Aviation Investigation Final Report

Location:	Lidderdale, Iowa	**Accident Number:**	CEN10FA320
Date & Time:	June 13, 2010, 18:00 Local	**Registration:**	N6036U
Aircraft:	Beech A36	**Aircraft Damage:**	Destroyed
Defining Event:	Loss of control in flight	**Injuries:**	2 Fatal
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot contacted flight service stations on three occasions prior to the accident flight and obtained weather briefings for the visual flight rules (VFR) flight. During each of the weather briefings, the pilot was informed that VFR flight was not recommended due to instrument meteorological conditions that existed along the proposed route. Despite this information, the pilot departed for the flight. The airplane subsequently impacted a farm field about 62 nautical miles from the departure airport, about 1-1/2 hours after the pilot obtained the last weather briefing. Weather conditions recorded at an airport 4 nautical miles from the accident site included an overcast ceiling at 1,100 feet above ground level. The pilot did not have an instrument rating associated with his pilot certificate. A postaccident examination of the airplane revealed no preimpact anomalies with respect to the airframe, engine or airplane systems. The dimensions of the debris field, about 1,000 feet in length, and the T-shaped ground scar at the initial impact point, was indicative of the airplane impacting the ground in a wings level attitude at a high rate of speed, which was consistent with an attempted recovery from a dive.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's decision to initiate the flight in marginal weather conditions and his loss of aircraft control.

Findings

Personnel issues	Decision making/judgment - Pilot
Aircraft	(general) - Not attained/maintained
Environmental issues	Low ceiling - Effect on operation

Factual Information

History of Flight

Enroute-cruise	Loss of control in flight (Defining event)
Uncontrolled descent	Collision with terr/obj (non-CFIT)

HISTORY OF FLIGHT

On June 13, 2010, about 1800 central daylight time, a Beech A36, N6036U, was destroyed when it impacted terrain near Lidderdale, Iowa. The airplane was registered to OK Flying LLC., and was being operated by a private pilot under the provisions of 14 Code of Federal Regulations Part 91 as a personal flight. Visual meteorological conditions existed at the surface with instrument conditions at 1,100 feet above ground level (agl). No flight plan was filed. The private pilot and his passenger were fatally injured. The flight departed from the Algona Municipal Airport (AXA), Algona, Iowa, at an unconfirmed time, and was destined for the Lamar Municipal Airport (LLU), Lamar, Missouri.

At 0556 on the day of the accident, the pilot contacted the Fort Worth Automated Flight Service Station (AFSS) and obtained a weather briefing for a proposed visual flight rules (VFR) flight from AXA to LLU. The briefer informed the pilot of widespread areas of instrument conditions along the route of flight. He provided forecast information for the route including convective activity and that an airmen's meteorological information bulletin (AIRMET) for instrument flight rules (IFR) conditions existed for portions of the proposed flight. At the conclusion of the call, the pilot stated that he would call back at a later time for updated weather information.

At 1403, the pilot contacted the Washington AFSS and again obtained weather information for a VFR flight from AXA to LLU. The pilot was informed of an AIRMET for instrument conditions at the departure airport and an area encompassing the western half of the state of Iowa. The AIRMET was valid until 2200. The briefer also informed the pilot of convective activity along the route of flight. At the conclusion of the call the pilot again stated that he would call back at a later time for updated weather information.

At 1634, the pilot contacted the Fort Worth AFSS and again obtained weather information for a VFR flight from AXA to LLU. The pilot stated to the briefer that he could see gaps in the clouds at AXA. The briefer advised the pilot that marginal VFR conditions existed for most of the proposed route of flight but there were still areas with instrument flight rules (IFR) conditions along the route. The briefer informed the pilot that VFR flight was not recommended.

The airplane impacted the ground about 62 nautical miles (nm) south-southwest of the departure airport. The destination airport was about 280 nm south of the accident site.

PERSONNEL INFORMATION

The pilot held a private pilot certificate, issued in August, 2003, with an airplane single engine land rating. He did not have an instrument rating. His most recent third class airman medical certificate was issued on January 26, 2010. The medical certificate listed a limitation that the pilot wear corrective lenses. The pilot's flight logbook was not recovered during the investigation. The pilot reported having 900 hours of flight experience on his most recent airman medical certificate application.

AIRCRAFT INFORMATION

The airplane was a 1979 Beechcraft model A36, serial number E-1422. It was a single-engine, low-wing monoplane configured to seat 6 occupants including the pilot. The airplane had a retractable tricycle landing gear and was constructed predominately of aluminum. The airplane was powered by a Continental IO-550-B engine, serial number 296794-P. The engine was rated to produce 300 horsepower. The airplane logbooks were not recovered during the investigation.

METEOROLOGICAL INFORMATION

At 1800, the weather conditions at the Arthur N Neu Airport, Carroll, Iowa, located about 4 nm south of the accident site were recorded as: Wind 20 degrees at 8 knots; 10 miles visibility; overcast ceiling at 1,100 feet agl; temperature 68 degrees Fahrenheit; dew point 62 degrees Fahrenheit; altimeter setting 29.99 inches of mercury.

WRECKAGE AND IMPACT INFORMATION

The airplane wreckage was distributed along a path from the initial impact point in a corn field continuing across a road into another farm field. Fuel blight was evident on the crops two days after the accident. Portions of all major components of the airplane were identified within the wreckage path. The airplane was severely fragmented with various pieces and components distributed over a wide area fanning from the initial impact point. The overall length of the wreckage path was about 1,000 feet in length from the initial impact point to the engine which had separated from the airframe. There was a T-shaped ground scar/depression at the initial impact point with dimensions similar to the overall airplane dimensions. Green fragments of glass consistent with the right navigation light lens was found near the right side of the T-shaped impact scar, consistent with an upright orientation at impact.

The fuselage was fragmented and the cabin section was crushed. The aft fuselage and empennage came to rest adjacent to the remains of the cabin. The vertical stabilizer and the left horizontal stabilizer remained attached to the aft fuselage. The rudder remained attached to the vertical stabilizer. The inboard half of the left elevator, including the trim tab remained attached to the left horizontal stabilizer. The right horizontal stabilizer and elevator were separated. The right elevator remained attached to the right horizontal stabilizer. Both wings

were fragmented. The outboard portion of the left wing from the tip to the inboard end of the aileron was separated from the remainder of the left wing. The left aileron remained attached. The left flap was separated from the left wing. The right wing was separated from the rest of the airplane. The wing was crushed and the wing skins were torn open exposing the internal wing structure. The right flap and aileron were separated from the wing

The propeller flange was separated from the crankshaft and remained attached to the propeller hub. All three propeller blade shanks remained attached to the hub. One blade was separated from its shank just outside of the hub. The other two blades exhibited bending and twisting.

The engine was separated from the airplane. Both magnetos were separated from the engine. One magneto was located and produced spark on all leads when rotated by hand. All six cylinders remained attached to the engine. The lower portion of the crankcase, including the oil pan was separated from the remainder of the engine. Valve train continuity was established by visual inspection of the exposed gears.

Examination of the airplane did not reveal any anomalies with regard to the airplane, engine, or systems.

MEDICAL AND PATHOLOGICAL INFORMATION

An autopsy was performed on the pilot at the Iowa Office of the State Medical Examiner in Ankeny, Iowa. The cause of death was attributed to multiple blunt force injuries.

A Final Forensic Toxicology Fatal accident report was prepared by the Federal Aviation Administration Civil Aerospace Medical Institute. The reported findings were:

27 (mg/dL, mg/hg) ETHANOL detected in Muscle

Pilot Information

Certificate:	Private	**Age:**	64,Male
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 With waivers/limitations	**Last FAA Medical Exam:**	January 26, 2010
Occupational Pilot:	No	**Last Flight Review or Equivalent:**	
Flight Time:	900 hours (Total, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Beech	**Registration:**	N6036U
Model/Series:	A36	**Aircraft Category:**	Airplane
Year of Manufacture:		**Amateur Built:**	
Airworthiness Certificate:	Normal	**Serial Number:**	E-1422
Landing Gear Type:	Retractable - Tricycle	**Seats:**	6
Date/Type of Last Inspection:	Unknown	**Certified Max Gross Wt.:**	3600 lbs
Time Since Last Inspection:		**Engines:**	1 Reciprocating
Airframe Total Time:		**Engine Manufacturer:**	CONT MOTOR
ELT:	Installed, not activated	**Engine Model/Series:**	IO 550-B
Registered Owner:	On file	**Rated Power:**	300 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:	CIN,1204 ft msl	**Distance from Accident Site:**	4 Nautical Miles
Observation Time:	18:00 Local	**Direction from Accident Site:**	170°
Lowest Cloud Condition:	Unknown	**Visibility**	10 miles
Lowest Ceiling:	Overcast / 1100 ft AGL	**Visibility (RVR):**	
Wind Speed/Gusts:	8 knots /	**Turbulence Type Forecast/Actual:**	/
Wind Direction:	20°	**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:	29.98 inches Hg	**Temperature/Dew Point:**	20°C / 17°C
Precipitation and Obscuration:			
Departure Point:	Algona, IA (AXA)	**Type of Flight Plan Filed:**	None
Destination:	Lamar, MO (LLU)	**Type of Clearance:**	None
Departure Time:		**Type of Airspace:**	

Wreckage and Impact Information

Crew Injuries:	1 Fatal	**Aircraft Damage:**	Destroyed
Passenger Injuries:	1 Fatal	**Aircraft Fire:**	On-ground
Ground Injuries:	N/A	**Aircraft Explosion:**	On-ground
Total Injuries:	2 Fatal	**Latitude, Longitude:**	42.118057,-94.804168

Administrative Information

Investigator In Charge (IIC):	Brannen, John
Additional Participating Persons:	Joseph Quirring; FAA - Des Moines FSDO; Des Moines, IA Sara Irwin; Continental Motors; Mobile, AL Ernest C Hall; Hawker Beechcraft; Wichita, KS
Original Publish Date:	October 6, 2011
Last Revision Date:	
Investigation Class:	Class
Note:	The NTSB traveled to the scene of this accident.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=76323