Environmental issues	(general) - Effect on operation
Environmental issues	(general) - Contributed to outcome

Factual Information

History of Flight

Enroute-cruise	Fuel exhaustion (Defining event)
Enroute-cruise	Loss of engine power (total)
Landing	Nose over/nose down

Pilot Information

Certificate:	Private	Age:	60, Male
Airplane Rating(s):	Single-engine land; Single-engine sea	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 3 Without waivers/limitations	Last FAA Medical Exam:	May 27, 2016
Occupational Pilot:	No	Last Flight Review or Equivalent:	June 26, 2016
Flight Time:	(Estimated) 1332.5 hours (Total, all aircraft), 602.7 hours (Total, this make and model), 1332.5 hours (Pilot In Command, all aircraft), 18 hours (Last 90 days, all aircraft), 18 hours (Last 30 days, all aircraft), 6 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N7945V
Model/Series:	180 H	Aircraft Category:	Airplane
Year of Manufacture:	1967	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	18051845
Landing Gear Type:	Retractable - Tailwheel	Seats:	2
Date/Type of Last Inspection:	February 13, 2017 Continuous airworthiness	Certified Max Gross Wt.:	2950 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	5144.59 Hrs at time of accident	Engine Manufacturer:	Continental
ELT:	C91 installed, not activated	Engine Model/Series:	O-470-50
Registered Owner:	On file	Rated Power:	235 Horsepower
Operator:	On file	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	89Q,59 ft msl	Distance from Accident Site:	2 Nautical Miles
Observation Time:	14:41 Local	Direction from Accident Site:	218°
Lowest Cloud Condition:		Visibility	10 miles
Lowest Ceiling:	Overcast / 10000 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	5 knots /	Turbulence Type Forecast/Actual:	/ None
Wind Direction:	340°	Turbulence Severity Forecast/Actual:	/ N/A
Altimeter Setting:	30.21 inches Hg	Temperature/Dew Point:	20°C / 12°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	EUREKA, CA (EKA)	Type of Flight Plan Filed:	None
Destination:	PETALUMA, CA (069)	Type of Clearance:	VFR flight following
Departure Time:	08:21 Local	Type of Airspace:	Class G

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	38.973609,-123.708885(est)

Administrative Information

Investigator In Charge (IIC):	Vanover, Jackie
Additional Participating Persons:	Jon A Prater; FAA; Oakland, CA Mike Council; Continental Motors; Mobile , AL
Original Publish Date:	October 31, 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=94999

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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](#).