



Aviation Investigation Final Report

Location:	Sedalia, Missouri	Accident Number:	CHI05LA250
Date & Time:	August 31, 2005, 19:30 Local	Registration:	N37855
Aircraft:	Porterfield FP-65	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 Fatal
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The airplane was substantially damaged when the pilot lost control and impacted terrain. According to the Federal Aviation Administration (FAA) inspector assigned to the accident, a witness reported that the airplane rolled upside down and descended to the ground. The wreckage was confined to the immediate area of the impact. The airplane was resting on its nose, with the empennage oriented upward about 60-degrees relative to the terrain. A post accident examination was conducted and no anomalies associated with a pre-impact failure were observed. There was no record of the pilot ever having been issued a pilot or medical certificate. A flight time logbook for the pilot was not located. Maintenance logbooks for the airplane were not located. The FAA forensic toxicology report for the pilot stated that ethanol was detected in blood, vitreous fluid, muscle, brain, and urine samples. Blood ethanol level was measured as 46 mg/dl (0.046 percent), vitreous ethanol level was 44 mg/dl (0.044 percent), and urine ethanol level was 92 mg/dl (0.092 percent). Federal regulations stated that a pilot may not operate an aircraft with a blood alcohol level of 0.04 percent or greater.

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 sufficient airspeed and the inadvertent stall/spin resulting in an in-flight loss of control and collision with terrain.

Findings

Occurrence #1: LOSS OF CONTROL - IN FLIGHT

Phase of Operation: TAKEOFF - INITIAL CLIMB

Findings

1. (C) AIRSPEED - NOT MAINTAINED - PILOT IN COMMAND
2. (C) STALL/SPIN - INADVERTENT - PILOT IN COMMAND
3. IMPAIRMENT(ALCOHOL) - PILOT IN COMMAND
4. LACK OF CERTIFICATION - PILOT IN COMMAND

Occurrence #2: IN FLIGHT COLLISION WITH TERRAIN/WATER

Phase of Operation: DESCENT - UNCONTROLLED

Findings

5. TERRAIN CONDITION - GROUND

Factual Information

HISTORY OF FLIGHT

On August 31, 2005, about 1930 central daylight time, a Porterfield FP-65 airplane, N37855, was substantially damaged during an in-flight collision with terrain after takeoff from a private airstrip near Sedalia, Missouri. The local flight was conducted under 14 CFR Part 91 without a flight plan. Visual meteorological conditions prevailed at the time. The pilot sustained fatal injuries.

According to the Federal Aviation Administration (FAA) inspector assigned to the accident, a witness reported that the airplane rolled upside down and descended to the ground.

PERSONNEL INFORMATION

The FAA inspector reported that there was no record of the pilot ever having been issued a pilot or medical certificate. A flight time logbook for the pilot was not located.

Volunteer firefighters on-scene reported that the pilot was known to make short flights around the area late in the evening. They noted that the pilot maintained the airplane himself.

AIRCRAFT INFORMATION

The accident airplane was a 1941 model year, Porterfield FP-65, serial number 1002. The FP-65 was a high-wing, single-engine, 2-place airplane, with a conventional (tail-wheel) landing gear configuration. The airplane was powered by a Franklin 4AC-176B, 65-horsepower, reciprocating engine.

According to the previous owner, the accident pilot purchased the airplane on October 11, 1999. FAA records still listed the previous owner as the owner of record. There was no record of the accident pilot submitting a registration application for the airplane.

Maintenance logbooks for the airplane were not located.

METEOROLOGICAL INFORMATION

Weather conditions recorded by the Sedalia Memorial Airport (DMO) Automated Surface Observing System (ASOS), located approximately 5 miles west of the accident site, at 1953 were: Clear skies, winds from 210 degrees at 5 knots, and visibility of 10 statute miles. Sunset was at 1944 on the day of the accident.

WRECKAGE AND IMPACT INFORMATION

The accident site was located in a cornfield across the road from an open pasture the pilot used as an airstrip. The site and airstrip were approximately 5 miles east of DMO.

The airplane wreckage was confined to the immediate area of the impact. The airplane was resting on its nose, with the empennage oriented upward about 60-degrees relative to the terrain. The empennage was bent to the right about 45-degrees at a point between the aft cabin and the empennage. The wings were dislocated from the fuselage at the wing roots but remained in position adjacent to the airframe.

A post accident examination was conducted and no anomalies associated with a pre-impact failure were observed. The propeller blades were sheared off at the hub. The propeller blades appeared to be of a composite, carbon fiber construction. Internal engine and accessory section continuity were confirmed via crankshaft rotation. Compression was obtained at all cylinders.

The fuel tanks were ruptured and the fuel strainer (gascolator) was damaged. First responders to the accident site reported a strong fuel odor at the site.

The flight controls remained attached to the airframe. Flight control continuity was continuous except for where the wings had dislocated from the fuselage.

MEDICAL AND PATHOLOGICAL INFORMATION

The FAA Civil Aero Medical Institute forensic toxicology report indicated the presence of ethanol in the pilot's post mortem blood, vitreous fluid, muscle, brain and urine samples. The testing measured 46 mg/dl of ethanol in the blood, 44 mg/dl in the vitreous fluid, 41 mg/dl in the muscle, 53 mg/dl in the brain, and 92 mg/dl in the urine samples.

An autopsy of the pilot was conducted at the University of Missouri, Columbia, Missouri, by the Boone County medical examiner on September 1, 2005.

ADDITIONAL INFORMATION

Title 14 CFR 91.17, Alcohol and Drugs, stated that a person may not act as a crew member of a civil aircraft with a blood alcohol level of 0.04 percent by weight or greater.

The FAA was a party to the investigation.

Pilot Information

Certificate:	None	Age:	50, Male
Airplane Rating(s):	None	Seat Occupied:	Front
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	Last FAA Medical Exam:	
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:			

Aircraft and Owner/Operator Information

Aircraft Make:	Porterfield	Registration:	N37855
Model/Series:	FP-65	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	1002
Landing Gear Type:	Tailwheel	Seats:	2
Date/Type of Last Inspection:		Certified Max Gross Wt.:	1200 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	Franklin
ELT:		Engine Model/Series:	4AC-176-B
Registered Owner:	On file	Rated Power:	65 Horsepower
Operator:	On file	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	DMO,909 ft msl	Distance from Accident Site:	3 Nautical Miles
Observation Time:	19:53 Local	Direction from Accident Site:	30°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	5 knots / 0 knots	Turbulence Type Forecast/Actual:	/
Wind Direction:	210°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.94 inches Hg	Temperature/Dew Point:	27°C / 19°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Sedalia, MO (PVT)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	19:30 Local	Type of Airspace:	

Airport Information

Airport:	-- PVT	Runway Surface Type:	
Airport Elevation:	909 ft msl	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:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Fatal	Latitude, Longitude:	38.707221,-93.175834

Administrative Information

Investigator In Charge (IIC):	Sorensen, Timothy
Additional Participating Persons:	Alfred Rager; FAA – Kansas City FSDO
Original Publish Date:	August 29, 2006
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=62371

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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](#).