



National Transportation Safety Board Aviation Accident Final Report

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| Location: | Amarillo, TX | Accident Number: | FTW01LA135 |
| Date & Time: | 06/02/2001, 1350 CDT | Registration: | N2495C |
| Aircraft: | Piper PA-38-112 | Aircraft Damage: | Substantial |
| Defining Event: | | Injuries: | 1 None |

Flight Conducted Under: Part 91: General Aviation - Personal

Analysis

Prior to turning final, the pilot completed the before landing checks. While on final approach to runway 04, the engine "sputtered a little." There was a strong right crosswind so the pilot crabbed the airplane into the wind. Prior to landing, the pilot aligned the airplane with the runway, and the wind began pushing the airplane to the left. The pilot initiated a go-around by applying full throttle and turning off the carburetor heat; however, the engine began to "sputter." Subsequently, the airplane landed "hard" on its left main landing gear, bounced several times, veered left, and exited the runway onto the grass. While on the grass, the airplane porpoised several times collapsing the nose landing gear. The airplane came to rest on its nose. At the time of the accident, the wind was from 140 degrees at 14 knots gusting to 19 knots.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: the pilot's inadequate compensation for the crosswind, which resulted in a hard landing. A contributing factor was the crosswind.

Findings

Occurrence #1: HARD LANDING
Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings

1. (F) WEATHER CONDITION - CROSSWIND
2. (C) COMPENSATION FOR WIND CONDITIONS - INADEQUATE - PILOT IN COMMAND

Factual Information

On June 2, 2001, at 1350 central daylight time, a Piper PA-38-112 (Tomahawk) single-engine airplane, N2495C, was substantially damaged during a hard landing at the Amarillo International Airport, Amarillo, Texas. The airplane was registered to Panther Aviation, Inc. and operated by Cleburne Aviation Services, both of Cleburne, Texas. The private pilot, sole occupant, was not injured. Visual meteorological conditions prevailed, and a visual flight rules (VFR) flight plan was filed and activated for the 14 Code of Federal Regulations Part 91 personal flight. The cross-country flight originated from Cleburne, Texas, at 1040.

The pilot reported to the NTSB investigator-in-charge that prior to turning final, he completed the before landing checks. While on final approach to runway 04, the engine "sputtered a little, like losing a magneto, carburetor icing, or fouled spark plugs." There was a strong right crosswind so he crabbed the airplane into the wind. Prior to landing, he aligned the airplane with the runway, and the wind began pushing the airplane to the left. The pilot initiated a go-around by applying full throttle and turning off the carburetor heat; however, the engine began to "sputter." Subsequently, the airplane landed "hard" on its left main landing gear, bounced several times, veered left, and exited the runway onto the grass. While on the grass, the airplane porpoised several times collapsing the nose landing gear. The airplane came to a rest on its nose.

According to the FAA inspector, who responded to the accident site, the nose wheel was folded under the airplane, the firewall was buckled, and the engine was displaced downward and to the left.

At 1410, the reported wind at the Amarillo International Airport was from 140 degrees at 14 knots gusting to 19 knots.

Pilot Information

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|----------------------------------|---|--|----------------------------|
| Certificate: | Private | Age: | 34, Male |
| Airplane Rating(s): | Single-engine Land | Seat Occupied: | Left |
| Other Aircraft Rating(s): | None | Restraint Used: | Seatbelt, Shoulder harness |
| Instrument Rating(s): | Airplane | Second Pilot Present: | No |
| Instructor Rating(s): | None | Toxicology Performed: | No |
| Medical Certification: | Class 2 Valid Medical--no waivers/lim. | Last FAA Medical Exam: | 10/15/1999 |
| Occupational Pilot: | | Last Flight Review or Equivalent: | 12/04/2000 |
| Flight Time: | 204 hours (Total, all aircraft), 27 hours (Total, this make and model), 170 hours (Pilot In Command, all aircraft), 54 hours (Last 90 days, all aircraft), 26 hours (Last 30 days, all aircraft), 0 hours (Last 24 hours, all aircraft) | | |

Aircraft and Owner/Operator Information

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|--------------------------------------|----------------------------------|---------------------------------------|-----------------|
| Aircraft Make: | Piper | Registration: | N2495C |
| Model/Series: | PA-38-112 | Aircraft Category: | Airplane |
| Year of Manufacture: | | Amateur Built: | No |
| Airworthiness Certificate: | Normal; Utility | Serial Number: | |
| Landing Gear Type: | Tricycle | Seats: | 2 |
| Date/Type of Last Inspection: | 10/17/2000, 100 Hour | Certified Max Gross Wt.: | 1670 lbs |
| Time Since Last Inspection: | 97 Hours | Engines: | 1 Reciprocating |
| Airframe Total Time: | 3826.6 Hours at time of accident | Engine Manufacturer: | Lycoming |
| ELT: | Installed | Engine Model/Series: | O-235-L2C |
| Registered Owner: | Panther Aviation, Inc. | Rated Power: | 112 hp |
| Operator: | Ceburne Aviation Services | Operating Certificate(s) Held: | None |

Meteorological Information and Flight Plan

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|---|---------------------|---|------------------|
| Conditions at Accident Site: | Visual Conditions | Condition of Light: | Day |
| Observation Facility, Elevation: | ama, 3605 ft msl | Distance from Accident Site: | 0 Nautical Miles |
| Observation Time: | 1410 CDT | Direction from Accident Site: | 0° |
| Lowest Cloud Condition: | Few / 2800 ft agl | Visibility | 10 Miles |
| Lowest Ceiling: | None | Visibility (RVR): | |
| Wind Speed/Gusts: | 14 knots / 19 knots | Turbulence Type Forecast/Actual: | / |
| Wind Direction: | 140° | Turbulence Severity Forecast/Actual: | / |
| Altimeter Setting: | 29.87 inches Hg | Temperature/Dew Point: | 27°C / 19°C |
| Precipitation and Obscuration: | | | |
| Departure Point: | CLEBURNE, TX (F18) | Type of Flight Plan Filed: | VFR |
| Destination: | Amarillo, TX (AMA) | Type of Clearance: | VFR |
| Departure Time: | 1040 CDT | Type of Airspace: | Class D |

Airport Information

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|-----------------------------|---------------------|----------------------------------|----------------------------|
| Airport: | AMARILLO INTL (AMA) | Runway Surface Type: | Concrete |
| Airport Elevation: | 3605 ft | Runway Surface Condition: | Dry |
| Runway Used: | 04 | IFR Approach: | None |
| Runway Length/Width: | 13502 ft / 300 ft | VFR Approach/Landing: | Full Stop; Traffic Pattern |

Wreckage and Impact Information

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|----------------------------|--------|-----------------------------|-------------|
| Crew Injuries: | 1 None | Aircraft Damage: | Substantial |
| Passenger Injuries: | N/A | Aircraft Fire: | None |
| Ground Injuries: | N/A | Aircraft Explosion: | None |
| Total Injuries: | 1 None | Latitude, Longitude: | |

Administrative Information

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| Investigator In Charge (IIC): | Douglas D Wigington | Report Date: | 10/09/2001 |
| Additional Participating Persons: | Juan Rivera; FAA FSDO; Lubbock, TX | | |
| Publish Date: | | | |
| Investigation Docket: | NTSB accident and incident dockets serve as permanent archival information for the NTSB's investigations. Dockets released prior to June 1, 2009 are publicly available from the NTSB's Record Management Division at pubinq@ntsb.gov , or at 800-877-6799. Dockets released after this date are available at http://dms.ntsbt.gov/pubdms/ . | | |

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. A factual report that may be admissible under 49 U.S.C. § 1154(b) is available [here](#).