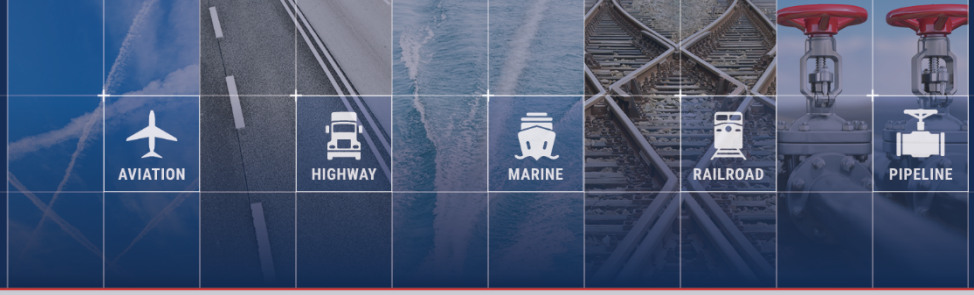

Aviation Investigation Final Report

Location:	Bristow, Oklahoma	**Accident Number:**	CEN10FA130
Date & Time:	February 28, 2010, 14:03 Local	**Registration:**	N63713
Aircraft:	Beech C24R	**Aircraft Damage:**	Destroyed
Defining Event:	Collision with terr/obj (non-CFIT)	**Injuries:**	2 Fatal
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

A witness, located about 1 mile from the accident site, observed the airplane circle the airport from south to north. He then saw it maneuvering at a low altitude between two hangars and heard a loud "pop" followed by the sound of the engine sputtering. The airplane collided with the power lines running alongside the service road next to the airport and impacted the ground. A postimpact fire ensued. The airport’s north-south runway was not level and dipped in several places. The investigation could not determine if either pilot had ever flown into this particular airport. An examination of the airplane's systems revealed no preimpact anomalies.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot’s loss of control for undetermined reasons while maneuvering at low altitude.

Findings

Not determined	(general) - Unknown/Not determined
Aircraft	(general) - Not attained/maintained

Factual Information

History of Flight

Maneuvering	Collision with terr/obj (non-CFIT) (Defining event)
Uncontrolled descent	Collision with terr/obj (non-CFIT)

HISTORY OF FLIGHT

On February 28, 2010, at 1403 Central Standard Time, a Hawker Beechcraft C24R Sierra, N63713, registered to and operated by Double A-C, LLC, of Tulsa, Oklahoma, was destroyed when it struck a power line and impacted terrain across the street from Jones Municipal Airport (3F7), Bristow, Oklahoma. Visual meteorological conditions (VMC) prevailed at the time of the accident. The personal flight was being conducted under the provisions of Title 14 Code of Federal Regulations (CFR) Part 91 without a flight plan. The pilot and pilot-rated passenger on board the airplane were fatally injured. The local flight originated at Richard Lloyd Jones, Jr., Airport (RVS), Jenks, Oklahoma.

According to the Federal Aviation Administration, the pilot received a weather briefing but he did not file a flight plan, nor was one required. The airplane took off at 1348.

The only known witness, located about 1 mile from the accident site, said he saw the airplane circle Jones Municipal Airport from south to north. When he saw it again, it was flying at a low altitude between two hangars. He heard a loud "pop" and heard the engine sputter. The airplane collided with the power lines running alongside the service road next to the airport and impacted the ground. A post-impact fire ensued.

PERSONNEL (CREW) INFORMATION

The 38-year-old pilot-in-command held a private pilot certificate, dated March 14, 2003, with an airplane single-engine land rating. He also held a third class airman medical certificate, dated February 1, 2008, with no limitations or restrictions.

The 37-year-old pilot-rated passenger held a private pilot certificate, dated September 20, 2004, with an airplane single-engine land rating. He also held a third class airman medical certificate, dated February 24, 2007, with no limitations or restrictions.

Both pilots' families were contacted and asked to attempt to locate their flight logbooks. They were unsuccessful. According to FAA records, when the pilot made application for his medical certificate, he estimated he had accrued 310 total flight hours. When the pilot-rated passenger made application for his medical certificate, he estimated he had accrued 300 total flight

hours. It is unknown whether either pilot had ever flown into Jones Memorial Airport.

AIRCRAFT INFORMATION

N63713 (s.n. MC-777), a model C24R, was manufactured by the Beech Aircraft Corporation in 1982. It was a 4-place, low-wing monoplane, equipped with wing flaps and a retractable landing gear. It had an FAA standard airworthiness certificate in the normal category. It was powered by a Lycoming IO-360-A1B6 engine (s.n. L-22998-51A), rated at 200 horsepower, driving a Hartzell 2-blade, all-metal, constant-speed propeller (m.n. HC-M2YR-1BY) with F7666A blades. Its maximum certificated gross weight was 2,750 pounds. Total fuel capacity is 59.8 gallons.

According to copies of the maintenance records made available by Aircraft Inspection and Repair, LLC, (AIR), the last annual inspection was performed on May 27, 2009, at a tachometer time of 2928.45 hours. The airplane was certified for IFR (instrument flight rules) on August 5, 2009, and the ELT (emergency locator transmitter) battery was replaced on July 13, 2009.

METEOROLOGICAL INFORMATION

The following Aviation Routine Weather Reports (METAR) were recorded at 1353 at the Richard Lloyd Jones, Jr., Airport (RVS), Jenks, Oklahoma, located 30 miles northeast of the accident site:

Wind, 090 degrees at 7 knots; visibility, 10 s.m.; sky condition, clear; temperature, 11 degrees Celsius (C.); dew point, -4 degrees C.; altimeter setting, 30.05 inches of Mercury.

AERODROME INFORMATION

Jones Memorial Airport (3F7), located 3 miles southwest of Bristow, is situated at an elevation of 851 feet above mean sea level (msl), at geographical coordinates 35 degrees, 48.41 North latitude, and 096 degrees, 25.31’ West longitude. It is served by one asphalt runway, 17-35, 3,400 feet long and 45 feet wide.

The airport’s narrow north-south runway was not level and dipped in several places. The service road was west of, and ran parallel to, the runway. The power lines ran along the east side the road.

WRECKAGE AND IMPACT INFORMATION

The wreckage was located in a field west of and adjacent to Jones Memorial Airport, at

coordinates 35 degrees, 48.591' north latitude, and 096 degrees, 25.407' west longitude. The elevation was 800 feet msl. A ground scar, containing green lens fragments and approximately the length of a wing, terminated at a large depression that contained engine components. The cockpit was located 22 feet from this crater, and the separated propeller and inverted left wing were located 48 feet from the crater. The wreckage path was aligned on a magnetic heading of 320 degrees.

Control cable continuity was established. According to the Beech technical representative, stabilator trim was 5 degrees tab down (nose up). The flap jackscrew revealed 13 threads, or 25 degrees down. Full flaps are 35 degrees down, and will expose 10 threads. The landing gear was down and locked. Both door latch bayonets were extended. Because the cockpit was destroyed by fire, the fuel selector was never located. Two sets of seatbelt buckles were found; both were fastened. The shoulder harnesses were not located. Both fuel caps were secured.

The wreckage was re-examined by NTSB and FAA inspectors and Beech Aircraft and Textron-Lycoming investigators. The examination took place at the facilities of Air Salvage of Dallas (ASOD) on March 31, 2010. The propeller blades, left and right main and nose landing gear assemblies, and the left wing bore no evidence of a wire strike.

MEDICAL AND PATHOLOGICAL INFORMATION

Autopsies on both pilots were performed by the Oklahoma Criminal Laboratory in Tulsa, Oklahoma. Toxicology screens on the first pilot were conducted by FAA's Civil Aeromedical Institute (CAMI) in Oklahoma City, Oklahoma.

TESTS AND RESEARCH

According to a Western Claims insurance adjuster who handled the damage claim for the Oklahoma Gas and Electric (OG&E) Company, there were five lines mounted on the power poles: 3 were conductor (service) or phase lines; a neutral line (below the conductors), and a street lamp conductor (below the neutral line). The conductors were #4 ACSR (aluminum conductor steel reinforced), carrying 14,400 to 24,000 volts, and two of them had to be spliced. One power pole had to be replaced, and the cross arms on two other poles had to be replaced. The poles are 35 feet in length (top to ground level), and the wires droop to about 25 feet above the ground at mid span. The three power poles were 287 and 290 feet apart, respectively.

Jones Municipal Airport's runway 35 was examined. The first half of the runway is relatively flat; the second half of the runway drops off. The threshold is at an elevation of 851 feet msl. The runway then slopes down to about 840 feet msl at the 500-foot mark. From the 500-foot mark to about the 1,900-foot mark, the runway is level (about 840 feet msl). From the 1,850-foot mark to the end of the runway, the elevation slopes downward to an elevation of 803 feet

msl.

Pilot Information

Certificate:	Private	**Age:**	38,Male
Airplane Rating(s):	Single-engine land	**Seat Occupied:**	Left
Other Aircraft Rating(s):	None	**Restraint Used:**	
Instrument Rating(s):	None	**Second Pilot Present:**	Yes
Instructor Rating(s):	None	**Toxicology Performed:**	Yes
Medical Certification:	Class 3 Without waivers/limitations	**Last FAA Medical Exam:**	February 1, 2008
Occupational Pilot:	No	**Last Flight Review or Equivalent:**	
Flight Time:	(Estimated) 310 hours (Total, all aircraft)		

Pilot Information

Certificate:	Private	**Age:**	37
Airplane Rating(s):	Single-engine land	**Seat Occupied:**	Right
Other Aircraft Rating(s):	None	**Restraint Used:**	
Instrument Rating(s):	None	**Second Pilot Present:**	Yes
Instructor Rating(s):	None	**Toxicology Performed:**	Yes
Medical Certification:	Class 3 Without waivers/limitations	**Last FAA Medical Exam:**	February 24, 2007
Occupational Pilot:	No	**Last Flight Review or Equivalent:**	
Flight Time:	(Estimated) 300 hours (Total, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Beech	**Registration:**	N63713
Model/Series:	C24R	**Aircraft Category:**	Airplane
Year of Manufacture:		**Amateur Built:**	
Airworthiness Certificate:	Normal	**Serial Number:**	MC-777
Landing Gear Type:	Retractable - Tricycle	**Seats:**	4
Date/Type of Last Inspection:	May 27, 2009 Annual	**Certified Max Gross Wt.:**	2750 lbs
Time Since Last Inspection:		**Engines:**	1 Reciprocating
Airframe Total Time:	2928 Hrs	**Engine Manufacturer:**	Lycoming
ELT:		**Engine Model/Series:**	IO-360-A1B6
Registered Owner:	Double A-C, LLC	**Rated Power:**	200 Horsepower
Operator:	Double A-C, LLC	**Operating Certificate(s) Held:**	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	**Condition of Light:**	Day
Observation Facility, Elevation:	RVS,638 ft msl	**Distance from Accident Site:**	
Observation Time:	13:53 Local	**Direction from Accident Site:**	
Lowest Cloud Condition:	Clear	**Visibility**	10 miles
Lowest Ceiling:	None	**Visibility (RVR):**	
Wind Speed/Gusts:	7 knots /	**Turbulence Type Forecast/Actual:**	/
Wind Direction:	80°	**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:	30.02 inches Hg	**Temperature/Dew Point:**	12°C / -4°C
Precipitation and Obscuration:			
Departure Point:	Jenks, OK (RVS)	**Type of Flight Plan Filed:**	None
Destination:	Jenks, OK (RVS)	**Type of Clearance:**	None
Departure Time:	13:48 Local	**Type of Airspace:**	Class G

Airport Information

Airport:	Jones Memorial 3F7	**Runway Surface Type:**	Asphalt
Airport Elevation:	851 ft msl	**Runway Surface Condition:**	Dry
Runway Used:	35	**IFR Approach:**	None
Runway Length/Width:	3400 ft / 45 ft	**VFR Approach/Landing:**	Unknown

Wreckage and Impact Information

Crew Injuries:	2 Fatal	**Aircraft Damage:**	Destroyed
Passenger Injuries:		**Aircraft Fire:**	On-ground
Ground Injuries:	N/A	**Aircraft Explosion:**	None
Total Injuries:	2 Fatal	**Latitude, Longitude:**	35.809722,-96.423614(est)

Administrative Information

Investigator In Charge (IIC):	Scott, Arnold
Additional Participating Persons:	Dan Donnelly; FAA Flight Standards District Office; Oklahoma City, OK Jimmy J Wynne; FAA Flight Standards District Office; Oklahoma City, OK Rakesh Patel; FAA Flight Standards District Office; Oklahoma City, OK
Original Publish Date:	April 12, 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=75421