



Aviation Investigation Final Report

Location:	Coeur d'Alene, Idaho	Accident Number:	SEA08LA134
Date & Time:	May 12, 2008, 18:50 Local	Registration:	N5885C
Aircraft:	Hawker Beechcraft Corporation E-55	Aircraft Damage:	Substantial
Defining Event:	Loss of engine power (total)	Injuries:	1 Serious, 1 None
Flight Conducted Under:	Part 91: General aviation - Instructional		

Analysis

The certified flight instructor (CFI) and private pilot undergoing instruction (PUI) had been flying for approximately 1.4 hours when they landed at the departure airport. The CFI requested that the PUI perform a short field takeoff. During the initial climb, the left engine lost power, the CFI confirmed the fuel selectors were on the main tanks, and they force-landed the airplane and impacted a vehicle. The CFI could not recall if the right engine also lost power. According to the CFI, the airplane had been fueled to capacity two days prior to the accident and had flown 2.8 hours when the accident occurred. The CFI said that both flights were flown extensively on the auxiliary tanks, but positioned to the main tanks approximately 5 minutes prior to landing and during the takeoff. Based on the fuel capacity of the airplane, adequate fuel should have been available in the airplane to conduct the flight. However, due to damage sustained during the impact sequence, the amount of fuel in each tank could not be confirmed. Examination of the engines and fuel systems revealed no pre-impact mechanical anomalies.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: Loss of engine power for undetermined reasons.

Findings

Not determined

(general) - Unknown/Not determined

Factual Information

History of Flight

Emergency descent	Loss of engine power (total)
Initial climb	Loss of engine power (total) (Defining event)

On May 12, 2008, about 1850 Pacific daylight time, a Hawker Beechcraft Corporation B55, N5885C, collided with ground obstacles during a forced landing following a loss of power during the initial climb from Coeur d' Alene Air Terminal, Coeur d' Alene, Idaho. Action Flying was operating the airplane under the provisions of 14 Code of Federal Regulations Part 91. The airplane was substantially damaged. The certified flight instructor (CFI) was not injured; the private pilot undergoing instruction (PUI) sustained serious injuries. Visual meteorological conditions prevailed and no flight plan was filed for the local area instructional flight that departed about 1730.

According to the CFI, he and the student were on a local instructional flight. After completing an approach into the airport, they initiated a takeoff. At approximately 200 feet above ground level, the left engine lost power. The student was flying the airplane and the CFI pushed the nose over to maintain airspeed. The CFI verified that the fuel selectors were positioned to the main tanks. He could not recall if the right engine also lost power. During the forced-landing, the airplane impacted a vehicle.

In a conversation with the Safety Board investigator, the CFI indicated that the airplane's fuel tanks had been fueled to capacity on May 10. Fueling records obtained from the fueling facility at the airport indicated that 88.37 gallons of fuel were sold to the PUI on May 10 at the self-fueling facility. The CFI reported that they had flown 1.4 hours on May 10, and had flown about 1.4 hours on the day of the accident. During the last flight, they departed on the main tanks, switched to the auxiliary tanks during the flight, and then switched back to the main tanks 5 minutes prior to landing. During the flights on both days, the CFI indicated that they flew extensively on the auxiliary fuel tanks. According to the CFI, the fuel selectors were on the main tanks when the accident occurred.

The Federal Aviation Administration accident coordinator responded to the accident scene. He reported that all of the fuel tanks were breached and residual fuel of 1 gallon was located in the right main tank. Due to the damage, the amount of fuel contained in each tank prior to the accident could not be confirmed. The fuel selectors were positioned to the main tanks. The fuel manifold valves were removed from each engine and no fuel was evident. No anomalies were noted with the airframe fuel system.

A Teledyne Continental Motors representative examined the engines following the accident. No mechanical anomalies were identified that would have resulted in a loss of engine power.

The representative did not identify any fuel in the fuel lines to the engine fuel pumps.

According to a Hawker Beechcraft Representative, pilots are to takeoff and land on the main tanks only.

Flight instructor Information

Certificate:	Airline transport; Flight instructor	Age:	53, Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Right
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	Airplane multi-engine; Airplane single-engine; Instrument airplane	Toxicology Performed:	No
Medical Certification:	Class 3 With waivers/limitations	Last FAA Medical Exam:	March 19, 2007
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	May 13, 2007
Flight Time:	15400 hours (Total, all aircraft), 503 hours (Total, this make and model), 15300 hours (Pilot In Command, all aircraft), 100 hours (Last 90 days, all aircraft), 60 hours (Last 30 days, all aircraft)		

Student pilot Information

Certificate:	Private	Age:	43, Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 With waivers/limitations	Last FAA Medical Exam:	July 10, 2007
Occupational Pilot:	No	Last Flight Review or Equivalent:	June 15, 2007
Flight Time:	1015 hours (Total, all aircraft), 8 hours (Total, this make and model), 935 hours (Pilot In Command, all aircraft), 8 hours (Last 90 days, all aircraft), 8 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Hawker Beechcraft Corporation	Registration:	N5885C
Model/Series:	E-55	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	TE868
Landing Gear Type:	Retractable - Tricycle	Seats:	4
Date/Type of Last Inspection:	October 10, 2007 Annual	Certified Max Gross Wt.:	5300 lbs
Time Since Last Inspection:	8 Hrs	Engines:	2 Reciprocating
Airframe Total Time:	4869.1 Hrs as of last inspection	Engine Manufacturer:	Teledyne Continental
ELT:	C91 installed, activated, did not aid in locating accident	Engine Model/Series:	IO-520-B2B
Registered Owner:	Hamid Wasti	Rated Power:	285 Horsepower
Operator:	Action Flying	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	COE,2320 ft msl	Distance from Accident Site:	1 Nautical Miles
Observation Time:	19:35 Local	Direction from Accident Site:	
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	9 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	160°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.13 inches Hg	Temperature/Dew Point:	11°C / 1°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Coeur d'Alene, ID (COE)	Type of Flight Plan Filed:	None
Destination:	Coeur d'Alene, ID (COE)	Type of Clearance:	VFR
Departure Time:	17:30 Local	Type of Airspace:	

Airport Information

Airport:	Coeur d'Alene Air Terminal COE	Runway Surface Type:	
Airport Elevation:	2320 ft msl	Runway Surface Condition:	Dry
Runway Used:	05	IFR Approach:	None
Runway Length/Width:	7400 ft / 100 ft	VFR Approach/Landing:	None

Wreckage and Impact Information

Crew Injuries:	1 Serious, 1 None	Aircraft Damage:	Substantial
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Serious, 1 None	Latitude, Longitude:	47.774166,-116.819442

Administrative Information

Investigator In Charge (IIC):	Dunks, Kristi
Additional Participating Persons:	Stephen Dunn; Federal Aviation Administration; Spokane, WA Andrew Swick; Federal Aviation Administration; Sacramento, CA
Original Publish Date:	December 8, 2008
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=67997

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The NTSB does not assign fault or blame for an accident or incident; rather, as specified by NTSB regulation, “accident/incident investigations are fact-finding proceedings with no formal issues and no adverse parties ... and are not conducted for the purpose of determining the rights or liabilities of any person” (Title 49 *Code of Federal Regulations* section 831.4). Assignment of fault or legal liability is not relevant to the NTSB’s statutory mission to improve transportation safety by investigating accidents and incidents and issuing safety recommendations. In addition, statutory language prohibits the admission into evidence or use of any part of an NTSB report related to an accident in a civil action for damages resulting from a matter mentioned in the report (Title 49 *United States Code* section 1154(b)). A factual report that may be admissible under 49 *United States Code* section 1154(b) is available [here](#).