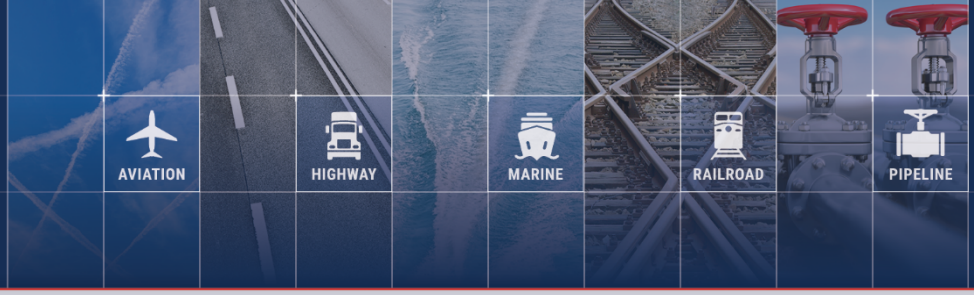

Aviation Investigation Final Report

Location:	Fairbanks, Alaska	**Accident Number:**	ANC01LA063
Date & Time:	June 1, 2001, 17:00 Local	**Registration:**	N9311T
Aircraft:	Cessna 180	**Aircraft Damage:**	Substantial
Defining Event:		**Injuries:**	4 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The certificated commercial pilot, with three passengers aboard, departed from a remote lake in a float-equipped, single engine airplane. While in level, cruise flight, the engine began to run rough, and lose power. Emergency procedures restored partial engine power momentarily, followed by a complete loss of engine power. The airplane collided with trees during a subsequent forced landing, and sustained substantial damage to the fuselage, wings, and empennage. An FAA inspector examined the airplane and reported that both fuel tanks were empty. The pilot reported that the fuel gauges installed in his airplane would consistently provide an inaccurate fuel quantity reading. He added that prior to departure, he visually checked the quantity of fuel in the wing fuel tanks by using a fuel measuring device, but later added that the fuel level reading may have been in error due to the airplane's attitude while moored.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's failure to refuel the airplane, his inadequate preflight planning/decision making, and subsequent fuel exhaustion during cruise flight.

Findings

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

Findings
1. (C) FLUID,FUEL - EXHAUSTION
2. (C) REFUELING - NOT PERFORMED - PILOT IN COMMAND
3. (C) PREFLIGHT PLANNING/PREPARATION - INADEQUATE - PILOT IN COMMAND

Occurrence #2: FORCED LANDING
Phase of Operation: EMERGENCY DESCENT/LANDING

Occurrence #3: IN FLIGHT COLLISION WITH OBJECT
Phase of Operation: EMERGENCY DESCENT/LANDING

Findings
4. OBJECT - TREE(S)

Factual Information

On June 1, 2001, about 1700 Alaska daylight time, a float-equipped Cessna 180 airplane, N9311T, sustained substantial damage during a forced landing about 20 miles west of Fairbanks, Alaska. The airplane was being operated as a visual flight rules (VFR) personal flight under Title 14, CFR Part 91, when the accident occurred. The certificated commercial pilot, and the three passengers aboard, were not injured. Visual meteorological conditions prevailed, and no flight plan was filed. The flight originated about 1630, from a remote lake located about 15 miles north of Nenana, Alaska, and was en route to Fairbanks.

During a telephone conversation with the National Transportation Safety Board (NTSB) investigator-in-charge on June 1, the pilot reported that while in level, cruise flight, the engine began to run rough, and lose power. He said that after performing emergency procedures, he was able to restore partial engine power momentarily, followed by a complete loss of engine power. The airplane collided with trees during a subsequent forced landing, and sustained substantial damage to the fuselage, wings, and empennage.

A Federal Aviation Administration (FAA) airworthiness inspector from the Fairbanks Flight Standards District Office, traveled to the accident scene on June 4, and examined the airplane. The inspector reported the airplane's fuel system, including both wing fuel tanks, were intact and were not breached. He reported that both fuel tanks were empty, and added that the total amount drained from the airplane's gascolator was about 5 ounces. Examination of the fuel from the gascolator revealed it was clean and bright, and did not contain any visible contaminants.

In the Pilot/Operator report (NTSB form 6120.1/2) filed by the pilot on June 16, he reported that the fuel gauges installed in his airplane would consistently provide an inaccurate fuel quantity reading. He added that prior to departure, he visually checked the quantity of fuel in the wing fuel tanks by using a fuel measuring device. He wrote, in part: "This procedure indicated that I had 18 gallons of 100LL, in retrospect this reading may have been in error due to the unknown attitude of the aircraft, as the act of getting out on the wing may have tipped the wing in that direction or attitude of the floatplane in the water caused the indication of more fuel than there actually was."

Pilot Information

Certificate:	Commercial	**Age:**	55,Male
Airplane Rating(s):	Single-engine land; Single-engine sea; Multi-engine land	**Seat Occupied:**	Left
Other Aircraft Rating(s):	None	**Restraint Used:**	
Instrument Rating(s):	Airplane	**Second Pilot Present:**	No
Instructor Rating(s):	Airplane single-engine	**Toxicology Performed:**	No
Medical Certification:	Class 3 Valid Medical--w/ waivers/lim	**Last FAA Medical Exam:**	May 23, 2001
Occupational Pilot:	UNK	**Last Flight Review or Equivalent:**	June 28, 1999
Flight Time:	1920 hours (Total, all aircraft), 1411 hours (Total, this make and model), 1846 hours (Pilot In Command, all aircraft), 11 hours (Last 90 days, all aircraft), 11 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	**Registration:**	N9311T
Model/Series:	180	**Aircraft Category:**	Airplane
Year of Manufacture:		**Amateur Built:**	
Airworthiness Certificate:	Normal	**Serial Number:**	5081
Landing Gear Type:	Float	**Seats:**	4
Date/Type of Last Inspection:	May 1, 2001 Annual	**Certified Max Gross Wt.:**	2820 lbs
Time Since Last Inspection:	10.5 Hrs	**Engines:**	1 Reciprocating
Airframe Total Time:	5349.1 Hrs at time of accident	**Engine Manufacturer:**	Continental
ELT:	Installed, activated, aided in locating accident	**Engine Model/Series:**	O-470-L
Registered Owner:	Donald D. Kirk	**Rated Power:**	230 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:	Scattered / 10000 ft AGL	**Visibility**	100 miles
Lowest Ceiling:		**Visibility (RVR):**	
Wind Speed/Gusts:	8 knots /	**Turbulence Type Forecast/Actual:**	/
Wind Direction:	240°	**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:		**Temperature/Dew Point:**	18°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Nenana, AK (ENN)	**Type of Flight Plan Filed:**	None
Destination:	Fairbanks , AK (AK28)	**Type of Clearance:**	None
Departure Time:	16:30 Local	**Type of Airspace:**	Class E

Wreckage and Impact Information

Crew Injuries:	1 None	**Aircraft Damage:**	Substantial
Passenger Injuries:	3 None	**Aircraft Fire:**	None
Ground Injuries:	N/A	**Aircraft Explosion:**	None
Total Injuries:	4 None	**Latitude, Longitude:**	64.783332,-148.551666

Administrative Information

Investigator In Charge (IIC):	Johnson, Clinton
Additional Participating Persons:	Cary J Meier; Federal Aviation Administration ; Fairbanks , AK
Original Publish Date:	May 21, 2002
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=53195