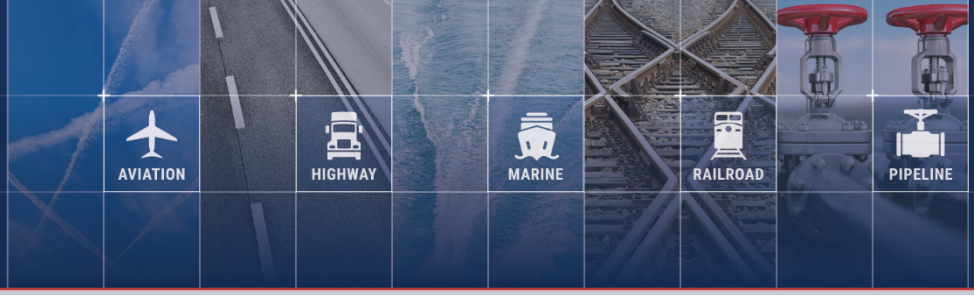

Aviation Investigation Final Report

Location:	CANTWELL, Alaska	**Accident Number:**	ANC99LA076
Date & Time:	June 12, 1999, 19:30 Local	**Registration:**	N43373
Aircraft:	Taylorcraft BC-12	**Aircraft Damage:**	Substantial
Defining Event:		**Injuries:**	1 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot was departing a private airport on the continuation of a cross-country flight. He reported the engine power began to decrease, varying from full power to almost none, and the application of carburetor heat produced no change. The engine was not running rough or sputtering, but was not producing enough power to climb above about 100 feet. He made a gentle bank to the left, gradually losing altitude, and made an emergency landing on soft, tundra-covered terrain about 3/4 mile southwest of the airport. During the landing, the landing gear was sheared off, the wing lift struts were bent, and the left wing was bent at the inboard end. The pilot said he always filtered his fuel through a chamois. Prior to his departure on the cross-country flight, he did not find any water in the fuel when he drained his fuel tanks. Following recovery of the airplane, it was inspected by an FAA airworthiness inspector. The inspector reported the carburetor control cables were attached, and operated normally. Fuel was present in the carburetor bowl, and in the lines to the carburetor. About four to five gallons of fuel were present in the header tank. Engine gear train continuity was established. The air filter was unobstructed.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: A loss of engine power for an undetermined reason.

Findings

Occurrence #1: LOSS OF ENGINE POWER
Phase of Operation: TAKEOFF - INITIAL CLIMB

Findings
1. (C) REASON FOR OCCURRENCE UNDETERMINED

Occurrence #2: FORCED LANDING
Phase of Operation: EMERGENCY LANDING AFTER TAKEOFF

Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation: EMERGENCY LANDING AFTER TAKEOFF

Findings
2. TERRAIN CONDITION - TUNDRA
3. TERRAIN CONDITION - SOFT

Factual Information

On June 12, 1999, about 1930 Alaska daylight time, a wheel equipped Taylorcraft BC-12 airplane, N43373, sustained substantial damage during a forced landing after takeoff from the Summit Airport, a private airport located about six miles southwest of Cantwell, Alaska, about latitude 63 degrees, 19.89 minutes north, and longitude 149 degrees, 07.64 degrees west. The airplane was being operated as a visual flight rules (VFR) personal flight to the Lake Hood Strip, Anchorage, Alaska, when the accident occurred. The airplane was operated by the pilot. The certificated private pilot, the sole occupant, was not injured. Visual meteorological conditions prevailed. The flight was the continuation of a cross-country flight that originated at the Fairbanks International Airport, Fairbanks, Alaska, about 1800.

During an interview with the National Transportation Safety Board (NTSB) investigator-in-charge (IIC), on June 14, 1999, the pilot reported that when he departed Fairbanks, the airplane's engine was running fine. He landed at the Summit Airport for a rest. Upon departure from runway 21, the engine power began to decrease, varying from full power to almost none. His application of carburetor heat produced no change. He said the engine was not running rough or sputtering, but was not producing enough power to climb above about 100 feet. He made a gentle bank to the left, gradually losing altitude. He performed an emergency landing on soft, tundra-covered terrain about 3/4 mile southwest of the airport. During the landing, the landing gear was sheared off, the wing lift struts were bent, and the left wing was bent at the inboard end.

In the Pilot/Operator report (NTSB form 6120.1/2) completed by the pilot, he indicated that he always filtered his fuel through a chamois. Prior to his departure from Fairbanks, he did not find any water in the fuel when he sumped his fuel tanks.

Following the accident, the airplane was recovered and transported to a private residence in Big Lake, Alaska. A Federal Aviation Administration (FAA) airworthiness inspector, Anchorage Flight Standards District Office (FSDO), inspected the airplane at the residence on July 1, 1999. The inspector reported the carburetor control cables were attached, and operated normally. Fuel was present in the carburetor bowl, and in the lines to the carburetor. About four to five gallons of fuel was present in the header tank. Engine gear train continuity was established. The air filter was unobstructed.

Pilot Information

Certificate:	Private	**Age:**	34,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 Valid Medical--no waivers/lim.	**Last FAA Medical Exam:**	July 10, 1997
Occupational Pilot:	UNK	**Last Flight Review or Equivalent:**	
Flight Time:	360 hours (Total, all aircraft), 120 hours (Total, this make and model), 310 hours (Pilot In Command, all aircraft), 2 hours (Last 90 days, all aircraft), 2 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Taylorcraft	**Registration:**	N43373
Model/Series:	BC-12 BC-12	**Aircraft Category:**	Airplane
Year of Manufacture:		**Amateur Built:**	
Airworthiness Certificate:	Normal	**Serial Number:**	7032
Landing Gear Type:	Tailwheel	**Seats:**	2
Date/Type of Last Inspection:	May 11, 1998 Annual	**Certified Max Gross Wt.:**	1200 lbs
Time Since Last Inspection:	40 Hrs	**Engines:**	1 Reciprocating
Airframe Total Time:	2080 Hrs	**Engine Manufacturer:**	Continental
ELT:	Installed, not activated	**Engine Model/Series:**	A-65-8
Registered Owner:	KARL D. OLSON	**Rated Power:**	65 Horsepower
Operator:		**Operating Certificate(s) Held:**	None
Operator Does Business As:		**Operator Designator Code:**	

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**	60 miles
Lowest Ceiling:	None	**Visibility (RVR):**	
Wind Speed/Gusts:	/	**Turbulence Type Forecast/Actual:**	/
Wind Direction:	0°	**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:		**Temperature/Dew Point:**	18°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	SUMMIT , AK (UMM)	**Type of Flight Plan Filed:**	VFR
Destination:	ANCHORAGE , AK (Z41)	**Type of Clearance:**	None
Departure Time:	19:30 Local	**Type of Airspace:**	Class G

Airport Information

Airport:	SUMMIT UMM	**Runway Surface Type:**	Gravel
Airport Elevation:	2409 ft msl	**Runway Surface Condition:**	Dry;Soft
Runway Used:	21	**IFR Approach:**	None
Runway Length/Width:	3840 ft / 80 ft	**VFR Approach/Landing:**	Forced landing

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:**	63.009914,-149.400222(est)

Administrative Information

Investigator In Charge (IIC):	Erickson, Scott
Additional Participating Persons:	KIM RISKE (FAA); ANCHORAGE , AK
Original Publish Date:	June 23, 2000
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=46568