Aviation Investigation Final Report

Location:	PORT ALSWORTH, Alaska	**Accident Number:**	ANC96LA134
Date & Time:	August 30, 1996, 15:30 Local	**Registration:**	N8241V
Aircraft:	Cessna 180	**Aircraft Damage:**	Substantial
Defining Event:		**Injuries:**	1 Serious, 1 Minor, 1 None
Flight Conducted Under:	Part 135: Air taxi & commuter - Non-scheduled		

Analysis

The pilot had landed at a field site to pick up two passengers. After the landing, he drained the fuel from the left fuel tank to store for future use. The operator stated this is their normal practice, and as a result, operate the airplanes with the fuel selector valve in the right fuel tank position. When the airplane was approximately 5 minutes from the destination, the engine stopped producing power. The airplane landed and nosed over. Subsequent examination showed that the right fuel tank contained 7.3 gallons of usable fuel and the left fuel tank contained 3.1 gallons of usable fuel. The engine was started and it operated normally. The passengers stated the pilot did not dip the fuel tank prior to departure and that the return flight was turbulent.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The fuel starvation caused by the unporting of the right fuel tank, and the pilot's inadequate preflight by not dipping the fuel tank to ensure sufficient fuel quantity to prevent the unporting.

Findings

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

Findings

1. WEATHER CONDITION - TURBULENCE
2. (C) FUEL SYSTEM - STARVATION
3. (C) AIRCRAFT PREFLIGHT - INADEQUATE - PILOT IN COMMAND

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

Occurrence #3: NOSE OVER
Phase of Operation: EMERGENCY DESCENT/LANDING

Findings
4. TERRAIN CONDITION - SWAMPY

Factual Information

On August 30, 1996, at 1530 Alaska daylight time a wheel equipped Cessna 180 airplane, N8241V, registered to and operated by Lake Clark Air Inc., experienced a loss of engine power and subsequent forced landing while en route from the Mulchatna River to Port Alsworth, Alaska. The air taxi flight, operating under 14 CFR Part 135, departed the Mulchatna River area with two hunters on board. The destination was Port Alsworth. No flight plan was filed and visual meteorological conditions prevailed. The certificated airline transport pilot was not injured, one passenger sustained serious injuries and one passenger received minor injuries. The airplane was substantially damaged.

According to the passengers' statements, the pilot drained approximately 50 gallons of fuel from the airplane after landing. They said the pilot drained the left fuel tank dry. The operator stated that the airplane holds 84 gallons of fuel. It is their practice that upon reaching a field site, they drain the left fuel tank and store the fuel for future use. As a result, the company practice is to operate the airplane's fuel selector valve in the right fuel tank position. According to the passengers, the pilot did not dip the fuel tank prior to departure. They stated that he did not give them a passenger briefing prior to departure. The passengers indicated that the flight was turbulent.

While in cruise flight, and 5 minutes from the destination, the airplane's engine stopped producing power. The propeller continued to windmill during the descent. The pilot indicated on the NTSB Form 6120.1/2 that he applied carburetor heat, pushed the mixture full rich, pushed the throttle full forward, and placed the fuel selector in the "both" position. He landed the airplane and during the landing roll the airplane "flipped" over.

Subsequent examination of the airplane on September 4, 1996, by Federal Aviation Administration Flight Standards District Office Inspector, Mr. Gerald Martelli, showed that with the airplane in a level attitude there was only 7/16 of an inch of fuel covering the bottom of the right fuel tank. The fuel was drained from the right fuel tank through the gascolator. A total of 7.3 gallons of fuel was drained. The left fuel tank was drained through the gascolator and it yielded 3.1 gallons of fuel. The fuel was returned to their respective tanks and the engine was started. The engine started and operated normally.

Pilot Information

Certificate:	Airline transport; Commercial; Flight instructor	**Age:**	29,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 1 Valid Medical--w/ waivers/lim	**Last FAA Medical Exam:**	August 1, 1996
Occupational Pilot:	Yes	**Last Flight Review or Equivalent:**	
Flight Time:	4630 hours (Total, all aircraft), 20 hours (Total, this make and model), 2850 hours (Pilot In Command, all aircraft), 120 hours (Last 90 days, all aircraft), 90 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	**Registration:**	N8241V
Model/Series:	180 180	**Aircraft Category:**	Airplane
Year of Manufacture:		**Amateur Built:**	
Airworthiness Certificate:	Normal	**Serial Number:**	18051743
Landing Gear Type:	Tailwheel	**Seats:**	4
Date/Type of Last Inspection:	August 20, 1996 Annual	**Certified Max Gross Wt.:**	2800 lbs
Time Since Last Inspection:	36 Hrs	**Engines:**	1 Reciprocating
Airframe Total Time:	9357 Hrs	**Engine Manufacturer:**	Continental
ELT:	Installed, activated, did not aid in locating accident	**Engine Model/Series:**	O-470-R25
Registered Owner:	GLEN & JEAN ALSWORTH	**Rated Power:**	230 Horsepower
Operator:	LAKE CLARK AIR INC.	**Operating Certificate(s) Held:**	On-demand air taxi (135)
Operator Does Business As:		**Operator Designator Code:**	HXXC

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:	Unknown	**Visibility**	25 miles
Lowest Ceiling:	Broken / 2500 ft AGL	**Visibility (RVR):**	
Wind Speed/Gusts:	4 knots /	**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:	MULCHATNA RIVER, AK	**Type of Flight Plan Filed:**	Company VFR
Destination:	(5NW)	**Type of Clearance:**	None
Departure Time:	00:00 Local	**Type of Airspace:**	Class G

Airport Information

Airport:		**Runway Surface Type:**	
Airport Elevation:		**Runway Surface Condition:**	
Runway Used:	0	**IFR Approach:**	None
Runway Length/Width:		**VFR Approach/Landing:**	Forced landing

Wreckage and Impact Information

Crew Injuries:	1 None	**Aircraft Damage:**	Substantial
Passenger Injuries:	1 Serious, 1 Minor	**Aircraft Fire:**	None
Ground Injuries:	N/A	**Aircraft Explosion:**	None
Total Injuries:	1 Serious, 1 Minor, 1 None	**Latitude, Longitude:**	60.200721,-154.279022(est)

Administrative Information

Investigator In Charge (IIC):	Kobelnyk, George
Additional Participating Persons:	TERRY BATEMAN; ANCHORAGE , AK
Original Publish Date:	February 18, 1997
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=2889