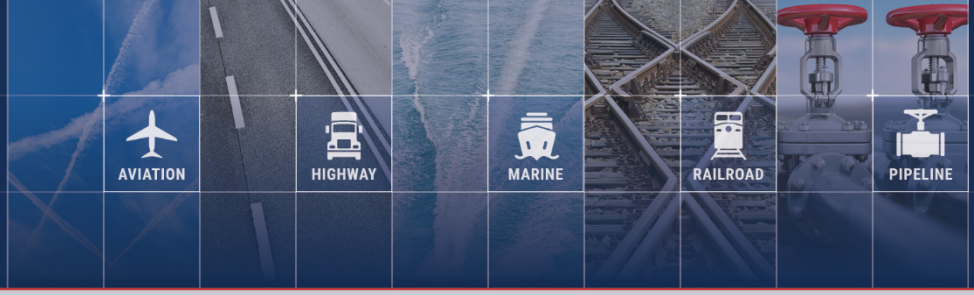

Aviation Investigation Final Report

Location:	Cleveland, Texas	**Accident Number:**	DFW05FA240
Date & Time:	September 15, 2005,	**Registration:**	N8285T
Aircraft:	Cessna 175B	**Aircraft Damage:**	Destroyed
Defining Event:		**Injuries:**	3 Fatal
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The 1,220-hour pilot lost control of the single-engine airplane while maneuvering at a low altitude over an area leased for deer hunting. No flight plan was filed, and the airplane was not reported missing until the following day. No radio transmissions or distress calls were received, and there were no reported eyewitnesses to the accident. Visual meteorological conditions prevailed, with more than 10 miles of visibility. The airplane came to rest in a near vertical position with the engine and nose section driven into the ground. Flight control continuity was established at the accident site, and no evidence of preimpact mechanical failure or malfunction was observed.

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 airspeed resulting in an inadvertent stall/spin. A contributing factor was the low altitude.

Findings

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

Findings
1. (F) ALTITUDE - LOW - PILOT IN COMMAND
2. (C) AIRSPEED - NOT MAINTAINED - PILOT IN COMMAND

3. STALL/SPIN - INADVERTENT - PILOT IN COMMAND

Occurrence #2: IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation: DESCENT - UNCONTROLLED

Findings
4. TERRAIN CONDITION - GROUND

Factual Information

HISTORY OF FLIGHT

On September 15, 2005, at an unknown time, a single-engine Cessna 175B airplane, N8285T, was destroyed upon impact with terrain following a loss of control while maneuvering near Cleveland, Texas. The commercial pilot and two passengers were fatally injured. The airplane was owned and operated by the pilot. 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 Williams Airport (9X1), near Porter, Texas, approximately 1700 central daylight time (CDT).

According to local authorities, the pilot and passengers told friends that they were planning to fly over and observe an area that was leased for deer hunting. However, it was not until the next morning that a fellow pilot noticed that the pilot's and the passenger's cars remained parked at the airport. The flight was then reported as missing, and a ground and air search were initiated. An emergency locator transmitter (ELT) signal was received by local pilots searching for the missing airplane. After the wreckage of the airplane was located, the Federal Aviation Administration (FAA) was notified approximately 1000 on September 16, 2005. The Liberty County Sheriff's Department and officers from the Texas Department of Public Safety secured the wreckage and area until the arrival of the NTSB. No radio transmissions or distress calls were received, and there were no reported eyewitnesses to the accident.

PERSONNEL INFORMATION

The 43-year old pilot held a commercial certificate with airplane single-engine land and multi-engine land ratings, and an instrument airplane rating. The pilot also held a flight instructor certificate (CFI), with airplane single-engine land and multi-engine land ratings. The pilot also held an aircraft mechanic certificate, with airframe and powerplant ratings.

The pilot's most recent FAA second-class medical certificate was issued on December 1, 2004, with no limitations or waivers noted. On the medical application form, the pilot reported that he had a total flight time of 1,200 hours.

AIRCRAFT INFORMATION

The airplane was originally powered by a Continental GO-300-D engine, serial number 16204-0-D, that was later replaced by a Lycoming O-360 engine using supplemental type certificate (STC) SA424CE. On April 15, 2004, an engine kit number O-361-AIA/01 that displayed Engine Components Incorporated (ECI) part numbers was installed on the airplane by the owner/pilot/mechanic.

According to maintenance records provided to the NTSB, the 1961 airplane completed its most recent annual inspection on May 10, 2005. Total time (TT) on the airplane was recorded at 1,607.85 hours. The engine TT was 3,204.5 hours and time since overhaul (TSO). The tachometer time, was 184.5 hours.

METEOROLOGICAL INFORMATION

At 1753, the automated surface observing system at the Lone Star Executive Airport (CXO), near Conroe, Texas, reported wind from 210 degrees at 11 knots, visibility 10 statute miles, broken clouds at 5,500 feet, overcast 8,000 feet, temperature 34 degrees Celsius, dew point 21 degrees Celsius, and barometric pressure at 29.91 inches of Mercury. The density altitude was calculated by the NTSB investigator-in-charge (IIC) at 2,395 feet.

WRECKAGE AND IMPACT INFORMATION

The accident site was was located near Texas Farm Market (FM) Road 1010 and Gulf Road on the Gulf Oil Hunting Club Lease in Liberty County, Texas, about three miles on a secluded dirt road into a forested area. The Global Positioning System (GPS) coordinates recorded at the accident site using a hand held unit were latitude 30 degrees 16.223 minutes North and longitude 95 degrees 01.523 minutes West, with a field elevation of 106 feet mean sea level (msl). The accident site was approximately 6.17 miles south of the Cleveland Municipal Airport (6R3), near Cleveland, Texas.

The airplane came to rest in a near vertical attitude, with the engine and nose section of the airplane driven into the ground, with the aft portion of the fuselage extending upward. The other part of the fuselage, including the empennage, was still partially attached and hanging downward. The cabin area was collapsed from front to back. There was slight damage to new-growth pine trees within 25 feet of the airplane, but no other ground marks were found. Both wings were rotated forward, and the engine was pushed aft approximately three feet into the cabin area. All aerodynamic flight controls were accounted for and remained attached to the airframe. The manual flap control was found in the retracted position.

The right wing fuel tank contained approximately 15 gallons of fuel. The left wing tank was crushed and open, but contained about 5 gallons of fuel. The light-blue colored fuel, which smelled like aviation fuel, was tested with water-finding paste with negative results. The fuel caps were found in place and exhibited pliable rubber seals. The fuel selector handle and the fuel selector valve were observed in the "Off" position. No evidence of preimpact mechanical failure or malfunction was observed. There was no post-impact fire.

On September 18, 2005, the wreckage was recovered to Air Salvage of Dallas (ASOD), near Lancaster, Texas, for further examination.

MEDICAL AND PATHOLIGCAL INFORMATION

An autopsy was performed on September 17, 2005, by a forensic pathologist at the request of the Justice of the Peace, Liberty County, Texas, in the Southwest Texas Forensic Center, Conroe, Texas.

Toxicological testing on the pilot was performed by the FAA's Civil Aeromedical Institute (CAMI) Forensic Center, Oklahoma City, Oklahoma, for carbon monoxide, cyanide, volatiles, and tested drugs. The presence of cocaine was detected in the urine, but not in the blood. Also, propoxyphene (Darvon) was detected in the blood and urine. The FAA's Regional Flight Surgeon stated that "use of these substances would have precluded airman duties for this pilot had they been reported."

TESTS AND RESEARCH

On September 19, 2005, at the facilities of ASOD, the wreckage was examined by representatives from Cessna Aircraft and Textron Lycoming under the supervision of the NTSB investigator-in-charge (IIC).

The flight control cables remained attached to their respective surfaces, and were extended throughout the fuselage to the forward section of the cabin, where binding occurred due to deformation of the lower cabin area.

The seat rails were attached. The seat bases for both front seats were deformed to the right and forward, but not attached to their respective seat rails.

The propeller was found separated from the crankshaft at the propeller flange. The engine cowling remained attached to the engine. There was no data plate attached to the engine or engine serial numbers embossed on the crankshaft. All visible engine components displayed Engine Components Incorporated (ECI) part numbers. The operation of the crankshaft, camshaft, valve train, and cylinder revealed continuity, when the engine was rotated by hand using a turning tool attached to the vacuum pump adapter pad. Thumb suction and compression was obtained from the engine, and spark was observed at all of the outlet points of both magnetos. The air induction and carburetor system was inspected and no defects were observed. All screens were observed free of debris and contaminants. All cylinders were inspected using a lighted borescope and no defects were noted. No anomalies were found during the examination that would have precluded the engine from producing power prior to impact.

The starter ring-gear on the Sensenich model number 76EM855-0-56 propeller, which was separated from the crankshaft, displayed rotational marks. Both blades showed chordwise gouging and scratching, including blade polishing and torsional twisting.

ADDITIONAL INFORMATION

The airplane wreckage and logbooks were released to the owner's representative on December 15, 2005.

Pilot Information

Certificate:	Commercial; Flight instructor	**Age:**	43,Male
Airplane Rating(s):	Single-engine land; Multi-engine land	**Seat Occupied:**	Right
Other Aircraft Rating(s):	None	**Restraint Used:**	
Instrument Rating(s):	Airplane	**Second Pilot Present:**	No
Instructor Rating(s):	Airplane multi-engine; Airplane single-engine; Instrument airplane	**Toxicology Performed:**	Yes
Medical Certification:	Class 2 Without waivers/limitations	**Last FAA Medical Exam:**	December 1, 2004
Occupational Pilot:	No	**Last Flight Review or Equivalent:**	March 1, 2004
Flight Time:	1220 hours (Total, all aircraft), 150 hours (Total, this make and model), 1085 hours (Pilot In Command, all aircraft), 23 hours (Last 90 days, all aircraft), 29 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	**Registration:**	N8285T
Model/Series:	175B	**Aircraft Category:**	Airplane
Year of Manufacture:		**Amateur Built:**	
Airworthiness Certificate:	Normal	**Serial Number:**	17556985
Landing Gear Type:	Tricycle	**Seats:**	4
Date/Type of Last Inspection:	May 1, 2005 Annual	**Certified Max Gross Wt.:**	2350 lbs
Time Since Last Inspection:	167 Hrs	**Engines:**	1 Reciprocating
Airframe Total Time:	3204.5 Hrs as of last inspection	**Engine Manufacturer:**	Experimental
ELT:	Installed, activated, aided in locating accident	**Engine Model/Series:**	O-360-A2A
Registered Owner:	Istvan Macsai	**Rated Power:**	180 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:	CXO,245 ft msl	**Distance from Accident Site:**	23 Nautical Miles
Observation Time:	17:53 Local	**Direction from Accident Site:**	98°
Lowest Cloud Condition:	Thin Overcast / 8000 ft AGL	**Visibility**	10 miles
Lowest Ceiling:	Broken	**Visibility (RVR):**	
Wind Speed/Gusts:	11 knots /	**Turbulence Type Forecast/Actual:**	/
Wind Direction:	210°	**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:	29.9 inches Hg	**Temperature/Dew Point:**	34°C / 21°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Cleveland, TX (6R3)	**Type of Flight Plan Filed:**	None
Destination:		**Type of Clearance:**	None
Departure Time:	17:00 Local	**Type of Airspace:**	

Wreckage and Impact Information

Crew Injuries:	1 Fatal	**Aircraft Damage:**	Destroyed
Passenger Injuries:	2 Fatal	**Aircraft Fire:**	None
Ground Injuries:	N/A	**Aircraft Explosion:**	None
Total Injuries:	3 Fatal	**Latitude, Longitude:**	30.270277,-95.025276

Administrative Information

Investigator In Charge (IIC):	McGill, C Frank
Additional Participating Persons:	Gary S Schuster; Federal Aviation Administration; Houston, TX Emile J Lohman; Cessna Aircraft Company; Wichita, KS John B Butler; Lycoming Engines; Arlington, TX
Original Publish Date:	April 25, 2006
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=62474