



# Aviation Investigation Final Report

|                                |                                      |                         |             |
|--------------------------------|--------------------------------------|-------------------------|-------------|
| <b>Location:</b>               | Mountain Home, Texas                 | <b>Accident Number:</b> | FTW04LA231  |
| <b>Date &amp; Time:</b>        | September 3, 2004, 11:54 Local       | <b>Registration:</b>    | N2972P      |
| <b>Aircraft:</b>               | Piper PA-22                          | <b>Aircraft Damage:</b> | Substantial |
| <b>Defining Event:</b>         |                                      | <b>Injuries:</b>        | 2 None      |
| <b>Flight Conducted Under:</b> | 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

|                                  |  |  |                   |
|----------------------------------|--|--|-------------------|
| <b>Certificate:</b>              | Private  | <b>Age:</b>                              | 52, Male          |
| <b>Airplane Rating(s):</b>       | Single-engine land   | <b>Seat Occupied:</b>                    | Left              |
| <b>Other Aircraft Rating(s):</b> | None   | <b>Restraint Used:</b>                   |                   |
| <b>Instrument Rating(s):</b>     | None   | <b>Second Pilot Present:</b>             | No                |
| <b>Instructor Rating(s):</b>     | None   | <b>Toxicology Performed:</b>             | No                |
| <b>Medical Certification:</b>    | Class 3 Valid Medical-w/<br>waivers/lim  | <b>Last FAA Medical Exam:</b>            | March 19, 2004    |
| <b>Occupational Pilot:</b>       | No   | <b>Last Flight Review or Equivalent:</b> | February 21, 2004 |
| <b>Flight Time:</b>              | 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

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

## Meteorological Information and Flight Plan

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

## Airport Information

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

## Wreckage and Impact Information

|                            |        |                             |                      |
|----------------------------|--------|-----------------------------|----------------------|
| <b>Crew Injuries:</b>      | 1 None | <b>Aircraft Damage:</b>     | Substantial          |
| <b>Passenger Injuries:</b> | 1 None | <b>Aircraft Fire:</b>       | None                 |
| <b>Ground Injuries:</b>    | N/A    | <b>Aircraft Explosion:</b>  | None                 |
| <b>Total Injuries:</b>     | 2 None | <b>Latitude, Longitude:</b> | 30.221666,-99.498336 |

## Administrative Information

|  |   |
|--|---|
| <b>Investigator In Charge (IIC):</b>     | Lemishko, Alexander   |
| <b>Additional Participating Persons:</b> | Wayne Radicke; San Antonio FSDO; San Antonio, TX  |
| <b>Original Publish Date:</b>            | July 7, 2005  |
| <b>Last Revision Date:</b>               |   |
| <b>Investigation Class:</b>              | <a href="#">Class</a>   |
| <b>Note:</b>                             |   |
| <b>Investigation Docket:</b>             | <a href="https://data.nts.gov/Docket?ProjectID=60054">https://data.nts.gov/Docket?ProjectID=60054</a> |

The National Transportation Safety Board (NTSB) is an independent federal agency charged by Congress with investigating every civil aviation accident in the United States and significant events in other modes of transportation—railroad, transit, highway, marine, pipeline, and commercial space. We determine the probable causes of the accidents and events we investigate, and issue safety recommendations aimed at preventing future occurrences. In addition, we conduct transportation safety research studies and offer information and other assistance to family members and survivors for each accident or event we investigate. We also serve as the appellate authority for enforcement actions involving aviation and mariner certificates issued by the Federal Aviation Administration (FAA) and US Coast Guard, and we adjudicate appeals of civil penalty actions taken by the FAA.

The NTSB does not assign fault or blame for an accident or incident; rather, as specified by NTSB regulation, “accident/incident investigations are fact-finding proceedings with no formal issues and no adverse parties ... and are not conducted for the purpose of determining the rights or liabilities of any person” (Title 49 *Code of Federal Regulations* section 831.4). Assignment of fault or legal liability is not relevant to the NTSB’s statutory mission to improve transportation safety by investigating accidents and incidents and issuing safety recommendations. In addition, statutory language prohibits the admission into evidence or use of any part of an NTSB report related to an accident in a civil action for damages resulting from a matter mentioned in the report (Title 49 *United States Code* section 1154(b)). A factual report that may be admissible under 49 *United States Code* section 1154(b) is available [here](#).