



# National Transportation Safety Board Aviation Accident Final Report

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<b>Location:</b>	Correctionville, IA	<b>Accident Number:</b>	CEN13FA082
<b>Date &amp; Time:</b>	12/01/2012, 1950 CST	<b>Registration:</b>	N1566Z
<b>Aircraft:</b>	BEECH P35	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>	VFR encounter with IMC	<b>Injuries:</b>	2 Fatal, 1 Serious
<b>Flight Conducted Under:</b>	Part 91: General Aviation - Personal		

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## Analysis

The commercial pilot was receiving flight-following services. He advised an air traffic controller that he had the airport in sight, and the controller acknowledged and told the pilot that radar services were terminated. The airport had an unimproved grass strip and runway lights. Two witnesses who lived next to the airport said thick fog quickly enveloped the area shortly before the accident. Another witness said that visibility had dropped to less than 1/4 mile and that he heard the airplane fly low over his house but could not see it. On the approach to land, the airplane struck trees and terrain about 1/4 mile northeast of the airport. A postimpact fire ensued. A postaccident examination of the airplane revealed no anomalies that would have precluded normal operation. The airplane was instrument equipped and the commercial pilot held an instrument rating.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's failure to perform a go-around after encountering thick fog at night.

## Findings

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<b>Personnel issues</b>	Delayed action - Pilot (Cause) Decision making/judgment - Pilot (Cause)
<b>Environmental issues</b>	Fog - Contributed to outcome

## Factual Information

### HISTORY OF FLIGHT

On December 1, 2012, about 1950 central standard time, a Beech P35, N1566Z, collided with trees and terrain while maneuvering near a private airstrip near Correctionville, Iowa. The pilot was seriously injured and two passengers were fatally injured. The airplane was substantially damaged. The airplane was registered to and operated by the pilot under the provisions of 14 Code of Federal Regulations Part 91 as a personal flight. Night, instrument meteorological conditions prevailed at the time of the accident, and no flight plan had been filed. The local flight originated from Grand Island, Nebraska, at an undetermined time.

The pilot and a passenger had flown from Correctionville to Grand Island, Nebraska, earlier that day to pick up a second passenger. During the latter portion of the return flight to Correctionville, the pilot received flight following services from the Sioux City (SUX), Iowa, Terminal Radar Approach Control (TRACON). At 1938, the pilot advised SUX TRACON that he had the Correctionville Airport in sight, and radar services were terminated. The airplane struck trees and terrain about 1/2-mile northwest of the airport. A post-impact fire ensued. A motorist and his wife, who were driving south on the highway, saw a fire on the hillside. When they slowed down to investigate, they came upon the pilot on the side of road and called 9-1-1.

Two residents whose home borders and faces the airstrip said they saw the pilot depart earlier that day. They were standing in their front yard about 1930 when thick fog quickly enveloped the area and they were unable to see the airstrip which was about 125 feet away. A resident, who was visiting friends about a mile east of the accident site, said the weather was clear at 1800, but fog moved in soon thereafter and visibility dropped to less than 1/4-mile. He heard an airplane pass low over the house. The engine was "running fast" and the airplane was moving slowly because it took "awhile to pass over the house." He said he never saw, but only heard, the airplane.

The Woodbury County Sheriff said first responders were hampered by darkness and fog that reduced visibility to about 50 feet. He said the reduced visibility contributed to an accident involving a Correctionville ambulance that was transporting the pilot to a hospital and a Merville police car. A second ambulance was summoned to transport the pilot.

### PERSONNEL (CREW) INFORMATION

The pilot, age 70, held a commercial pilot certificate with airplane single-engine, multiengine, and instrument ratings, dated February 28, 2010. He also held a second class airman medical certificate, dated December 13, 2011, with the restriction, "Must have available glasses for near vision." The medical certificate was valid for 12 months. At the time the medical certificate was issued, the pilot estimated his total flight time as 2,400 hours.

### AIRCRAFT INFORMATION

N1566Z (serial number D-6868), a model P35, was manufactured by the Beech Aircraft Corporation in 1961. It was powered by a Continental IO-470-N engine (serial number 52117-D-N), rated at 260 horsepower, driving a McCauley 2-blade, all-metal, constant speed propeller (model number 2A36C23-P-CE).

According to the airplane maintenance records, the last annual and 100-hour inspections were performed on August 30, 2012. At that time the tachometer read 1,812 hours; the airframe had

accrued 6,091.6 hours and the engine had accrued 6,079.8 hours. The engine was overhauled on March 17, 1993, at a tachometer time of 435.3 hours, and had accrued 1,338.5 hours since major overhaul. The altimeter, encoder and transponder were certified for flight in IFR (instrument flight rules) conditions on June 27, 2011.

#### METEOROLOGICAL INFORMATION

Weather recorded at the Sioux Gateway Airport-Colonel Bud Day Field (SUX), Sioux City, Iowa, located about 30 miles west of the accident site, was as follows:

1852: Wind, 120 degrees at 3 knots; visibility, 7 statute miles;; sky condition, clear; temperature, 4 degrees Celsius (C.); dew point, 3 degrees C.; altimeter, 29.81 inches of mercury.

2036: Wind, calm; visibility, 5 statute miles, mist; sky condition, few clouds , 300 feet; temperature, 2 degrees C.; dew point, 1 degree C.; altimeter, 29.83 inches of mercury.

#### AERODROME INFORMATION

Correctionville Airport is an unpublished and unimproved airstrip, located about 2 miles south of the town of Correctionville. It has a single runway, aligned on a magnetic heading of about 140-320 degrees. The grass runway is about 2,000 feet long and 120 feet wide, and is equipped with runway lights. It is situated at an elevation of about 1,200 feet above mean sea level.

#### WRECKAGE AND IMPACT INFORMATION

The accident site was located about 1 mile southwest of the town of Correctionville in the 1700 block of Highway 31, and about 1/4-mile northeast of the airstrip. The wreckage was in a field west of and adjacent to Highway 31. The terrain sloped upward with multiple embankments. The debris path was approximately 200 to 250 feet in length, and aligned on a magnetic heading of 324°. The initial impact point was a small group of trees at an elevation of 1,122 feet. A portion of the right wing and extended right main landing gear and portions of the right fuel bladder were at the base of the trees. An odor of fuel was noted.

After striking the trees, the airplane impacted a terraced embankment at an elevation was 1,156 feet. The airplane came to rest on a magnetic heading of 062°. The engine separated from the airplane at the firewall and was next to the fuselage, pointed in the opposite direction. The propeller separated from the engine at the flange. Both blades showed s-bending and chordwise scratches.

The main body of wreckage consisted of the fuselage aft of the firewall, the empennage, and the left wing. Extensive fire damage was noted. The landing gear was down and the flaps were extended, the amount of which was not determined. Control continuity was partially established. The two passengers were located next to and aft of the trailing edge of the left wing. The altimeter faceplate, bearing the Kollsman window, was set to 29.80 inches of mercury. No other anomalies were noted with the airplane during the postaccident examination.

#### MEDICAL AND PATHOLOGICAL INFORMATION

The pilot succumbed to his injuries on February 11, 2013. Because more than 30 days had elapsed since the accident, his injuries did not meet the criteria for "fatal injury" as defined in Title 49 CFR Part 830.2. Autopsy and toxicology protocols were not performed.

## TESTS AND RESEARCH

SUX TRACON confirmed that N1566Z was tracked as a VFR primary target with no transponder-encoder data. They advised that radar detection of an airplane at low altitude was unavailable for that area. Correctionville Airport is not depicted on the TRACON radar or on sectional charts.

### History of Flight

<b>Maneuvering</b>	VFR encounter with IMC (Defining event) Loss of control in flight Collision with terr/obj (non-CFIT)
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### Pilot Information

<b>Certificate:</b>	Commercial	<b>Age:</b>	70, Male
<b>Airplane Rating(s):</b>	Multi-engine Land; Single-engine Land	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	Seatbelt
<b>Instrument Rating(s):</b>	Airplane	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	Yes
<b>Medical Certification:</b>	Class 2 With Waivers/Limitations	<b>Last Medical Exam:</b>	12/13/2011
<b>Occupational Pilot:</b>	No	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	2400 hours (Total, all aircraft)		

### Aircraft and Owner/Operator Information

<b>Aircraft Manufacturer:</b>	BEECH	<b>Registration:</b>	N1566Z
<b>Model/Series:</b>	P35	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	No
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	D-6868
<b>Landing Gear Type:</b>	Retractable - Tricycle	<b>Seats:</b>	4
<b>Date/Type of Last Inspection:</b>	08/30/2012, Annual	<b>Certified Max Gross Wt.:</b>	
<b>Time Since Last Inspection:</b>		<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	6092 Hours	<b>Engine Manufacturer:</b>	Continental
<b>ELT:</b>	Installed, not activated	<b>Engine Model/Series:</b>	IO-470-N
<b>Registered Owner:</b>	KNAACK GAYLEN M	<b>Rated Power:</b>	260 hp
<b>Operator:</b>	KNAACK GAYLEN M	<b>Air Carrier Operating Certificate:</b>	None

## Meteorological Information and Flight Plan

Observation Facility, Elevation:	KSUX, 1098 ft msl	Observation Time:	2036 CST
Distance from Accident Site:	36 Nautical Miles	Condition of Light:	Night/Dark
Direction from Accident Site:	270°	Conditions at Accident Site:	Visual Conditions
Lowest Cloud Condition:	Few / 300 ft agl	Temperature/Dew Point:	2°C / 1°C
Lowest Ceiling:	None	Visibility	5 Miles
Wind Speed/Gusts, Direction:	Calm	Visibility (RVR):	
Altimeter Setting:	29.83 inches Hg	Visibility (RVV):	
Precipitation and Obscuration:			
Departure Point:	Grand Island, NE (KGRI)	Type of Flight Plan Filed:	None
Destination:	Correctionville, IA	Type of Clearance:	None
Departure Time:	CST	Type of Airspace:	Class G

## Airport Information

Airport:	Private	Runway Surface Type:	
Airport Elevation:	1200 ft	Runway Surface Condition:	
Runway Used:	N/A	IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	None

## Wreckage and Impact Information

Crew Injuries:	1 Serious	Aircraft Damage:	Substantial
Passenger Injuries:	2 Fatal	Aircraft Fire:	On-Ground
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 Fatal, 1 Serious		

## Administrative Information

Investigator In Charge (IIC):	Arnold W Scott	Adopted Date:	06/19/2013
Additional Participating Persons:	Jeffrey Rock; FAA Flight Standards District Office; Des Moines, IA		
Publish Date:	06/19/2013		
Investigation Docket:	<a href="http://dms.nts.gov/pubdms/search/dockList.cfm?mKey=85712">http://dms.nts.gov/pubdms/search/dockList.cfm?mKey=85712</a>		

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