Aviation Investigation Final Report

Location:	Mountain Home, Texas	**Accident Number:**	FTW04LA231
Date & Time:	September 3, 2004, 11:54 Local	**Registration:**	N2972P
Aircraft:	Piper PA-22	**Aircraft Damage:**	Substantial
Defining Event:		**Injuries:**	2 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot lost control of the single-engine airplane shortly after takeoff from a 2,200-foot long turf runway. The 245-hour private pilot stated that after liftoff from the runway, the airspeed was approximately 65 miles per hour (mph) and the rate of climb was about 200 feet per minute. The pilot maintained back pressure on the yoke until the airplane cleared the treetops on his side at an altitude of approximately 50 feet above ground level (agl). The pilot noticed airspeed beginning to decay and released back pressure on the yoke. The airplane continued to descend in a nose-high attitude until it impacted terrain.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's failure to maintain adequate airspeed which resulted in a stall.

Findings

Occurrence #1: LOSS OF CONTROL - IN FLIGHT
Phase of Operation: TAKEOFF - INITIAL CLIMB

Findings
1. (C) AIRCRAFT CONTROL - NOT MAINTAINED - PILOT IN COMMAND
2. (C) AIRSPEED - NOT MAINTAINED - PILOT IN COMMAND
3. STALL/MUSH - ENCOUNTERED - PILOT IN COMMAND

Occurrence #2: IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation: DESCENT - UNCONTROLLED

Findings
4. TERRAIN CONDITION - GROUND

Factual Information

On September 3, 2004, approximately 1154 central daylight time, a Piper PA-22 single-engine airplane, N2972P, registered to and operated by the pilot, was substantially damaged when it impacted terrain following a loss of control during takeoff from the Goebel Field Airport (4TS5) near Mountain Home, Texas. The private pilot and his passenger were not injured. Visual meteorological conditions prevailed, and a visual flight rules flight plan was filed for the 14 Code of Federal Regulations Part 91 personal flight. The cross-country flight originated from the Llano Municipal Airport (AQO) near Llano, Texas, at 1044 and was destined for 4TS5.

The 245-hour private pilot reported in a written statement to the NTSB investigator-in-charge that after briefing his passenger, he decided to perform a touch-and-go landing on Runway 14 (a 2,200-foot long and 60-foot wide turf runway). The pilot stated that he flew a stabilized approach with full flaps, and the airplane touched down slightly beyond the displaced threshold. During the landing roll, he applied full throttle and retained the full flaps for takeoff. The airplane lifted off the ground at an airspeed of approximately 65 miles per hour (mph) and a climb at a rate of approximately 200 feet per minute. The pilot maintained back pressure on the yoke until the treetops on his side were cleared at an altitude of approximately 50 feet above ground level (agl). The pilot added that he noticed airspeed beginning to decay. In response, he released back pressure on the yoke.

The airplane continued to descend in a nose-high attitude until it impacted terrain. Upon impact with terrain, the nose gear collapsed, and the propeller struck the ground. Subsequently, the aircraft nosed over, slid 50 yards inverted and came to rest in the inverted position.

Examination of the aircraft by a Federal Aviation Administration (FAA) inspector, who responded to the site of the accident, revealed structural damage to the vertical stabilizer, left wing, left wing support struts. There was additional minor damage to the propeller, right wing, and nose gear. No pre-impact anomalies were observed at the time of the examination.

At 1151, the automated weather observing system at Kimble County Airport, near Junction, Texas, located approximately 22 nautical miles northwest of the site of the accident, reported wind variable at 6 knots, visibility 9 statute miles, few clouds at 3,400 feet agl, temperature 79 degrees Fahrenheit, dew point 63 degrees Fahrenheit, and an altimeter setting of 30.02 inches of Mercury.

Pilot Information

Certificate:	Private	**Age:**	52,Male
Airplane Rating(s):	Single-engine land	**Seat Occupied:**	Left
Other Aircraft Rating(s):	None	**Restraint Used:**	
Instrument Rating(s):	None	**Second Pilot Present:**	No
Instructor Rating(s):	None	**Toxicology Performed:**	No
Medical Certification:	Class 3 Valid Medical--w/ waivers/lim	**Last FAA Medical Exam:**	March 19, 2004
Occupational Pilot:	No	**Last Flight Review or Equivalent:**	February 21, 2004
Flight Time:	245 hours (Total, all aircraft), 72 hours (Total, this make and model), 245 hours (Pilot In Command, all aircraft), 10 hours (Last 90 days, all aircraft), 5 hours (Last 30 days, all aircraft), 3 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Piper	**Registration:**	N2972P
Model/Series:	PA-22	**Aircraft Category:**	Airplane
Year of Manufacture:		**Amateur Built:**	
Airworthiness Certificate:	Normal	**Serial Number:**	22-3247
Landing Gear Type:	Tricycle	**Seats:**	4
Date/Type of Last Inspection:	November 28, 2003 Annual	**Certified Max Gross Wt.:**	2000 lbs
Time Since Last Inspection:	23.15 Hrs	**Engines:**	1 Reciprocating
Airframe Total Time:	3119.62 Hrs at time of accident	**Engine Manufacturer:**	Lycoming
ELT:	Installed, not activated	**Engine Model/Series:**	O-320A2
Registered Owner:	Donald Mancuso	**Rated Power:**	150 Horsepower
Operator:		**Operating Certificate(s) Held:**	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	**Condition of Light:**	
Observation Facility, Elevation:	KJCT,2189 ft msl	**Distance from Accident Site:**	22 Nautical Miles
Observation Time:	11:51 Local	**Direction from Accident Site:**	310°
Lowest Cloud Condition:	Few / 3400 ft AGL	**Visibility**	9 miles
Lowest Ceiling:	None	**Visibility (RVR):**	
Wind Speed/Gusts:	6 knots / 0 knots	**Turbulence Type Forecast/Actual:**	/
Wind Direction:	0°	**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:	30.02 inches Hg	**Temperature/Dew Point:**	26°C / 17°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Llano, TX (AQO)	**Type of Flight Plan Filed:**	VFR
Destination:	Mountain Home, TX (4TS5)	**Type of Clearance:**	VFR
Departure Time:	10:33 Local	**Type of Airspace:**	Unknown

Airport Information

Airport:	Goebel Field 4TS5	**Runway Surface Type:**	Grass/turf
Airport Elevation:	2189 ft msl	**Runway Surface Condition:**	Dry
Runway Used:	14	**IFR Approach:**	Visual
Runway Length/Width:	2200 ft / 60 ft	**VFR Approach/Landing:**	Touch and go

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	**Latitude, Longitude:**	30.221666,-99.498336

Administrative Information

Investigator In Charge (IIC):	Lemishko, Alexander
Additional Participating Persons:	Wayne Radicke; San Antonio FSDO; San Antonio, TX
Original Publish Date:	July 7, 2005
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=60054