

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: 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)

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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.

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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

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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

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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:	<u>Class</u>
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=62255

The National Transportation Safety Board (NTSB) is an independent federal agency charged by Congress with investigating every civil aviation accident in the United States and significant events in other modes of transportation—railroad, transit, highway, marine, pipeline, and commercial space. We determine the probable causes of the accidents and events we investigate, and issue safety recommendations aimed at preventing future occurrences. In addition, we conduct transportation safety research studies and offer information and other assistance to family members and survivors for each accident or event we investigate. We also serve as the appellate authority for enforcement actions involving aviation and mariner certificates issued by the Federal Aviation Administration (FAA) and US Coast Guard, and we adjudicate appeals of civil penalty actions taken by the FAA.

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.

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