



Aviation Investigation Final Report

Location:	Piggott, Arkansas	Accident Number:	DFW05LA171
Date & Time:	June 23, 2005, 17:40 Local	Registration:	N9071R
Aircraft:	Cessna A188B	Aircraft Damage:	Destroyed
Defining Event:		Injuries:	1 Fatal
Flight Conducted Under:	Part 137: Agricultural		

Analysis

The 225-hour private pilot was spraying a cotton field. After completing the first pass over the field, the airplane was observed to pull- up over a levee and tree line. The airplane continued to climb at a steep angle of attack before it stalled, nosed over, and descended toward the ground in a nose down attitude into a field. A post-impact fire consumed the airplane. An examination of the wreckage revealed that all major components were accounted for at the accident site and cable continuity was established to the airplane's flight controls.

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 resulting in an inadvertent stall.

Findings

Occurrence #1: LOSS OF CONTROL - IN FLIGHT
Phase of Operation: MANEUVERING - TURN TO REVERSE DIRECTION

- Findings
1. (C) AIRSPEED - INADEQUATE - PILOT IN COMMAND
 2. STALL - INADVERTENT - PILOT IN COMMAND
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Occurrence #2: IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation: DESCENT - UNCONTROLLED

Findings

3. TERRAIN CONDITION - OPEN FIELD

Factual Information

On June 23, 2005, about 1740 central daylight time, a single-engine Cessna A188B agricultural airplane, N9071R, was destroyed following a loss of control while maneuvering at low altitude near Piggott, Arkansas. The commercial pilot, sole occupant of the airplane, was fatally injured. The airplane was registered and operated by the pilot. Visual meteorological condition prevailed and a flight plan was not filed for the 14 Code of Federal Regulations Part 137 aerial application flight. The local flight departed from a private airstrip near Kennett, Missouri, approximately 1725.

The first witness, a ground crewmember, reported the pilot was spraying a "sensitive" cotton field in an east to west direction. Starting at the south end of the field, the pilot made the first pass and pulled up over a levee and tree line before disappearing from his view. After about 45 seconds the crewmember became concerned when the airplane did not return and radioed the pilot. The pilot did not respond.

A second witness was driving in his vehicle when he observed the airplane. He reported that the airplane climbed at a steep angle and appeared to stall before coming "straight back down." The witness did not see the airplane hit the ground. Upon his arrival at the accident site the airplane was engulfed in flames.

According to a third witness, the airplane came "straight down," impacted terrain, and "exploded."

A Federal Aviation Administration (FAA) inspector and an a representative from the Cessna Aircraft Company performed an on-scene examination of the wreckage. The inspector and the manufacturer's representative reported that the airplane impacted into a field while at a steep angle of descent, on an approximate 270-degree heading. Ground evidence and scars revealed the left wing impacted the terrain first and the airplane came to rest in an upright position on a heading about 360-degrees. The energy path was approximately 100 feet long. Flight control cable continuity was established to the airplane's flight controls. The flaps were found partially extended and the elevator trim actuator was found in the neutral position. A post-impact fire consumed the cockpit and both wings.

The pilot held a commercial certificate for airplane single-engine land. His last second-class FAA medical was issued on April 21, 2005. At that time he reported having accumulated a total of 225 hours with 50 hours in the last 6 months. The pilot's logbook was not available for review during the course of the investigation.

The 1975-model Cessna A188B, serial number 18802097T, was a single seat, low wing, semi-monocoque airplane, configured for agricultural spraying. The airplane was powered by a

direct drive, horizontally opposed, fuel injected, normally aspirated, six-cylinder Continental IO-520-D engine, rated at 300 horsepower at 2,850 rpm and was driving a two bladed constant speed McCauley propeller. According to the airframe logbook, the airplane's most recent annual inspection was completed on March 26, 2005, with a total time of 4,499.1 hours. The engine logbook revealed that the engine had been inspected in accordance with a 100-hour inspection on March 26, 2005, and at that time had accrued 1,025.7 hours since its last major overhaul.

The Arkansas State Crime Laboratory, near Little Rock, Arkansas, performed an autopsy on the pilot on June 27, 2005. Specimens for toxicological tests were taken from the pilot by the medical examiner.

The FAA's Civil Aeromedical Institute's (CAMI) Forensic and Accident Research Center examined the specimens taken by the medical examiner. The results of analysis of the specimens were negative for carbon monoxide, cyanide, ingested volatiles, and tested drugs.

The closest weather reporting station to the accident site was located at Poplar Bluff Municipal Airport (POF), near Poplar Bluff, Missouri, about 24 nautical miles north of the accident site. At 1755, the weather observation facility reported wind from 200 degrees at 5 knots, visibility 10 statute miles, clear of clouds, temperature 93 degrees Fahrenheit, dew point 64 degrees Fahrenheit, and a barometric pressure setting of 30.00 inches of Mercury.

Pilot Information

Certificate:	Private	Age:	25, Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Single
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 2 Without waivers/limitations	Last FAA Medical Exam:	April 1, 2005
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:	225 hours (Total, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N9071R
Model/Series:	A188B	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Restricted (Special)	Serial Number:	18802097T
Landing Gear Type:	Tailwheel	Seats:	1
Date/Type of Last Inspection:	March 1, 2005 Annual	Certified Max Gross Wt.:	4200 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	4499 Hrs as of last inspection	Engine Manufacturer:	Continental
ELT:		Engine Model/Series:	IO-520-D
Registered Owner:	Joshua Savat	Rated Power:	300 Horsepower
Operator:		Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	POF,331 ft msl	Distance from Accident Site:	24 Nautical Miles
Observation Time:	17:55 Local	Direction from Accident Site:	360°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	5 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	200°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	34°C / 18°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Kennett, MO	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	17:25 Local	Type of Airspace:	

Airport Information

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

Wreckage and Impact Information

Crew Injuries:	1 Fatal	Aircraft Damage:	Destroyed
Passenger Injuries:		Aircraft Fire:	On-ground
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Fatal	Latitude, Longitude:	36.382,-90.190339

Administrative Information

Investigator In Charge (IIC): LeBaron, Timothy

Additional Participating Persons: Gerald H Acord; Federal Aviation Administration; Little Rock, AR
Emile J Lohman; Cessna Aircraft Company; Wichita, KS

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Investigation Class: [Class](#)

Note:

Investigation Docket: <https://data.ntsb.gov/Docket?ProjectID=61796>

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](#).