



Aviation Investigation Final Report

Location:	Prescott, Arizona	Accident Number:	GAA18CA312
Date & Time:	May 29, 2018, 21:15 Local	Registration:	N148ME
Aircraft:	Piper PA 46	Aircraft Damage:	Substantial
Defining Event:	Fuel exhaustion	Injuries:	3 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

According to the pilot, about 15 minutes before reaching the destination airport during descent, the engine lost power. The pilot switched fuel tanks, and the engine power was momentarily restored, but the engine stopped producing power even though he thought it "was still running all the way to impact." The pilot conducted a forced landed on a highway at night, and the right wing struck an object and separated from the airplane. The airplane came to rest inverted.

According to the Federal Aviation Administration (FAA) aviation safety inspector (ASI) that performed the postaccident airplane examination, the fuel lines to the fuel manifold were dry, and the fuel manifold valves were dry. He reported that the fuel strainer, the diaphragm, and the fuel filter in the fuel manifold were unremarkable. Fuel was found in the gascolator.

The FAA ASI reported that, during his interview with the pilot, "the pilot changed his story from fuel exhaustion, to fuel contamination." The inspector reported that there were no signs of fuel contamination during the examination of the fuel system.

According to the fixed-base operator (FBO) at the departure airport, the pilot requested 20 gallons of fuel. He then canceled his fuel request and walked out of the FBO.

Probable Cause and Findings

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

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

Findings

Personnel issues	Fuel planning - Pilot
Aircraft	Fuel - Fluid level

Factual Information

History of Flight

Enroute-descent	Fuel exhaustion (Defining event)
Enroute-descent	Loss of engine power (total)
Enroute-descent	Attempted remediation/recovery
Landing	Collision with terr/obj (non-CFIT)
Landing	Part(s) separation from AC
Landing	Roll over

Pilot Information

Certificate:	Airline transport; Private	Age:	34,Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	3-point
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 1 None	Last FAA Medical Exam:	January 5, 2018
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	March 27, 2018
Flight Time:	(Estimated) 3100 hours (Total, all aircraft), 3 hours (Total, this make and model), 2000 hours (Pilot In Command, all aircraft), 60 hours (Last 90 days, all aircraft), 22 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Piper	Registration:	N148ME
Model/Series:	PA 46	Aircraft Category:	Airplane
Year of Manufacture:	1986	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	46-8608009
Landing Gear Type:	Retractable - Tricycle	Seats:	6
Date/Type of Last Inspection:	Annual	Certified Max Gross Wt.:	4118 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	Continental
ELT:	Installed	Engine Model/Series:	TSIO-520
Registered Owner:		Rated Power:	0 Horsepower
Operator:		Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Night
Observation Facility, Elevation:	KPRC, 5052 ft msl	Distance from Accident Site:	20 Nautical Miles
Observation Time:	04:53 Local	Direction from Accident Site:	341°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	7 knots /	Turbulence Type Forecast/Actual:	/ None
Wind Direction:	210°	Turbulence Severity Forecast/Actual:	/ N/A
Altimeter Setting:	29.95 inches Hg	Temperature/Dew Point:	22°C / -2°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	SANTA ANA, CA (SNA)	Type of Flight Plan Filed:	IFR
Destination:	PRESCOTT, AZ (PRC)	Type of Clearance:	VFR; IFR; VFR on top
Departure Time:	19:40 Local	Type of Airspace:	Class D

Airport Information

Airport:	Ernest A Love Field PRC	Runway Surface Type:	Asphalt;Concrete
Airport Elevation:	5045 ft msl	Runway Surface Condition:	Dry
Runway Used:		IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	Forced landing

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:	34.340557,-112.294166(est)

Administrative Information

Investigator In Charge (IIC):	Hicks, Michael
Additional Participating Persons:	Michael G Moyer; FAA; Prescott, AZ
Original Publish Date:	March 18, 2019
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=97366

The National Transportation Safety Board (NTSB), established in 1967, is an independent federal agency mandated by Congress through the Independent Safety Board Act of 1974 to investigate transportation accidents, determine the probable causes of the accidents, issue safety recommendations, study transportation safety issues, and evaluate the safety effectiveness of government agencies involved in transportation. The NTSB makes public its actions and decisions through accident reports, safety studies, special investigation reports, safety recommendations, and statistical reviews.

The Independent Safety Board Act, as codified at 49 U.S.C. Section 1154(b), precludes the admission into evidence or use of any part of an NTSB report related to an incident or accident in a civil action for damages resulting from a matter mentioned in the report. A factual report that may be admissible under 49 U.S.C. § 1154(b) is available [here](#).