



Aviation Investigation Factual Report

Location:	Briggsdale, Colorado	Accident Number:	DEN02FA050
Date & Time:	June 6, 2002, 18:45 Local	Registration:	N9775R
Aircraft:	Beech M35	Aircraft Damage:	Destroyed
Defining Event:		Injuries:	1 Fatal
Flight Conducted Under:	Part 91: General aviation - Personal		

Factual Information

HISTORY OF FLIGHT

On June 6, 2002, at 1845 mountain daylight time, a Beech M35, N9775R, registered to and operated by the pilot, was destroyed when the aircraft impacted terrain near Briggsdale, Colorado. The private pilot, the sole occupant on board was fatally injured. Day visual metrological conditions prevailed, and no flight plan had been filed for the personal flight being conducted under Title 14 (Code of Federal Regulations) Part 91. The local flight originated in Greeley, Colorado, at 1821.

According to the Weld County Sheriff's report, the pilot's wife notified the Greeley Police Department on June 7 to report her husband missing. FAA was subsequently notified and the Denver Automated Flight Service Station (AFSS) issued an ALNOT (alert notification) at 1338. The ALNOT indicated "possible destination Pawnee Buttes." The Civil Air Patrol launched an aerial search and the wreckage was located that afternoon. The ALNOT was cancelled at 1818.

The accident occurred during the hours of daylight at a location of 40 degrees, 43.96' North latitude, and 104 degrees, 12.38' West longitude.

PERSONNEL INFORMATION

The 46-year-old private pilot held an expired third class airman medical certificate, dated March 31, 2000.

The pilot's logbook was recovered from the wreckage and contained entries from March 7, 1977, when he first began taking flying lessons in Mountain Home, Arkansas, to January 24, 2002. The following summarizes his aeronautical experience (figure totals do not equate due to arithmetical errors):

By category:

Total time - 335.7

Night - 19.1

Actual instruments - 0.2

Simulated instruments - 80.3

Cross-country - 88.5

Dual instruction - 138.4

Pilot-in-Command - 227.4

By aircraft type:

Cessna 150 -- 12.2
Cessna 152 -- 6.3
Cessna 172 -- 220.7
Cessna 180 -- 1.0
Cessna 182 -- 19.3
Piper PA-28-181-- 4.5
Beech M35 -- 84.7

By year:

1977 -- 13.2
1986 -- 2.2
1987 -- 4.1
1998 -- 76.6
1999 -- 38.6
2000 -- 137.9
2001 -- 69.1
2002 -- 1.0

The pilot's wife said her husband purchased N9775R approximately 2 years prior to the accident. According to his logbook, the first M35 Bonanza entry was made on October 21, 2000. All flights made thereafter were in the M35 with the exception of his instrument flight instruction, which were made in Cessna 172s. His most recent flight review was accomplished in a Cessna 172 on July 26, 2001.

AIRCRAFT INFORMATION

The airplane, N9775R (s/n D-6297), a model M35, was manufactured by the Beech (now Raytheon) Aircraft Corporation in 1960. It was equipped with a Continental IO-470-C1B engine (s/n 072168-H), rated at 250 horsepower, and a Beech 2-blade, all-metal, constant speed propeller (m/n 278-100-7). It was equipped with two 25-gallon main fuel tanks and two 10-gallon auxiliary fuel tanks.

N9775R's maintenance records were located at a Greeley-Weld County Airport maintenance facility and examined. According to these records, the most recent annual inspection of the airframe, engine, and propeller was accomplished on May 3, 2002, at a tachometer reading of 211.8 hours. At that time, the airframe, engine, and propeller had accrued 5849.4, 2657.44, and 5849.4 total hours, respectively. The engine was last overhauled on February 22, 1993, and had accrued 783.5 hours since that time. The propeller was last overhauled on July 15, 1987, and had accrued 1250.9 hours since that time.

METEOROLOGICAL INFORMATION

The following Automatic Weather Observation Station (AWOS) were recorded at the Greeley-Weld County Airport, located 36 nautical miles southwest of the accident site. The observations were recorded 6 minutes before takeoff and 10 minutes after the accident:

(1815): Wind, 040 degrees at 5 knots; visibility, (greater than) 10 statute miles; sky condition, clear; temperature, 29 degrees C.; dew point, 3 degrees C.; altimeter, 29.93.

(1855): Wind, 110 degrees at 4 knots; visibility, (greater than) 10 statute miles; sky condition, clear; temperature, 29 degrees C.; dew point, 4 degrees C.; altimeter, 29.92.

WRECKAGE AND IMPACT INFORMATION

The wreckage was located on flat, cactus-covered terrain at 4,967 feet msl. There was no evidence of fire. At the beginning of the initial ground scar, measuring 24 feet in length and aligned on a magnetic heading of 242 degrees, were small red lens fragments. Five slashes were noted in this scar at the 21-foot mark. In the last of these slashes was a separated propeller blade. Examination of the blade after removal disclosed forward bending approximately 10 degrees about midspan. Chordwise scratching was noted on the cambered surface.

At the end of this scar was a crater, approximately 4 feet long and 3 feet wide, containing pieces of engine cowling. The ground scar then curved to the left onto a magnetic heading of 198 degrees. Turning over a piece of exhaust pipe revealed scorched grass underneath. Various pieces of wreckage were strewn along this path for a distance of 209 feet, where the main body of wreckage was located. The empennage remained attached to the fuselage. The relatively undamaged ruddervators (the left ruddervator leading edge was punctured outboard of the trim tab) remained attached to the stabilizers and operated correctly when the cables were pulled. The ruddervator bushings were unremarkable. The pushrods remained attached, and the stops bore no evidence of flutter.

At the 105-foot mark was a large piece of red lens, identified as part of the top fuselage mounted rotating beacon. A large piece of engine cowling was located 75 feet left of the centerline. At the 123-foot mark were two parallel gouges in the ground, measuring 2 feet in length. At the 137-foot mark and 16 feet to the right of centerline was the left rear emergency exit window, and 10 feet ahead of it was the tail cone with intact white navigation light. At the 201-foot mark was the separated right cabin door. It was crushed from below and bulged outward. The door handle was down and locked and the latching pins were extended.

Approximately 21 feet left of centerline, the right wing lay on top of the left wing. The pitot tube and static port were unobstructed. The left wing was separated from the fuselage at the wing root and lay in several pieces. The aileron and flap were torn off the wing, but the aileron bellcrank and cables remained attached. The cables were traced to the cockpit area. The fuel tank was destroyed, but the fuel cap remained locked in the recess. The right wing was

separated from the fuselage at the wing root. Except for the flap being torn off, the wing was intact, including the aileron, bellcrank, and wing tip. Both flap tracks remained attached to the flap. There was accordion-type crushing of the leading edge approximately 4 feet from the tip, resulting in wrinkles from the leading edge inboard to the trailing edge outboard. The fuel tank was compromised, but the fuel cap remained locked in the recess.

On a magnetic heading of 220 degrees and 122 feet from the main body of wreckage was the separated engine with intact crankshaft, flange, and propeller hub. The fuel control unit was separated from the throttle body, which was in the idle position. Most of the accessories were broken off, including the oil cooler and sump, both magnetos, alternator, starter, vacuum pump, and exhaust system. The induction system and fuel pump remained attached but were extensively damaged.

About 50 feet beyond and to the right of the engine was the second detached propeller blade. There was forward 90 degree bending about midspan, the cambered surface bore chordwise polishing and scratching, and the leading edge was gouged. About 45 feet beyond and slightly to the left of the engine was a main landing gear with squat switch still attached. The battery box was 33 feet beyond. On a magnetic heading of 181 degrees and 135 feet from the main body of wreckage was the pilot, still strapped in his seat via seatbelt and shoulder harness. The restraint system had pulled free at the fasteners.

The circuit breaker and instrument panels were destroyed. Switches on both subpanels were destroyed. The magneto was in the BOTH position and the key was broken off. The throwover control wheel was broken off at the center post, but was found lying in the left position. The throttle, mixture, and propeller controls were full forward and bent. The fuel selector was positioned on the left tank, and residual fuel was obtained from the fuel lines. The lubber line of the directional gyro (heading indicator) was over 240 degrees. The vertical compass indicated 190 degrees. The tachometer was crushed but 02_2.4 was in the window. Beneath the crush line were the numbers 2434.6. Adding 8 to each numeral obtained a reading of 0212.4.

Control continuity was established from all control surfaces to their respective cockpit controls. The landing gear was retracted. The left and right flap actuators measured 1.75 and 1.72 inches, respectively, equivalent to a flaps UP position. Aileron trim setting was inconclusive. The ruddervator trim actuator was extended 0.75 inches, equating to a 5 degrees tab down (nose up).

MEDICAL AND PATHOLOGICAL INFORMATION

An autopsy was performed on the pilot and, according to that report, the pathologist wrote, "...circumstances suggest that the manner of death is suicide."

A toxicological screen was also conducted and the specimens tested positive for ethanol (2.5 mg/dL, vitreous; 70 mg/100g liver), carbon monoxide (1%, liver); ephedrine (730 ng/gram,

liver), and pseudoephedrine (310 ng/gram, liver). The latter two compounds are amphetamine and methamphetamine cross-reactives. A toxicological screen conducted by FAA's Civil Aeromedical Institute in Oklahoma City, Oklahoma, did not detect ethanol in vitreous humor or drugs in the kidney fluid/tissue.

The death certificate, signed by the Weld County Coroner, ruled the "manner of death [as] suicide."

TESTS AND RESEARCH

According to radar data obtained from the Denver Air Route Traffic Control Center, a target was first detected departing the Greeley-Weld County Airport area at 1821:07. The target proceeded towards the Pawnee Buttes area, located northeast of the airport. Radar contact was lost at 1831:34, when the target was at 5,600 feet. The target reappeared at 1836:07, at an altitude of 5,900 feet, and circled left around the Pawnee Buttes at 6,200 feet. It then turned to a heading towards Greeley and disappeared at 1845:13, about 2,000 feet from the GPS (Global Positioning System) coordinates of the accident site. The last recorded altitude was 5,700 feet. The accident site was 4,967 feet, a difference of 733 feet. The wreckage was found on June 7 approximately 1700 MDT.

ADDITIONAL INFORMATION

The pilot was an insurance agent and minister in Greeley who had recently been arrested and indicted by the State of Colorado for felony theft with respect to his insurance practice. The pilot was released from custody after posting bail on May 3, 2002, and was scheduled to appear in court on June 26, 2002.

On the day of the accident, the pilot sent several electronic mail messages to several members of his church congregation informing them that he was resigning as their minister and asking them for forgiveness for the "shame and reproach" he had brought on the church.

On July 3, 2002, the Weld County Coroner signed the death certificate. It ruled the death a suicide.

In addition to the Federal Aviation Administration, parties to the investigation included the Raytheon Aircraft Corporation, Teledyne Continental Motors, and the Weld County Sheriff's Office.

The wreckage was released to Beegles Aircraft Services, Inc., Greeley, Colorado, on June 11, 2002.

Pilot Information

Certificate:	Private	Age:	46, 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	Last FAA Medical Exam:	March 31, 2000
Occupational Pilot:	No	Last Flight Review or Equivalent:	July 26, 2001
Flight Time:	336 hours (Total, all aircraft), 85 hours (Total, this make and model), 227 hours (Pilot In Command, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Beech	Registration:	N9775R
Model/Series:	M35	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Utility	Serial Number:	D-6297
Landing Gear Type:	Retractable - Tricycle	Seats:	4
Date/Type of Last Inspection:	May 3, 2002 Annual	Certified Max Gross Wt.:	2950 lbs
Time Since Last Inspection:	1 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	5850 Hrs at time of accident	Engine Manufacturer:	Continental
ELT:	Installed, activated, aided in locating accident	Engine Model/Series:	IO-470-C1B
Registered Owner:	Russell D Wright	Rated Power:	250 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:	GXY,4658 ft msl	Distance from Accident Site:	36 Nautical Miles
Observation Time:	18:55 Local	Direction from Accident Site:	215°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	4 knots / None	Turbulence Type Forecast/Actual:	/
Wind Direction:	110°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.92 inches Hg	Temperature/Dew Point:	29°C / 4°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Greeley, CO (GXY)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	18:24 Local	Type of Airspace:	Class G

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:	40.721111,-104.210556

Administrative Information

Investigator In Charge (IIC):	Scott, Arnold
Additional Participating Persons:	Donald J Williams; FAA Flight Standards District Office; Denver, CO
Report Date:	October 29, 2002
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=54883

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