Aviation Investigation Final Report

Location:	Iliamna, Alaska	**Accident Number:**	ANC06LA043
Date & Time:	April 3, 2006, 10:00 Local	**Registration:**	N36291
Aircraft:	Taylorcraft BC12-65	**Aircraft Damage:**	Substantial
Defining Event:		**Injuries:**	1 Minor
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The certificated private pilot reported that while in cruise flight over an area of snow-covered terrain, he noted a rough running engine and a slight reduction in engine rpm. The application of carburetor heat and engine emergency procedures did not remedy the engine roughness, which was followed by a rapid loss of engine power, and subsequent loss of altitude. The pilot said that he was unable to restore adequate engine power to maintain level flight, and he selected a snow-covered plateau as a forced landing site, which required a downwind approach due to terrain features. Just before touch down on the soft, snow-covered terrain, he said the left wing stalled and struck the ground, causing the airplane to cartwheel to the left. The airplane sustained structural damage to the left wing and fuselage. In the pilot's written report to the NTSB, he stated that weather conditions at the time of the accident were, in part: Visibility, 2 miles; clouds and sky condition, 2,000 feet broken; wind, 090 degrees at 20 knots, gusting to 35 knots; temperature, 20 degrees F, with light snow showers and blowing snow. In the section of the form that inquires about mechanical malfunction/failure, he wrote: "Carb Icing."

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's delayed use of carburetor heat, which resulted in a loss of engine power during cruise, and an in-flight collision with snow-covered terrain. Factors associated with the accident were an unfavorable wind, and the pilot's inadvertent stall of the airplane during the

emergency descent.

Findings

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

Findings
1. (F) WEATHER CONDITION - CARBURETOR ICING CONDITIONS
2. (C) CARBURETOR HEAT - DELAYED - PILOT IN COMMAND

Occurrence #2: LOSS OF CONTROL - IN FLIGHT
Phase of Operation: EMERGENCY LANDING

Findings
3. (F) WEATHER CONDITION - UNFAVORABLE WIND
4. (F) STALL - INADVERTENT - PILOT IN COMMAND

Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation: DESCENT - UNCONTROLLED

Findings
5. TERRAIN CONDITION - SNOW COVERED

Factual Information

On April 3, 2006, about 1000 Alaska daylight time, a wheel-equipped Taylorcraft BC12-65 airplane, N36291, sustained substantial damage during a forced landing following a loss of engine power, about 16 miles northwest of Iliamna, Alaska. The airplane was being operated as a visual flight rules (VFR) cross-country personal flight under Title 14, CFR Part 91, when the accident occurred. The solo private certificated pilot sustained minor injuries. Visual meteorological conditions prevailed, and no flight plan was filed. The flight originated about 0930, from a remote off-airport site about 40 miles southwest of Iliamna, and was en route to Iliamna when the accident occurred.

During a telephone conversation with the National Transportation Safety Board (NTSB) investigator-in-charge (IIC), on April 4, the pilot related that during the flight to Iliamna, weather conditions consisted of ceilings between 600 and 800 feet, along with winds of 25 knots and blowing snow. As the flight progressed towards Iliamna, he noted a rough running engine and a slight reduction in engine rpm. He said that the application of carburetor heat and engine emergency procedures did not remedy the engine roughness, which was followed by a rapid loss of engine power, and subsequent loss of altitude. The pilot said that he was unable to restore adequate engine power to maintain level flight, and he selected a snow-covered plateau as a forced landing site. He said that terrain features around the forced landing site required a downwind approach. Just before touch down on the soft, snow-covered terrain, he said the left wing stalled and struck the ground, causing the airplane to cartwheel to the left. The airplane sustained structural damage to the left wing and fuselage.

In the pilot's written report that was submitted along with the NTSB Pilot/Operator Aircraft Accident Report (NTSB Form 6120.1/2), dated April 25, he reported that weather conditions at the time of the accident were, in part: Visibility, 2 miles; clouds and sky condition, 2,000 feet broken; wind, 090 degrees at 20 knots, gusting to 35 knots; temperature, 20 degrees F, with light snow showers and blowing snow. In the section of the form that inquires about and mechanical malfunction/failure, he wrote: "Carb Icing."

Pilot Information

Certificate:	Private	**Age:**	56,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 With waivers/limitations	**Last FAA Medical Exam:**	February 1, 2005
Occupational Pilot:	No	**Last Flight Review or Equivalent:**	July 1, 2005
Flight Time:	164 hours (Total, all aircraft), 100 hours (Total, this make and model), 164 hours (Pilot In Command, all aircraft), 33 hours (Last 90 days, all aircraft), 9 hours (Last 30 days, all aircraft), 5 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Taylorcraft	**Registration:**	N36291
Model/Series:	BC12-65	**Aircraft Category:**	Airplane
Year of Manufacture:		**Amateur Built:**	
Airworthiness Certificate:	Normal	**Serial Number:**	3209
Landing Gear Type:	Tailwheel	**Seats:**	2
Date/Type of Last Inspection:	August 1, 2005 Annual	**Certified Max Gross Wt.:**	1200 lbs
Time Since Last Inspection:	80 Hrs	**Engines:**	1 Reciprocating
Airframe Total Time:	3129.3 Hrs at time of accident	**Engine Manufacturer:**	Continental
ELT:	Installed, activated, did not aid in locating accident	**Engine Model/Series:**	A65-8
Registered Owner:	Debra Schneider & Mitchell Rausa	**Rated Power:**	65 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:		**Visibility**	2 miles
Lowest Ceiling:	Broken / 2000 ft AGL	**Visibility (RVR):**	
Wind Speed/Gusts:	20 knots / 35 knots	**Turbulence Type Forecast/Actual:**	/
Wind Direction:	90°	**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:		**Temperature/Dew Point:**	-7°C
Precipitation and Obscuration:	Light - Blowing - Snow		
Departure Point:	ILIAMNA, AK	**Type of Flight Plan Filed:**	None
Destination:	ILIAMNA, AK (ILI)	**Type of Clearance:**	None
Departure Time:	09:30 Local	**Type of Airspace:**	

Wreckage and Impact Information

Crew Injuries:	1 Minor	**Aircraft Damage:**	Substantial
Passenger Injuries:		**Aircraft Fire:**	None
Ground Injuries:	N/A	**Aircraft Explosion:**	None
Total Injuries:	1 Minor	**Latitude, Longitude:**	59.733333,-155.376388

Administrative Information

Investigator In Charge (IIC):	Johnson, Clinton
Additional Participating Persons:	John P Jones ; Anchorage FSDO
Original Publish Date:	October 31, 2006
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=63450