



National Transportation Safety Board Aviation Accident Data Summary

Location:	Indianola, IA	Accident Number:	CEN16LA310
Date & Time:	08/05/2016, 1113 CDT	Registration:	N4707M
Aircraft:	PIPER PA-11	Injuries:	2 Fatal
Flight Conducted Under:	Part 91: General Aviation - Personal		

Analysis

The commercial pilot was using a company airplane to accumulate flight time and experience. Two witnesses reported seeing the airplane climbing after takeoff and noted that the airplane was flying slowly and that it had a "hard time getting any lift." The airplane finally started to climb; however, the wings started rocking and the airplane subsequently descended into terrain. The witness statements were consistent with the prestall motions of the airplane.

The pilot and passenger were employed as company ground personnel. According to company policy, the pilot was not allowed to fly with passengers, and the passenger was only allowed to fly with a company flight instructor. The pilot was not a flight instructor. Examination of the airplane revealed no mechanical anomalies that would have precluded normal operation. A postaccident estimation of the airplane's weight and balance showed that the airplane exceeded its maximum gross weight at the time of the takeoff. It is likely that the pilot's inadequate preflight planning led to the airplane being operated above its maximum gross weight and degraded its climb performance and led to an aerodynamic stall.

Flight Events

Prior to flight - Aircraft loading event
Enroute-climb to cruise - Aerodynamic stall/spin
Enroute-climb to cruise - Loss of control in flight
Uncontrolled descent - Collision with terr/obj (non-CFIT)

Probable Cause

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

The pilot's inadequate preflight planning, which resulted in the airplane being operated above its maximum gross weight, degraded its climb performance, and led to an aerodynamic stall during the initial climb.

Findings

Aircraft-Aircraft oper/perf/capability-Performance/control parameters-Angle of attack-Not attained/maintained - C

Aircraft-Aircraft oper/perf/capability-Performance/control parameters-Airspeed-Not attained/maintained - C

Aircraft-Aircraft oper/perf/capability-Aircraft capability-CG/weight distribution-Capability exceeded - C

Aircraft-Aircraft oper/perf/capability-Performance/control parameters-Climb rate-Not attained/maintained - C

Personnel issues-Task performance-Use of equip/info-Aircraft control-Pilot - C

Personnel issues-Task performance-Planning/preparation-Weight/balance calculations-Pilot - C

Personnel issues-Action/decision-Info processing/decision-Decision making/judgment-Pilot

Personnel issues-Task performance-Use of equip/info-Use of policy/procedure-Pilot

Pilot Information

Certificate:	Commercial	Age:	23
Airplane Rating(s):	Single-engine Land	Instrument Rating(s):	None
Other Aircraft Rating(s):	None	Instructor Rating(s):	None
Flight Time:	255 hours (Total, all aircraft), 3 hours (Total, this make and model)		

Pilot-Rated Passenger Information

Certificate:	Student	Age:	
Airplane Rating(s):	None	Instrument Rating(s):	None
Other Aircraft Rating(s):	None	Instructor Rating(s):	None
Flight Time:			

Aircraft and Owner/Operator Information

Aircraft Make:	PIPER	Registration:	N4707M
Model/Series:	PA-11	Engines:	1 Reciprocating
Operator:	AGRI-FLITE INC	Engine Manufacturer:	Continental
Operating Certificate(s) Held:	Agricultural Aircraft (137)	Engine Model/Series:	A-65-8
Flight Conducted Under:	Part 91: General Aviation - Personal		

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	DSM, 958 ft msl	Weather Information Source:	Weather Observation Facility
Lowest Ceiling:	Broken / 30000 ft agl	Wind Speed/Gusts, Direction:	7 knots / , 20°
Temperature:	26° C	Visibility	10 Miles
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Indianola, IA (IA41)	Destination:	Indianola, IA (IA41)

Airport Information

Airport:	Laverty Field Airport (IA41)	Runway Surface Type:	
Runway Used:	N/A	Runway Surface Condition:	
Runway Length/Width:			

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
Latitude, Longitude:	41.415278, -93.561389 (est)		

Administrative Information

Investigator In Charge (IIC):	Mitchell F Gallo	Adopted Date:	07/26/2017
Note:	The NTSB did not travel to the scene of this accident.		
Investigation Docket:	http://dms.nts.gov/pubdms/search/dockList.cfm?mKey=93787		

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.