



Aviation Investigation Factual Report

Location:	Coleman, Texas	Accident Number:	DFW05FA052
Date & Time:	January 10, 2005,	Registration:	N45173
Aircraft:	Cessna 150M	Aircraft Damage:	Destroyed
Defining Event:		Injuries:	1 Fatal
Flight Conducted Under:	Part 91: General aviation - Personal		

Factual Information

HISTORY OF FLIGHT

On December 10, 2005, between 0730 and 1130 central standard time, a Cessna 150M single-engine airplane, N45173, was destroyed following a loss of control while maneuvering at low altitude approximately four nautical miles west of the Coleman Municipal Airport (COM), near Coleman, Texas. The non-rated pilot, who was the sole occupant and owner of the airplane, was fatally injured. Instrument meteorological conditions prevailed, and no flight plan was filed for the personal flight conducted under 14 Code of Federal Regulations Part 91. The local flight originated from the Coleman Airport at about 0730.

According to personnel at the Coleman Airport, the pilot regularly flew in the morning on short (less than one hour) flights in the local area. On the morning of the accident, the pilot departed about 0730. At 1130, a rancher located the wreckage of the airplane on his property and called 911.

PERSONNEL INFORMATION

The 67-year old pilot was not a certificated pilot; however, he was issued a Federal Aviation Administration (FAA) third class medical certificate on July 16, 2002. Examination of the pilot's logbook revealed that during the two-year period that his medical was valid (expired July 31, 2004), he logged flight instruction from a flight instructor and had received several 90-day solo endorsements. The pilot's last 90-day solo endorsement was logged on July 2, 2004. A review of FAA airman records revealed the pilot attempted to renew his medical certificate on August 5, 2004, but was denied. At the time of the accident, the pilot had accrued approximately 122 total flight hours.

METEOROLOGICAL INFORMATION

Weather at Brownwood Regional Airport (BWD), near Brownwood, Texas, located approximately 20 miles east-southeast of the accident site, at 0745, was reported as wind from 170 degrees at 4 knots, 6 miles visibility, clear skies, temperature 59 degrees Fahrenheit, dew point 59 degrees Fahrenheit, and a barometric pressure setting of 30.12 inches of Mercury.

At 0845, the reported weather included wind from 170 degrees at 4 knots, quarter-mile visibility, overcast ceiling at 100 feet, temperature 61 degrees Fahrenheit, dew point 61 degrees Fahrenheit, and a barometric pressure setting of 30.13 inches of Mercury.

A helicopter pilot, who was performing aerial application flights on the morning of the accident,

stated that he departed at 0720 and began spraying runs in the local Coleman area. He was scheduled to spray fields east of Coleman Airport, but his fuel truck driver who had positioned himself in that area reported, "it was fogged in."

WRECKAGE AND IMPACT INFORMATION

An on-scene investigation was conducted on January 11, 2005. All major components of the airplane were accounted for at the accident site. The airplane came to rest in an open field. The wreckage path was aligned on a magnetic heading of 260 degrees at an elevation of approximately 1,580 feet mean sea level (msl). Approximately 200 yards east of where the airplane came to rest was a small hill that was covered in approximately 50-foot-high trees and brush.

The initial impact point was a series of ground scars located approximately 170 feet from where the main wreckage came to rest. The initial impact mark included two horizontal impact marks (consistent with the leading edge of the wings) that expanded to the left and right of a 3-foot wide by 1-foot deep crater, which contained a slash mark consistent with the dimensions of a propeller blade. Pieces of the red navigational lens were found embedded in the eastern most end of the first horizontal impact mark, and a piece of green navigational lens was found laying near the end of the other horizontal impact mark, which extended to the west of the crater.

The main wreckage consisted of the left wing, engine, cockpit, empennage, and tail section. Control continuity was established for all control surfaces to the forward cockpit area. Several of the control cables were broken and exhibited "broomstrawed" fractures consistent with tension overload.

The cockpit area exhibited impact damage. The throttle was found in the near-idle position (approximately three inches from the panel) and was bent upwards. The mixture was in the full rich position, and the primer was in-and-locked.

Examination of the engine revealed that it had partially separated from the airframe. The engine was manually rotated and valve train continuity and piston movement was verified on all four cylinders. Both magnetos remained attached to the engine, but the left magneto sustained impact damage and could not be tested. The right magneto was removed along with the damaged ignition leads, and manually rotated. Spark was observed at each tower. The top spark plugs were removed and appeared gray in color. The engine oil sump was removed, and a small trace of carbon deposits and metal-like debris were noted.

The two-bladed, fixed-pitch propeller separated from the engine and was located just forward of the crater. The spinner was twisted and crushed against the center of the propeller. One blade exhibited chord-wise scoring, was twisted and bent aft. The other blade displayed chord-wise scoring and was twisted.

Both wings and their respective fuel tank sustained impact damage, and no evidence of fuel was noted. The fuel selector valve also sustained impact damage and was found in the intermediate position, between on and off. The fuel strainer had separated from the firewall and was not damaged. It was disassembled, and no fuel was found in the bowl, and the screen was absent of debris. The carburetor also separated from the engine but remained relatively undamaged. It too was disassembled, and no fuel was found in the bowl.

MEDICAL AND PATHOLOGICAL INFORMATION

An autopsy was conducted on the pilot by the Dallas County Medical Examiner's Office, Dallas, Texas, on January 12, 2005.

Toxicological testing was completed by the FAA Toxicology Accident Research Laboratory, Oklahoma City, Oklahoma. Pseudoephedrine, Doxlyamine, Dextrophan, Dextromethorphan, and Diphenhydramine were detected in the kidney and liver specimens. Diazepam and Nordiazepam were also detected in the liver and kidney specimens.

According to an FAA Regional Flight surgeon, Doxlyamine and Diephenhydramine are antihistamines used in symptomatic management of allergic symptoms. If the pilot had reported the use of these drugs to the FAA, he would have been warned not to fly for at least twelve hours after taking them.

Diazepam (Valium) is an anti-anxiety agent. Use of this medication would have precluded medical certification of this pilot if he had reported use of it to the FAA. The pilot would have been warned not to fly while taking this medication. A review of the pilot's past FAA medical applications revealed that he did not report this medication to the FAA. Nordiazepam is a metabolite of Diazepam.

ADDITIONAL INFORMATION

The wreckage was verbally released to the owner's daughter on January 12, 2004.

Pilot Information

Certificate:	Student	Age:	67, Male
Airplane Rating(s):	None	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:	None Invalid Medical for flight	Last FAA Medical Exam:	July 16, 2002
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:	122 hours (Total, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N45173
Model/Series:	150M	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	15076769
Landing Gear Type:	Tricycle	Seats:	2
Date/Type of Last Inspection:	Unknown	Certified Max Gross Wt.:	1500 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	Continental
ELT:	Installed, not activated	Engine Model/Series:	O-200-A
Registered Owner:	On file	Rated Power:	100 Horsepower
Operator:	On file	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Instrument (IMC)	Condition of Light:	Day
Observation Facility, Elevation:	BWD,1387 ft msl	Distance from Accident Site:	23 Nautical Miles
Observation Time:	08:45 Local	Direction from Accident Site:	270°
Lowest Cloud Condition:		Visibility	0.25 miles
Lowest Ceiling:	Overcast / 100 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	4 knots / None	Turbulence Type Forecast/Actual:	/
Wind Direction:	170°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.12 inches Hg	Temperature/Dew Point:	16°C / 16°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Coleman, TX (COM)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	07:30 Local	Type of Airspace:	Class G

Airport Information

Airport:	Coleman Municipal Airport COM	Runway Surface Type:	
Airport Elevation:	1697 ft msl	Runway Surface Condition:	Unknown
Runway Used:		IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	Unknown

Wreckage and Impact Information

Crew Injuries:	1 Fatal	Aircraft Damage:	Destroyed
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Fatal	Latitude, Longitude:	31.847778,-99.314445

Administrative Information

Investigator In Charge (IIC):	Yeager, Leah
Additional Participating Persons:	Brian F Fricker; FAA/FSDO (Airworthiness); San Antonio, TX John Kent; Teledyne Continental Motors; Seagoville, TX Dave Shonka; Cessna Aircraft Company; Wichita, KS
Report Date:	March 31, 2005
Last Revision Date:	
Investigation Class:	Class
Note:	The NTSB traveled to the scene of this accident.
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=60833

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](#).