



Aviation Investigation Final Report

Location:	ROSE BUD, Arkansas	Accident Number:	FTW99FA143
Date & Time:	May 22, 1999, 10:55 Local	Registration:	N95754
Aircraft:	Taylorcraft BC12-D	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 Fatal, 1 Serious
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The passenger, who was a student pilot, reported that the pilot was going to do a 'slow fly-by' at the private airstrip. He further reported that as the airplane came over a wooded area, 'we encountered what was evidently [a] left wing stall. We spun into the wooded area, and impacted the ground. Prior to the stall everything seemed normal.' The airplane owner reported that the wind was from the south at 6 to 8 mph. No structural or mechanical anomalies were observed during an examination of the airplane.

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 minimum required airspeed for flight, which resulted in an inadvertent stall.

Findings

Occurrence #1: LOSS OF CONTROL - IN FLIGHT
Phase of Operation: APPROACH - VFR PATTERN - FINAL APPROACH

- Findings
1. (C) AIRSPEED(VS) - NOT MAINTAINED - PILOT IN COMMAND
 2. STALL/SPIN - INADVERTENT - PILOT IN COMMAND
-

Occurrence #2: IN FLIGHT COLLISION WITH OBJECT

Phase of Operation: DESCENT - UNCONTROLLED

Findings

3. OBJECT - TREE(S)

Factual Information

HISTORY OF FLIGHT

On May 22, 1999, at 1055 central daylight time, a Taylorcraft BC12-D, N95754, owned and operated by a private individual, was substantially damaged after impacting trees during final approach to the McDonald private airstrip near Rose Bud, Arkansas. The private pilot sustained fatal injuries and the sole passenger sustained serious injuries. Visual meteorological conditions prevailed, and a flight plan was not filed for the 14 Code of Federal Regulations Part 91 personal flight. The local flight originated from the aforementioned private airstrip, at 1030.

The airplane owner reported that the pilot "asked to take her very good friend for a ride around the airstrip." The owner further reported that the airplane took off to the west, and upon returning to the airstrip, the pilot attempted to land to the west over 50-foot pine trees. The airplane "was observed on final approach to be too low over the trees with wings waving side to side, then it nosed over to the left and went straight down." The owner stated that the wind was from the south at 6 to 8 mph.

Witnesses reported that the aircraft was approaching the airstrip from the east, when it "banked right then hard left" then nosed down into the trees. One witness, who was a pilot, reported that he was "flying [a] helicopter even with the airplane and saw the wings go up and down three times and the plane looked like it stalled and it went nose down and hit the ground."

The passenger, who was a student pilot, reported that the pilot was going to do a "slow fly-by." The passenger stated that, "as we came over a wooded area, we encountered what was evidently [a] left wing stall. (It felt like prop wash.) We spun into the wooded area, and impacted the ground. Prior to the stall everything seemed normal."

PERSONNEL INFORMATION

According to FAA records, the pilot was issued a private pilot certificate on November 11, 1998, with an airplane single-engine land rating. The pilot held a valid third class medical certificate, issued August 8, 1997. The certificate stipulated a limitation to wear corrective lenses when operating an aircraft.

An examination of the pilot's logbook revealed that she had accumulated a total flight time of 108.7 hours, of which 83.7 hours were in the make and model of the accident airplane. She had logged 4 hours in the previous 30 days and 7.5 hours in the previous 90 days, and had previously flown from the McDonald private airstrip.

AIRCRAFT INFORMATION

The 1946 Taylorcraft BC12-D, was a single-engine, fabric covered, tailwheel landing gear, high wing airplane. It was powered by a Teledyne Continental A65-8F engine, rated at 65 horsepower, and a McCauley, two-blade, fixed pitched propeller.

The aircraft had been damaged several years prior to the accident when the hangar it was in was destroyed by a tornado. A complete restoration was completed on October 3, 1997. The aircraft's last annual inspection was completed on October 20, 1998, at a total time of 2524 hours, and it was determined to be in airworthy condition.

A review of the airframe and engine maintenance records, by the NTSB investigator-in-charge, did not reveal evidence of any uncorrected maintenance defects.

AERODROME INFORMATION

The McDonald private airstrip is located about 3.2 miles southeast of Rose Bud at the aircraft owner's residence. The airstrip's grass runway is 1,920 feet long and oriented 270/090 degrees. The elevation of the airstrip is 720 feet.

WRECKAGE IMPACT INFORMATION

The airplane wreckage was located in trees approximately 300 feet east of the grass runway, at latitude 35 degrees 19.097 minutes north and longitude 092 degrees 01.629 minutes west. The airplane traveled through the trees for about 55 feet, on a magnetic heading of 240 degrees. The airplane came to rest on its nose, on a heading of 140 degrees magnetic.

Examination of the airframe revealed that the left wing was crumpled and partially separated from the fuselage, connected by the wing strut. The right wing was attached to the fuselage and its leading edge was crushed aft and the wing tip was bent upward. The top of the vertical stabilizer was bent downward to the right. The fuselage was displaced to the left, four feet aft of the right wing. Continuity of the rudder and ailerons was confirmed from the controls to the flight surfaces. The elevator had continuity from the flight surface to the yoke; however, impact damage prevented fore and aft movement of the yoke.

Examination of the engine revealed that the propeller remained attached. One blade was curled aft, and the other blade was twisted and bent aft. The crankshaft was rotated by hand with the valve covers and top spark plugs removed. Continuity was confirmed to all cylinders and to the rear of the engine. "Good" finger compression was noted on all cylinders. Both magnetos sparked at all terminals when rotated by hand.

MEDICAL AND PATHOLOGICAL INFORMATION

An autopsy was not performed on the pilot due to her succumbing to injuries while being treated in a hospital.

The FAA Civil Aeromedical Institute toxicology laboratory noted 0.1 (mg/dl, mg/hg) lidocaine detected in blood, and ephedrine detected in blood. Review of hospital records indicated these medications were administered to the pilot following the accident.

ADDITIONAL INFORMATION

The aircraft was released to the owner on May 24, 1999.

Pilot Information

Certificate:	Private	Age:	51,Female
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-w/ waivers/lim	Last FAA Medical Exam:	August 8, 1997
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:	109 hours (Total, all aircraft), 84 hours (Total, this make and model), 58 hours (Pilot In Command, all aircraft), 8 hours (Last 90 days, all aircraft), 4 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Taylorcraft	Registration:	N95754
Model/Series:	BC12-D BC12-D	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	8054
Landing Gear Type:	Tailwheel	Seats:	
Date/Type of Last Inspection:	October 20, 1998 Annual	Certified Max Gross Wt.:	
Time Since Last Inspection:	31 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	2555 Hrs	Engine Manufacturer:	Continental
ELT:	Installed, not activated	Engine Model/Series:	A65-8F
Registered Owner:	LARRY G. MCDONALD	Rated Power:	65 Horsepower
Operator:		Operating Certificate(s) Held:	None
Operator Does Business As:		Operator Designator Code:	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	LRF ,311 ft msl	Distance from Accident Site:	25 Nautical Miles
Observation Time:	11:55 Local	Direction from Accident Site:	190°
Lowest Cloud Condition:	Scattered / 3500 ft AGL	Visibility	6 miles
Lowest Ceiling:	Broken / 25000 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	2 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	120°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	31°C / 21°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	(NONE)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	10:30 Local	Type of Airspace:	Class G

Airport Information

Airport:	MCDONALD PRIVATE AIRSTRIP NONE	Runway Surface Type:	
Airport Elevation:	720 ft msl	Runway Surface Condition:	
Runway Used:	27	IFR Approach:	None
Runway Length/Width:	1920 ft / 110 ft	VFR Approach/Landing:	Traffic pattern

Wreckage and Impact Information

Crew Injuries:	1 Fatal	Aircraft Damage:	Substantial
Passenger Injuries:	1 Serious	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Fatal, 1 Serious	Latitude, Longitude:	35.329132,-92.069427(est)

Administrative Information

Investigator In Charge (IIC):	Wigington, Douglas
Additional Participating Persons:	WILLIAM R FRY; LITTLE ROCK , AR
Original Publish Date:	July 17, 2001
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=46372

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](#).