



National Transportation Safety Board Aviation Accident Data Summary

Location:	Quinlan, TX	Accident Number:	CEN15FA287
Date & Time:	07/01/2015, 1354 CDT	Registration:	N6168P
Aircraft:	PIPER PA 24-250	Injuries:	2 Fatal
Flight Conducted Under:	Part 91: General Aviation - Personal		

Analysis

The airplane, which was owned and operated by the private pilot, experienced a total loss of engine power shortly after takeoff, descended, and impacted a field. A fire erupted that consumed the majority of the airplane's cabin and the inboard sections of both wings. The wreckage distribution, ground scars, and crushing of the wing leading edges were indicative of a low-speed nose-down impact and consistent with an aerodynamic stall. Examination of the fuel system revealed the presence of rust and water in both electric fuel pumps and water in the engine carburetor bowl. The examination revealed no other engine or airframe anomalies that would have precluded normal operation. The rust found in the fuel pumps indicated that the fuel system had been contaminated with water for a long period of time. The airplane owner's handbook provided clear and explicit instructions on how to check before flight for fuel system contamination.

Flight Events

Prior to flight - Aircraft inspection event
Prior to flight - Fuel contamination
Initial climb - Loss of engine power (total)
Initial climb - Loss of control in flight
Initial climb - Aerodynamic stall/spin
Uncontrolled descent - Collision with terr/obj (non-CFIT)
Post-impact - Fire/smoke (post-impact)

Probable Cause

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's failure to maintain control of the airplane following a loss of engine power during initial climb after takeoff, which resulted in the wing's critical angle-of-attack being exceeded and a subsequent aerodynamic stall. Also causal was the pilot's inadequate preflight inspection of the airplane's fuel system, which resulted in the loss of engine power due to water contamination.

Findings

Aircraft-Aircraft systems-Fuel system-(general)-Inadequate inspection - C
Aircraft-Fluids/misc hardware-Fluids-Fuel-Fluid condition - C
Aircraft-Aircraft oper/perf/capability-Performance/control parameters-Angle of attack-Capability exceeded - C
Personnel issues-Task performance-Inspection-Preflight inspection-Pilot - C
Personnel issues-Task performance-Use of equip/info-Aircraft control-Pilot - C

Pilot Information

Certificate:	Private	Age:	54
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Instrument Rating(s):	None
Other Aircraft Rating(s):	None	Instructor Rating(s):	None
Flight Time:	4005 hours (Total, all aircraft)		

Pilot Information

Certificate:	Private	Age:	49
Airplane Rating(s):	Single-engine Land	Instrument Rating(s):	None
Other Aircraft Rating(s):	None	Instructor Rating(s):	None
Flight Time:	250 hours (Total, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Manufacturer:	PIPER	Registration:	N6168P
Model/Series:	PA 24-250	Engines:	1 Reciprocating
Operator:	On file	Engine Manufacturer:	LYCOMING
Air Carrier Operating Certificate:	None	Engine Model/Series:	O-540-A1A5
Flight Conducted Under:	Part 91: General Aviation - Personal		

Meteorological Information and Flight Plan

Observation Facility, Elevation:	GVT, 535 ft msl	Weather Information Source:	Weather Observation Facility
Conditions at Accident Site:	Visual Conditions	Lowest Ceiling:	None
Condition of Light:	Day	Wind Speed/Gusts, Direction:	12 knots, 190°
Temperature:	32° C / 20° C	Visibility	10 Miles
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Quinlan, TX (T14)	Destination:	

Airport Information

Airport:	ROCKIN M (T14)	Runway Surface Type:	Grass/turf
Runway Used:	18	Runway Surface Condition:	Soft; Vegetation
Runway Length/Width:	3120 ft / 60 ft		

Wreckage and Impact Information

Crew Injuries:	1 Fatal	Aircraft Damage:	Destroyed
Passenger Injuries:	1 Fatal	Aircraft Fire:	On-Ground
Ground Injuries:	N/A	Aircraft Explosion:	None

Administrative Information

Investigator In Charge (IIC):	Mitchell F Gallo	Adopted Date:	11/17/2016
Note:	The NTSB traveled to the scene of this accident.		
Investigation Docket:	http://dms.nts.gov/pubdms/search/dockList.cfm?mKey=91481		

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.