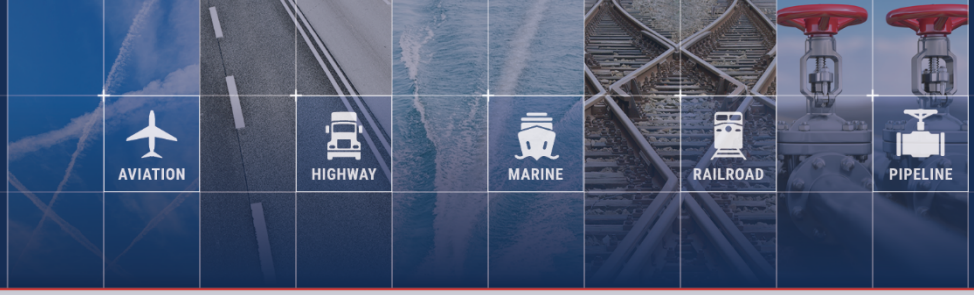

Aviation Investigation Final Report

Location:	Wasilla, Alaska	**Accident Number:**	ANC05LA118
Date & Time:	August 8, 2005, 19:30 Local	**Registration:**	N5616M
Aircraft:	Taylorcraft BC12D-85	**Aircraft Damage:**	Substantial
Defining Event:		**Injuries:**	2 Minor
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The private pilot was conducting a local personal flight, when the engine lost all power and he was forced to make an emergency landing. In his written statement to the NTSB, he indicated he performed a cruise descent from 2,100 feet to 700 feet above mean sea level (msl) with the carburetor heat on. After a short time at 700 feet he applied full power to gain altitude, and about 900 feet msl, the engine lost power. He attempted to restart the engine without success. During an emergency landing to a dirt road, the airplane collided with unmarked electrical wires, which redirected the airplane into the trees along the dirt road, resulting in structural damage to the wings and fuselage. An examination of the airplane at the accident site by the NTSB revealed fuel in the carburetor and in the airplane's fuel tank. During an operational test run of the airplane's engine, the engine was started and ran at various power settings. The carburetor was removed and evaluated on a flow test stand. No mechanical anomalies were found with the engine or carburetor.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The total loss of engine power for an unknown reason while maneuvering, which precipitated an emergency descent and landing, and resulted in an in-flight collision with power lines and trees. A factor associated with the accident was the power lines.

Findings

Occurrence #1: LOSS OF ENGINE POWER
Phase of Operation: MANEUVERING

Findings
1. (C) REASON FOR OCCURRENCE UNDETERMINED

Occurrence #2: FORCED LANDING
Phase of Operation: DESCENT - EMERGENCY

Occurrence #3: IN FLIGHT COLLISION WITH OBJECT
Phase of Operation: EMERGENCY DESCENT/LANDING

Findings
2. (F) OBJECT - WIRE,TRANSMISSION
3. OBJECT - TREE(S)

Factual Information

On August 8, 2005, about 1930 Alaska daylight time, a Taylorcraft BC12D-85 airplane, N5616M, sustained substantial damage during an emergency landing following a total loss of engine power, about 5 miles northwest of Wasilla, Alaska. The airplane was being operated by the pilot as a visual flight rules (VFR) local personal flight under Title 14, CFR Part 91, when the accident occurred. The private certificated pilot and sole passenger received minor injuries. Visual meteorological conditions prevailed, and no flight plan was filed. The flight originated at the Willow Airport, Willow, Alaska, about 2000.

During a conversation with the National Transportation Safety Board (NTSB) investigator-in-charge (IIC) on August 8, an Alaska State Trooper, who interviewed the pilot at the scene, said the pilot said he was cruising about 900 feet agl when the engine started to lose power. The Trooper indicated the pilot reported that as he applied full power the engine quit, and when he was unable to restart the engine, he attempted an emergency landing on a road. During the landing the airplane collided with unmarked power lines and impacted trees, receiving structural damage to both wings and the fuselage.

In a written statement to the NTSB, dated September 8, the pilot indicated he performed a cruise descent from 2,100 feet to 700 feet above mean sea level (msl) with the carburetor heat on. He wrote that after a short time at 700 feet, he applied full power to gain altitude for the flight home. He said about 900 feet msl, the airplane's engine quit. He wrote that he attempted to restart the engine without success. During an emergency landing to a dirt road, the airplane struck unmarked electrical wires, which redirected the airplane into the trees along the dirt road.

During an examination of the airplane at the accident site by the NTSB IIC on August 8, fuel was found in the carburetor and in the airplane's fuel tank.

On August 18, under the direction of the NTSB IIC, an FAA aviation safety inspector performed an operational test run of the airplane's engine. The engine was started and run at various power settings. The carburetor was removed and evaluated on a flow test stand. No mechanical anomalies were found with the engine or carburetor.

Pilot Information

Certificate:	Private	**Age:**	53,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:**	No
Medical Certification:	Class 3 Without waivers/limitations	**Last FAA Medical Exam:**	April 1, 2005
Occupational Pilot:	No	**Last Flight Review or Equivalent:**	
Flight Time:	140 hours (Total, all aircraft), 50 hours (Total, this make and model), 70 hours (Pilot In Command, all aircraft), 20 hours (Last 90 days, all aircraft), 10 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Taylorcraft	**Registration:**	N5616M
Model/Series:	BC12D-85	**Aircraft Category:**	Airplane
Year of Manufacture:		**Amateur Built:**	
Airworthiness Certificate:	Normal	**Serial Number:**	12016
Landing Gear Type:	Tailwheel	**Seats:**	2
Date/Type of Last Inspection:	April 1, 2005 Annual	**Certified Max Gross Wt.:**	1500 lbs
Time Since Last Inspection:		**Engines:**	1 Reciprocating
Airframe Total Time:	2302 Hrs as of last inspection	**Engine Manufacturer:**	Continental
ELT:	Installed, not activated	**Engine Model/Series:**	C85-12F
Registered Owner:	Darrell Lindgren	**Rated Power:**	85 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:		**Distance from Accident Site:**	
Observation Time:		**Direction from Accident Site:**	
Lowest Cloud Condition:	Clear	**Visibility**	10 miles
Lowest Ceiling:	None	**Visibility (RVR):**	
Wind Speed/Gusts:	/	**Turbulence Type Forecast/Actual:**	/
Wind Direction:	130°	**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:		**Temperature/Dew Point:**	22°C
Precipitation and Obscuration:			
Departure Point:	Willow, AK (PAUO)	**Type of Flight Plan Filed:**	None
Destination:		**Type of Clearance:**	None
Departure Time:	20:00 Local	**Type of Airspace:**	

Wreckage and Impact Information

Crew Injuries:	1 Minor	**Aircraft Damage:**	Substantial
Passenger Injuries:	1 Minor	**Aircraft Fire:**	None
Ground Injuries:	N/A	**Aircraft Explosion:**	None
Total Injuries:	2 Minor	**Latitude, Longitude:**	61.633335,-149.53334

Administrative Information

Investigator In Charge (IIC):	Lewis, Lawrence
Additional Participating Persons:	Ernie Walker; Anchorage FSDO-03; Anchorage, AK
Original Publish Date:	June 28, 2006
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=62255