



Aviation Investigation Final Report

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|--------------------------------|--------------------------------------|-------------------------|------------|
| Location: | TRINITY, Alabama | Accident Number: | ATL97FA034 |
| Date & Time: | February 1, 1997, 09:21 Local | Registration: | N50TB |
| Aircraft: | Cessna A150L | Aircraft Damage: | Destroyed |
| Defining Event: | | Injuries: | 2 Fatal |
| Flight Conducted Under: | Part 91: General aviation - Personal | | |

Analysis

A few minutes after takeoff, the airplane was next seen flying in the vicinity of the accident site. One eyewitness stated that when the airplane first flew overhead, it was just above the tree tops. Another eyewitness observed the airplane as the pilot made several low passes. On the last low pass, the pilot initiated a steep climb which terminated in what was described as a 'hammerhead stall.' The airplane entered a spin, descended from about 500 feet, and crashed adjacent to a single family dwelling, hitting a tree and utility line as it descended to the ground. All aircraft components were located in the immediate vicinity of the main wreckage. Subsequent examination of the engine assembly failed to disclose a mechanical problem. Examination of the airframe and aircraft systems also failed to disclose a mechanical problem.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: failure of the pilot to maintain flying airspeed, while maneuvering at low altitude, which resulted in a stall and subsequent collision with a tree, utility line, and the ground.

Findings

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

Findings

1. LOW PASS - PERFORMED - PILOT IN COMMAND

2. PULL-UP - INITIATED - PILOT IN COMMAND
3. (C) AIRSPEED - NOT MAINTAINED - PILOT IN COMMAND
4. (C) STALL - INADVERTENT - PILOT IN COMMAND

Occurrence #2: IN FLIGHT COLLISION WITH OBJECT
Phase of Operation: DESCENT - UNCONTROLLED

Findings

5. OBJECT - TREE(S)
6. OBJECT - WIRE, TRANSMISSION

Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation: DESCENT - UNCONTROLLED

Factual Information

HISTORY OF FLIGHT

On February 1, 1997, at 0921 central standard time, a Cessna A150L, N50TB, collided with utility lines and a tree while maneuvering over a residential area near Trinity, Alabama. The personal flight operated under the provisions of Title 14 CFR Part 91 with no flight plan filed. Visual weather conditions prevailed at the time of the accident. The airplane was destroyed. The pilot and passenger were fatally injured. The flight departed Pryor Field in Decatur, Alabama, at 0900.

Friends of the pilot and passenger reported that they had planned to go flying after they got off work on the morning of the accident. An official of Decatur/Athens Aero Services reported that the pilot arrived at the airport at approximately 0900 hours, entered flight operation alone, and rented N50TB for about two hours.

A few minutes after takeoff from Pryor Field, the airplane was seen flying in the vicinity of Trinity, Alabama. One eyewitness stated that, when the airplane first flew overhead, it was just above the tree tops. Another witness observed the airplane as the pilot made several low passes. On the last low pass, the pilot initiated a steep climb which terminated in what was described as a "hammerhead stall." The airplane entered a spin, descended from about 500 feet, and collided with utility lines adjacent to a single family dwelling (see attached witness statements).

PERSONNEL INFORMATION

Information about the pilot is included in this report under the data field labeled "First Pilot" on page 3 of the factual report. The pilot's flight logs were not recovered for examination, and Decatur/Athens Aero services did not have recorded data about the pilot's recent flight experience.

AIRCRAFT INFORMATION

Information about the airplane is included in this report under the data field labeled "Aircraft Information" on page 2 of the factual report.

METEOROLOGICAL INFORMATION

Visual weather conditions prevailed at the time of the accident. Weather information is contained in this report under the data field labeled "Weather Information" on page 4 of the factual report.

WRECKAGE AND IMPACT INFORMATION

The airplane impacted the ground adjacent to Mud Tavern Road in the community of Trinity. Examination of the accident site disclosed that the airplane wreckage was scattered over an area the approximate dimensions of the airframe. The horizontal stabilizer and vertical fin assemblies rested along the edge of the paved county road. The nose section of the airframe rested in the drainage ditch adjacent to the road surface. Additional debris from the damaged tree and downed utility lines was located in the immediate vicinity of the impact site. Despite the closeness of the accident site to a single family dwelling, the structure sustained minimal damage.

Examination of the aircraft wreckage at the accident site revealed that engine and propeller assemblies were buried two feet into the ground. The engine firewall was displaced aft into the pilot's and passenger's stations. Both aircraft seats were dislodged from their normally installed positions; the cockpit floor and seat tracks assemblies sustained buckling deformation. The leading edges of both wing assemblies sustained perpendicular crushing damage, and the wing assemblies were deflected aft from their normally installed positions. The pilot's station and the fuselage livable space sustained crushing damage. Despite impact damage to the airframe, flight control cables and fittings were examined at their normally installed positions. All aircraft components were located in the immediate vicinity of the main wreckage.

The subsequent examination of the engine assembly failed to disclose a mechanical problem. Examination of the airframe and aircraft systems also failed to disclose a mechanical problem.

MEDICAL AND PATHOLOGICAL INFORMATION

The autopsy on the pilot was conducted by Dr. Joseph Emory, on February 2, 1997 at the Alabama Department of Forensic Science in Birmingham, Alabama. The Toxicological examinations were negative for drugs and alcohol.

ADDITIONAL INFORMATION

The aircraft wreckage was released to, Mr. Edward C. Smith, President, Decatur/Athens Aero Services.

Pilot Information

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|----------------------------------|---------------------------------------|--|-----------------|
| Certificate: | Private | Age: | 26, 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: | Yes |
| Medical Certification: | Class 3 Valid Medical—no waivers/lim. | Last FAA Medical Exam: | August 29, 1995 |
| Occupational Pilot: | UNK | Last Flight Review or Equivalent: | |
| Flight Time: | 140 hours (Total, all aircraft) | | |

Aircraft and Owner/Operator Information

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|--------------------------------------|--|---------------------------------------|-----------------|
| Aircraft Make: | Cessna | Registration: | N50TB |
| Model/Series: | A150L A150L | Aircraft Category: | Airplane |
| Year of Manufacture: | | Amateur Built: | |
| Airworthiness Certificate: | Utility | Serial Number: | A150-3376 |
| Landing Gear Type: | Tricycle | Seats: | 2 |
| Date/Type of Last Inspection: | June 12, 1996 Annual | Certified Max Gross Wt.: | 1600 lbs |
| Time Since Last Inspection: | 44 Hrs | Engines: | 1 Reciprocating |
| Airframe Total Time: | 2526 Hrs | Engine Manufacturer: | Continental |
| ELT: | Installed, activated, did not aid in locating accident | Engine Model/Series: | O-200-A |
| Registered Owner: | DECATUR ATHENS AERO SERVICES | Rated Power: | 100 Horsepower |
| Operator: | BILLY D. PARKER | 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: | HSV ,630 ft msl | Distance from Accident Site: | 27 Nautical Miles |
| Observation Time: | 08:58 Local | Direction from Accident Site: | 75° |
| Lowest Cloud Condition: | Clear | Visibility | 10 miles |
| Lowest Ceiling: | None | Visibility (RVR): | |
| Wind Speed/Gusts: | 5 knots / | Turbulence Type Forecast/Actual: | / |
| Wind Direction: | 180° | Turbulence Severity Forecast/Actual: | / |
| Altimeter Setting: | 29 inches Hg | Temperature/Dew Point: | 10°C / 4°C |
| Precipitation and Obscuration: | No Obscuration; No Precipitation | | |
| Departure Point: | DECATUR , AL (DCU) | Type of Flight Plan Filed: | None |
| Destination: | | Type of Clearance: | None |
| Departure Time: | 08:55 Local | Type of Airspace: | Class G |

Airport Information

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|-----------------------------|---|----------------------------------|------|
| Airport: | | Runway Surface Type: | |
| Airport Elevation: | | Runway Surface Condition: | |
| Runway Used: | 0 | IFR Approach: | None |
| Runway Length/Width: | | VFR Approach/Landing: | None |

Wreckage and Impact Information

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|----------------------------|---------|-----------------------------|---------------------------|
| Crew Injuries: | 1 Fatal | Aircraft Damage: | Destroyed |
| Passenger Injuries: | 1 Fatal | Aircraft Fire: | None |
| Ground Injuries: | N/A | Aircraft Explosion: | None |
| Total Injuries: | 2 Fatal | Latitude, Longitude: | 34.669486,-87.399185(est) |

Administrative Information

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| Investigator In Charge (IIC): | Powell, Phillip |
| Additional Participating Persons: | TOM MILLER; BIRMINHAM , AL |
| Original Publish Date: | December 15, 1997 |
| Last Revision Date: | |
| Investigation Class: | Class |
| Note: | |
| Investigation Docket: | https://data.nts.gov/Docket?ProjectID=3773 |

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](#).