



National Transportation Safety Board Aviation Accident Factual Report

Location:	Cuba, NM	Accident Number:	CEN16LA349
Date & Time:	09/04/2016, 0435 MDT	Registration:	N9241J
Aircraft:	PIPER PA 28-180	Aircraft Damage:	Substantial
Defining Event:	Loss of engine power (partial)	Injuries:	2 None
Flight Conducted Under:	Part 91: General Aviation - Personal		

On September 4, 2016, about 0435 mountain daylight time, a Piper PA 28-180 airplane, N9241J, impacted ground obstacles and nosed over during a forced landing following a partial loss of engine power near Cuba, New Mexico. The pilot and his passenger reported no injuries. The airplane was substantially damaged during the nose over. The airplane was registered to an individual and was operated by the pilot under the provisions of 14 Code of Federal Regulations Part 91 as a personal flight. Night visual meteorological conditions prevailed along the route of flight and the flight did not operate on a flight plan. The flight originated from the Levelland Municipal Airport (LLN), near Levelland, Texas, about 0235 central daylight time, and was destined for the Four Corners Regional Airport (FMN), near Farmington, New Mexico.

The flight landed at LLN to obtain fuel and subsequently departed for FMN. About an hour after departing LLN, Albuquerque Center advised the pilot that there was light to moderate precipitation extending approximately 20 miles north of Albuquerque. He observed on an iPad application that the weather was a "non-factor" by the time he reached Albuquerque. The pilot continued the flight northwest and felt the engine suddenly lose power. He checked the engine gauges, which were all in the green. He advised Albuquerque Center of the loss of engine power. The pilot switched fuel tanks then activated the carb heat. He tried switching magnetos and enriching the mixture for "a few seconds." He leaned the mixture again and "deactivated the carb heat." He advised Albuquerque Center that the airplane was not going to be able to maintain altitude and declared an emergency. He used the iPad application map and he aligned the airplane over a road. The airplane's wing impacted a guard rail during the forced landing and the airplane subsequently nosed over. The pilot reported that fuel leaked from the fuel tank caps vents while he and his passenger exited the inverted airplane.

At 0453, the recorded weather at the Santa Fe Municipal Airport (SAF), near Santa Fe, New Mexico, was: Wind calm; visibility 10 statute miles; sky condition clear; temperature 16 degrees C; dew point 12 degrees C; altimeter 30.08 inches of mercury.

SAF's temperature and dew point were plotted on a carburetor icing probability chart. The plot shows a probability of serious icing at a cruise power settings at the temperature and dew point reported about the time of the accident.

The Pilot's Handbook of Aeronautical Knowledge, in part, stated:

When conditions are conducive to carburetor icing during flight, periodic checks should be made to detect its presence. If detected, full carburetor heat should be applied immediately, and it should be left in the ON position until you are certain that all the ice has been removed. If ice is present, applying partial heat or leaving heat on for an insufficient time might aggravate the situation. In extreme cases of carburetor icing, even after the ice has been removed, full carburetor heat should be used to prevent further ice formation. A carburetor temperature gauge, if installed, is very useful in determining when to use carburetor heat.

Pilot Information

Certificate:	Private	Age:	29, Male
Airplane Rating(s):	Single-engine Land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	Lap Only
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 1 Without Waivers/Limitations	Last Medical Exam:	08/18/2015
Occupational Pilot:	No	Last Flight Review or Equivalent:	12/16/2015
Flight Time:	338 hours (Total, all aircraft), 261 hours (Total, this make and model), 107 hours (Last 90 days, all aircraft), 38 hours (Last 30 days, all aircraft), 6 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Manufacturer:	PIPER	Registration:	N9241J
Model/Series:	PA 28-180	Aircraft Category:	Airplane
Year of Manufacture:	1966	Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	28-3315
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:	09/01/2015, Annual	Certified Max Gross Wt.:	
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	3975.28 Hours	Engine Manufacturer:	LYCOMING
ELT:	Installed, not activated	Engine Model/Series:	O-360-A3A
Registered Owner:	Individual	Rated Power:	180 hp
Operator:	On file	Air Carrier Operating Certificate:	None

Meteorological Information and Flight Plan

Observation Facility, Elevation:	KSAF, 6344 ft msl	Observation Time:	0453 MDT
Distance from Accident Site:	49 Nautical Miles	Condition of Light:	Night
Direction from Accident Site:	119°	Conditions at Accident Site:	Visual Conditions
Lowest Cloud Condition:	Clear	Temperature/Dew Point:	16°C / 12°C
Lowest Ceiling:	None	Visibility	10 Miles
Wind Speed/Gusts, Direction:	Calm	Visibility (RVR):	
Altimeter Setting:	30.08 inches Hg	Visibility (RVV):	
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	LEVELLAND, TX (LLN)	Type of Flight Plan Filed:	None
Destination:	FARMINGTON, NM (FMN)	Type of Clearance:	VFR Flight Following
Departure Time:	0235 CDT	Type of Airspace:	

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		

Administrative Information

Investigator In Charge (IIC):	Edward F Malinowski
Additional Participating Persons:	Jeffrey Burns; Federal Aviation Administration; Albuquerque, NM
Note:	The NTSB did not travel to the scene of this accident.
Investigation Docket:	http://dms.nts.gov/pubdms/search/dockList.cfm?mKey=93945