

National Transportation Safety Board  
Washington, DC 20594

Brief of Accident

Adopted 08/21/2001

ANC01LA029 File No. 10357	01/13/2001	Anchorage, AK	Aircraft Reg No. N2191J	Time (Local): 14:30 AST	
Make/Model: Piper / PA-18			Fatal	Serious	Minor/None
Engine Make/Model: Lycoming / O-320			Crew 0	0	1
Aircraft Damage: Substantial			Pass 0	0	0
Number of Engines: 1					
Operating Certificate(s): None					
Type of Flight Operation: Personal					
Reg. Flight Conducted Under: Part 91: General Aviation					

Last Depart. Point: Chugiak, AK	Condition of Light: Day
Destination: Local Flight	Weather Info Src: Weather Observation Facility
Airport Proximity: Off Airport/Airstrip	Basic Weather: Visual Conditions
	Lowest Ceiling: 7000 Ft. AGL, Overcast
	Visibility: 10.00 SM
	Wind Dir/Speed: 276 / 007 Kts
	Temperature (°C): -2
	Obstr to Vision: None
	Precipitation: Snow Shower

Pilot-in-Command	Age: 37	Flight Time (Hours)
Certificate(s)/Rating(s)		Total All Aircraft: 362
Private; Single-engine Land		Last 90 Days: 10
Instrument Ratings		Total Make/Model: 35
None		Total Instrument Time: 4

The private certificated pilot was in cruise flight about 1,000 feet above ground level (agl). He observed an area of snow showers ahead of the airplane, and decided to descend to about 500 feet agl. The pilot said he reduced the engine throttle without first applying carburetor heat. When he added engine throttle to level the airplane at 500 feet, the engine began sputtering. He then applied carburetor heat, but the engine did not respond. The engine continued to run rough, and the airplane could not sustain level flight. The pilot selected a snow-covered gravel bar for a forced landing. The airplane touched down in snow that was about 18 inches deep. During the landing roll, the airplane nosed over, and received damage to the right wing lift strut and the rudder. The pilot reported the weather conditions in the area of the accident as 1,200 to 1,500 feet overcast; temperature 35 to 38 degrees F; light to moderate snow showers. According to published carburetor icing charts, the atmospheric conditions at the time of the accident (38 degrees and visible moisture) reflected the probability of serious icing utilizing descent power. A postaccident inspection disclosed no mechanical anomalies with the engine.

Brief of Accident (Continued)

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Occurrence #1:    LOSS OF ENGINE POWER(PARTIAL) - NONMECHANICAL  
Phase of Operation: CRUISE

Findings

1. (F) WEATHER CONDITION - CARBURETOR ICING CONDITIONS
  2. (C) CARBURETOR HEAT - IMPROPER USE OF - PILOT IN COMMAND
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Occurrence #2:    FORCED LANDING  
Phase of Operation: EMERGENCY DESCENT/LANDING

Findings

3. (F) TERRAIN CONDITION - NONE SUITABLE
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Occurrence #3:    ON GROUND/WATER ENCOUNTER WITH TERRAIN/WATER  
Phase of Operation: EMERGENCY DESCENT/LANDING

Findings

4. (F) TERRAIN CONDITION - SNOW COVERED
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Occurrence #4:    NOSE OVER  
Phase of Operation: EMERGENCY DESCENT/LANDING

Findings Legend: (C) = Cause, (F) = Factor

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The National Transportation Safety Board determines the probable cause(s) of this accident as follows.  
The pilot's improper use of the carburetor heat control. Factors in the accident were the presence of carburetor icing conditions, and snow-covered terrain that was unsuitable for a forced landing.