

National Transportation Safety Board Aviation Accident Final Report

Location:	Wheeling, Illinois	Accident Number:	CEN13CA373
Date & Time:	June 25, 2013, 20:30 Local	Registration:	N92JR
Aircraft:	Beech 200	Aircraft Damage:	Substantial
Defining Event:	Fuel exhaustion	Injuries:	1 None
Flight Conducted Under:	Part 91: General aviation - Positioning		

Analysis

Before departure, the pilot performed fuel calculations and determined that he had enough fuel to fly to the intended destination. While enroute the pilot flew around thunderstorms. On arrival at his destination, the pilot executed the instrument landing system approach for runway 16. While on short final the right engine experienced a total loss of power. The pilot switched the fuel flow from the right tank to the left tank. The left engine then experienced a total loss of power and the pilot made an emergency landing on a road. The airplane received substantial damage to the wings and fuselage when it struck a tree. A postaccident examination revealed only a few gallons of unusable fuel in the left fuel tank. The right fuel tank was breached during the accident sequence but no fuel smell was noticed. The pilot performed another fuel calculation after the accident and determined that there were actually 170 gallons of fuel onboard, not 230 gallons like he originally figured. He reported no preaccident mechanical malfunctions that would have precluded normal operation and determined that he exhausted his entire fuel supply.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's improper fuel planning and management, which resulted in a loss of engine power due to fuel exhaustion.

Personnel issues

Aircraft

Fuel - Fluid management Fuel planning - Pilot

Factual Information

History of Flight

Approach-IFR final approach	Collision with terr/obj (non-CFIT)
Approach-IFR final approach	Fuel exhaustion (Defining event)

Pilot Information

Certificate:	Commercial	Age:	57,Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 2 With waivers/limitations	Last FAA Medical Exam:	July 27, 2012
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	May 23, 2012
Flight Time:	7125 hours (Total, all aircraft), 572 hours (Total, this make and model), 89 hours (Last 90 days, all aircraft), 47 hours (Last 30 days, all aircraft), 5 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Beech	Registration:	N92JR
Model/Series:	200	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	BB-751
Landing Gear Type:	Tricycle	Seats:	10
Date/Type of Last Inspection:	January 16, 2013 AAIP	Certified Max Gross Wt.:	12499 lbs
Time Since Last Inspection:		Engines:	2 Turbo prop
Airframe Total Time:	6709 Hrs as of last inspection	Engine Manufacturer:	Pratt & Whitney
ELT:	Installed, not activated	Engine Model/Series:	PT6A-41
Registered Owner:		Rated Power:	850 Horsepower
Operator:		Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Dusk
Observation Facility, Elevation:	PWK,647 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	20:09 Local	Direction from Accident Site:	
Lowest Cloud Condition:	Scattered / 3500 ft AGL	Visibility	9 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/
Wind Direction:		Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.82 inches Hg	Temperature/Dew Point:	24°C / 21°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Springfield, TN (M91)	Type of Flight Plan Filed:	IFR
Destination:	Wheeling, IL (PWK)	Type of Clearance:	IFR
Departure Time:	18:40 Local	Type of Airspace:	

Airport Information

Airport:	Chicago Executive Airport KPWK	Runway Surface Type:	Asphalt
Airport Elevation:	647 ft msl	Runway Surface Condition:	Wet
Runway Used:	16	IFR Approach:	ILS
Runway Length/Width:	5001 ft / 150 ft	VFR Approach/Landing:	None

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	42.114444,-87.90139(est)

Administrative Information

Investigator In Charge (IIC):	Lindberg, Joshua
Additional Participating Persons:	Kevin Raymond; Federal Aviation Administration; West Chicago, IL
Original Publish Date:	August 13, 2013
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=87306

The National Transportation Safety Board (NTSB), established in 1967, is an independent federal agency mandated by Congress through the Independent Safety Board Act of 1974 to investigate transportation accidents, determine the probable causes of the accidents, issue safety recommendations, study transportation safety issues, and evaluate the safety effectiveness of government agencies involved in transportation. The NTSB makes public its actions and decisions through accident reports, safety studies, special investigation reports, safety recommendations, and statistical reviews.

The Independent Safety Board Act, as codified at 49 U.S.C. Section 1154(b), precludes the admission into evidence or use of any part of an NTSB report related to an incident or accident in a civil action for damages resulting from a matter mentioned in the report. A factual report that may be admissible under 49 U.S.C. § 1154(b) is available <u>here</u>.