



Aviation Investigation Final Report

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| Location: | ROSWELL, New Mexico | Accident Number: | FTW94LA117 |
| Date & Time: | April 1, 1994, 13:54 Local | Registration: | N8961P |
| Aircraft: | PIPER PA-24-260 | Aircraft Damage: | Substantial |
| Defining Event: | | Injuries: | 2 None |
| Flight Conducted Under: | Part 91: General aviation - Personal | | |

Analysis

FLIGHT WAS EN ROUTE AT 10,000 FEET MSL WITH SCATTERED CLOUDS WHEN THE PILOT ENCOUNTERED 'SEVERE DOWNDRAFTS' AND THE AIRPLANE ENTERED AN UNCONTROLLED ALTITUDE DEVIATION AND DESCENT. THE PILOT INADVERTENTLY EXCEED THE NEVER EXCEED SPEED. AIRPLANE CONTROL WAS RECOVERED AT 4,400 FEET MSL. THE PILOT REPORTED THE AIR WAS 'RELATIVELY SMOOTH WITH SCATTERED CLOUDS AND NO OBVIOUS WARNING SIGNS.' HORIZONTAL STABILIZERS WERE BENT DOWNWARD.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: THE LOSS OF CONTROL DUE TO CLEAR AIR TURBULENCE.

Findings

Occurrence #1: LOSS OF CONTROL - IN FLIGHT
Phase of Operation: CRUISE

Findings

1. (C) WEATHER CONDITION - TURBULENCE, CLEAR AIR
2. AIRSPEED(VNE) - EXCEEDED - PILOT IN COMMAND
3. WEATHER CONDITION - DOWNDRAFT

Occurrence #2: AIRFRAME/COMPONENT/SYSTEM FAILURE/MALFUNCTION

Phase of Operation: DESCENT - UNCONTROLLED

Findings

4. HORIZONTAL STABILIZER SURFACE - BENT

Factual Information

On April 1, 1994, at 1354 mountain daylight time, a Piper PA-24- 260, N8961P, sustained substantial damage during cruise near Roswell, New Mexico. The private pilot and the sole passenger did not receive injuries. Visual meteorological conditions prevailed for the personal cross country flight.

Air traffic control data indicated the airplane was 35 miles southeast of Roswell, New Mexico, at 10,000 feet MSL en route to Albuquerque, New Mexico, when the pilot reported "severe downdrafts." The airplane entered an uncontrolled altitude deviation and descent. Recovery of airplane control, as reported by the pilot, was 4,400 feet MSL. The flight diverted to Roswell, New Mexico, and landed without further incident.

An examination of the airplane by the pilot and a mechanic (statement enclosed) reported the horizontal stabilizers were bent downward. The pilot reported that he closed the throttle as the speed approached the never exceed speed; however, the speed continued to increase.

Pilot Information

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| Certificate: | Private | Age: | 63, Male |
| Airplane Rating(s): | Single-engine land | Seat Occupied: | Left |
| Other Aircraft Rating(s): | None | Restraint Used: | |
| Instrument Rating(s): | Airplane | Second Pilot Present: | No |
| Instructor Rating(s): | None | Toxicology Performed: | No |
| Medical Certification: | Class 3 Valid Medical-w/ waivers/lim | Last FAA Medical Exam: | August 2, 1993 |
| Occupational Pilot: | UNK | Last Flight Review or Equivalent: | |
| Flight Time: | 1835 hours (Total, all aircraft), 162 hours (Total, this make and model), 1759 hours (Pilot In Command, all aircraft), 28 hours (Last 90 days, all aircraft), 26 hours (Last 30 days, all aircraft), 7 hours (Last 24 hours, all aircraft) | | |

Aircraft and Owner/Operator Information

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|--------------------------------------|--------------------------|---------------------------------------|-----------------|
| Aircraft Make: | PIPER | Registration: | N8961P |
| Model/Series: | PA-24-260 PA-24-260 | Aircraft Category: | Airplane |
| Year of Manufacture: | | Amateur Built: | |
| Airworthiness Certificate: | Normal | Serial Number: | 24-4418 |
| Landing Gear Type: | Retractable - Tricycle | Seats: | 6 |
| Date/Type of Last Inspection: | March 24, 1994 Annual | Certified Max Gross Wt.: | 3100 lbs |
| Time Since Last Inspection: | 23 Hrs | Engines: | 1 Reciprocating |
| Airframe Total Time: | 4293 Hrs | Engine Manufacturer: | LYCOMING |
| ELT: | Installed, not activated | Engine Model/Series: | IO-540-D4A5 |
| Registered Owner: | GILCRIST, ROBERT P. | Rated Power: | 260 Horsepower |
| Operator: | GILCRIST, ROBERT P. | Operating Certificate(s) Held: | None |
| Operator Does Business As: | | Operator Designator Code: | |

Meteorological Information and Flight Plan

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| Conditions at Accident Site: | Visual (VMC) | Condition of Light: | Day |
| Observation Facility, Elevation: | ROW ,3669 ft msl | Distance from Accident Site: | 1 Nautical Miles |
| Observation Time: | 15:00 Local | Direction from Accident Site: | 1° |
| Lowest Cloud Condition: | Clear | Visibility | 40 miles |
| Lowest Ceiling: | None | Visibility (RVR): | |
| Wind Speed/Gusts: | / | Turbulence Type Forecast/Actual: | / |
| Wind Direction: | 0° | Turbulence Severity Forecast/Actual: | / |
| Altimeter Setting: | 29 inches Hg | Temperature/Dew Point: | 24°C / 18°C |
| Precipitation and Obscuration: | No Obscuration; No Precipitation | | |
| Departure Point: | BROWNSVILLE , TX (BRO) | Type of Flight Plan Filed: | IFR |
| Destination: | ALBUQUERQUE , NM (ABQ) | Type of Clearance: | IFR |
| Departure Time: | 10:30 Local | Type of Airspace: | Class E |

Airport Information

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| Airport: | | Runway Surface Type: | |
| Airport Elevation: | | Runway Surface Condition: | |
| Runway Used: | 0 | IFR Approach: | |
| Runway Length/Width: | | VFR Approach/Landing: | |

Wreckage and Impact Information

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|----------------------------|--------|-----------------------------|----------------------------|
| 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: | 33.639907,-104.379386(est) |

Administrative Information

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| Investigator In Charge (IIC): | Smith, Joyce |
| Additional Participating Persons: | CAMILLA Z KATTELL; ALBUQUERQUE , NM |
| Original Publish Date: | November 14, 1994 |
| Last Revision Date: | |
| Investigation Class: | Class |
| Note: | |
| Investigation Docket: | https://data.ntsb.gov/Docket?ProjectID=19026 |

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](#).