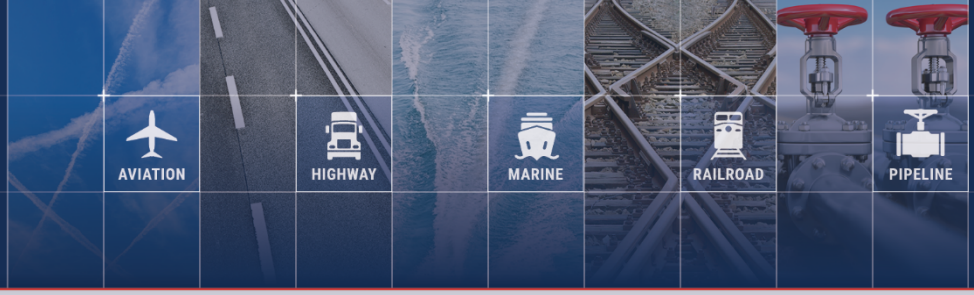

Aviation Investigation Factual Report

Location:	North Pole, Alaska	**Accident Number:**	ANC03LA035
Date & Time:	March 21, 2003, 16:30 Local	**Registration:**	N4123X
Aircraft:	Aero Commander 100	**Aircraft Damage:**	Substantial
Defining Event:		**Injuries:**	2 None
Flight Conducted Under:	Part 91: General aviation - Instructional		

Factual Information

On March 21, 2003, about 1630 Alaska standard time, an Aero Commander 100 airplane, N4123X, sustained substantial damage when it collided with trees during a forced landing after takeoff from the Bradley Sky-Ranch Airport, North Pole, Alaska. The airplane was being operated as a visual flight rules (VFR) instructional flight under Title 14, CFR Part 91, when the accident occurred. The first pilot, seated in the right seat, a certificated flight instructor, and the second pilot, seated in the left seat, a student pilot, were not injured. The airplane was owned by the second pilot. Visual meteorological conditions prevailed, and no flight plan was filed. The local area flight originated at the Bradley Sky-Ranch Airport, about 1615.

During a telephone conversation with the National Transportation Safety Board investigator-in-charge on March 25, the instructor pilot reported that he was providing flight instruction to the student pilot. The instructor pilot reported that after takeoff from runway 15, about 100 feet above the runway, the airplane's engine began to run rough and lose power. He said that emergency engine procedures did not restore engine power. The airplane collided with a stand of trees at the departure end of the airport, and sustained substantial damage to the wings, fuselage, and empennage.

Prior to reporting the accident on March 25, the instructor and student pilot disassembled the airplane, transported it to a vacant lot on the airport, and covered it with a tarp. On March 28, a Federal Aviation Administration (FAA) airworthiness inspector, Fairbanks Flight Standards District Office, traveled to the Bradley Sky-Ranch Airport to inspect the accident airplane. The inspector reported finding no preaccident mechanical anomalies with the airplane. The FAA inspector added that during the inspection he spoke with the student pilot involved in the accident. The student pilot reported to the FAA inspector that prior to the accident takeoff, just after starting the airplane's engine, the instructor pilot leaned the fuel mixture and applied full carburetor heat during the 15 to 20 minute engine warm-up time. He said that after the engine was warm, they taxied to the departure end of runway 15, and started their takeoff roll, with the mixture control and carburetor heat in the same position. He reported that just after takeoff the engine began to run rough, and lose power. He said that the instructor pilot then took control of the airplane, pushed in the carburetor heat control (off), and all engine power was lost. The airplane collided with a stand of trees at the departure end of the airport. The student pilot reported that immediately following the accident, both pilots noticed that the mixture control was still in the lean position.

Flight instructor Information

Certificate:	Commercial; Flight instructor	**Age:**	43,Male
Airplane Rating(s):	Single-engine land; Multi-engine land	**Seat Occupied:**	Right
Other Aircraft Rating(s):	None	**Restraint Used:**	
Instrument Rating(s):	Airplane	**Second Pilot Present:**	Yes
Instructor Rating(s):	Airplane single-engine	**Toxicology Performed:**	No
Medical Certification:	Class 3 Valid Medical--no waivers/lim.	**Last FAA Medical Exam:**	March 31, 2003
Occupational Pilot:	Yes	**Last Flight Review or Equivalent:**	September 29, 2001
Flight Time:	553 hours (Total, all aircraft), 21 hours (Total, this make and model), 500 hours (Pilot In Command, all aircraft), 15 hours (Last 90 days, all aircraft), 10 hours (Last 30 days, all aircraft)		

Student pilot Information

Certificate:	Student	**Age:**	64,Male
Airplane Rating(s):	None	**Seat Occupied:**	Left
Other Aircraft Rating(s):	None	**Restraint Used:**	
Instrument Rating(s):	None	**Second Pilot Present:**	Yes
Instructor Rating(s):	None	**Toxicology Performed:**	No
Medical Certification:	Class 3 Valid Medical--w/ waivers/lim	**Last FAA Medical Exam:**	April 3, 2002
Occupational Pilot:	No	**Last Flight Review or Equivalent:**	
Flight Time:	19 hours (Total, all aircraft), 19 hours (Total, this make and model)		

Aircraft and Owner/Operator Information

Aircraft Make:	Aero Commander	**Registration:**	N4123X
Model/Series:	100	**Aircraft Category:**	Airplane
Year of Manufacture:		**Amateur Built:**	
Airworthiness Certificate:	Normal	**Serial Number:**	222
Landing Gear Type:	Tricycle	**Seats:**	4
Date/Type of Last Inspection:	July 12, 2002 Annual	**Certified Max Gross Wt.:**	2250 lbs
Time Since Last Inspection:	24 Hrs	**Engines:**	1 Reciprocating
Airframe Total Time:	2023 Hrs at time of accident	**Engine Manufacturer:**	Lycoming
ELT:	Installed, activated, did not aid in locating accident	**Engine Model/Series:**	O-320-A2B
Registered Owner:	Leo A. Regner	**Rated Power:**	150 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**	5 miles
Lowest Ceiling:		**Visibility (RVR):**	
Wind Speed/Gusts:	/	**Turbulence Type Forecast/Actual:**	/
Wind Direction:		**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:		**Temperature/Dew Point:**	-17°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	North Pole , AK (95Z)	**Type of Flight Plan Filed:**	None
Destination:	North Pole , AK (95Z)	**Type of Clearance:**	None
Departure Time:	16:30 Local	**Type of Airspace:**	Class D

Airport Information

Airport:	North Pole 95Z	**Runway Surface Type:**	Gravel
Airport Elevation:	483 ft msl	**Runway Surface Condition:**	Ice
Runway Used:	15	**IFR Approach:**	None
Runway Length/Width:	3400 ft / 80 ft	**VFR Approach/Landing:**	None

Wreckage and Impact Information

Crew Injuries:	2 None	**Aircraft Damage:**	Substantial
Passenger Injuries:		**Aircraft Fire:**	None
Ground Injuries:	N/A	**Aircraft Explosion:**	None
Total Injuries:	2 None	**Latitude, Longitude:**	64.75,-147.383331

Administrative Information

Investigator In Charge (IIC):	Johnson, Clinton
Additional Participating Persons:	Donald Nelson ; Federal Aviation Administration; Fairbanks , AK Mark Smith ; Federal Aviation Administration; Faribanks , AK
Report Date:	June 24, 2003
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=56682