Aviation Investigation Final Report

Location:	Homer, Alaska	**Accident Number:**	ANC07FA051
Date & Time:	June 19, 2007, 11:03 Local	**Registration:**	N72067
Aircraft:	Cessna 206	**Aircraft Damage:**	Substantial
Defining Event:		**Injuries:**	4 Serious
Flight Conducted Under:	Part 135: Air taxi & commuter - Non-scheduled		

Analysis

The commercial pilot began her duty day by making three flights in another company airplane. Six minutes after parking the first airplane, she switched to the accident airplane, and departed on a round-robin flight that included 4 takeoffs and 3 landings. About 8 minutes after the last takeoff, she declared an emergency, and reported a loss of engine power. Ground witnesses, and the front seat passenger, heard the engine stop, restart for a moment, and stop again. The pilot made an emergency landing approach to a remote island beach. While maneuvering for landing, she banked sharply to the right, and the airplane stalled at low level, colliding with the ground in a right wing and nose low attitude. Examination of the airplane at the crash site by an FAA inspector revealed that the fuel selector was on the left fuel tank. The right wing fuel tank system appeared to have been breached. The left fuel tank system appeared to be intact, and contained about 1/2 gallon of fuel. The engine fuel manifold contained about a drop of fuel. The engine was placed on an engine test stand, where it produced full rated rpm. The accident airplane had been flown the previous day by another company pilot for about 72 to 90 minutes and then parked. The amount of fuel remaining in the airplane when it was parked is unknown. A company ramp employee said he saw the pilot with a fuel hose at the accident airplane, but the amount of fuel, if any, that the pilot put in the airplane is unknown. Also, that observation was 23 minutes before the pilot's time sheet indicated she landed in the first airplane. Consequently, the amount of fuel in the accident airplane when the pilot departed is unknown. The pilot flew the accident airplane about 41 minutes before her crash landing on the beach. The company does not require pilots to log the amount of fuel placed in each airplane before each flight. The airplane's owner's manual description of the procedure for engine restart, after running a fuel tank dry, states, in part: "To ensure a prompt engine restart in flight after running a fuel tank dry, switch to the tank containing fuel, and place the auxiliary fuel pump switch in the "HI" position momentarily (3 to 5 seconds) with the throttle at least 1/2 open. Excessive use of the "HI" position of the auxiliary pump can cause flooding of the engine as indicated by a short (1 to 2 second) period of power, followed by a loss of power. This can be detected by a fuel flow indication, accompanied by a lack of power. If flooding does occur,

turn off the auxiliary fuel pump switch, and normal propeller windmilling should start the engine in 1 to 2 seconds." Due to the lack of fuel found in the left wing tank, the position of the fuel selector, and the absence of any mechanical problems with the engine, it is probable that the pilot inadvertently allowed the left tank to run dry, and was unable to restart the engine prior to the emergency landing. During the emergency landing, she allowed the airspeed to decay and stalled the airplane, adding to the severity of the crash.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: A loss of engine power due to fuel starvation from the pilot's improper fuel selector positioning, and her failure to maintain adequate airspeed to preclude a stall. Contributing to the accident was an inadvertent stall.

Findings

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

Findings
1. (C) FLUID,FUEL - STARVATION
2. (C) FUEL TANK SELECTOR POSITION - IMPROPER - PILOT IN COMMAND

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

Occurrence #3: LOSS OF CONTROL - IN FLIGHT
Phase of Operation: EMERGENCY DESCENT/LANDING

Findings
3. (C) AIRSPEED(VS) - NOT MAINTAINED - PILOT IN COMMAND
4. (F) STALL - INADVERTENT - PILOT IN COMMAND

Occurrence #4: IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation: DESCENT - UNCONTROLLED

Findings
5. TERRAIN CONDITION - SAND BAR

Factual Information

HISTORY OF FLIGHT

On June 19, 2007, about 1103 Alaska daylight time, a Cessna 206 airplane, N72067, sustained substantial damage when it crashed on an island beach following a loss of engine power during cruise flight, about 8 miles south of Homer, Alaska. The airplane was being operated as a visual flight rules (VFR) local area air taxi flight under Title 14, CFR Part 135, when the accident occurred. The airplane was operated by Smokey Bay Air Inc., Homer. The commercial certificated pilot and the three passengers received serious injuries. Visual meteorological conditions prevailed, and VFR company flight following procedures were in effect. The flight originated at the Seldovia Airport, Seldovia, Alaska, about 1052.

The pilot departed in the accident airplane from Homer, about 1014. The pilot had flown three flights earlier in the day, in a different airplane. The accident flight initially went to Seldovia, a distance of about 15 nautical miles (nm), and landed at 1028. The pilot then departed at 1030, and flew to Nanwalek, Alaska, a distance of about 8.7 nm, and landed at 1038. She picked up two passengers, one of which had been having complications from a pregnancy, and was en route to a hospital in Homer. That passenger was placed in the left seat of the middle row. The second passenger was also en route to Homer, and was placed in the right front seat. The flight departed Nanwalek at 1040, and landed at Seldovia at 1048. The pilot picked up another passenger, and 246 pounds of cargo. The last passenger was placed in the right seat of the middle row. The flight departed for Homer about 1052.

At 1059:04, the pilot made radio contact with the Federal Aviation Administration (FAA) Flight Service Station (FSS) at Homer, and reported her position as "60 Foot Rock," at 2,200 feet msl. At 1100:12, the pilot made an emergency radio call, stating, "Mayday Mayday, I have an emergency." The pilot said she was having engine problems, and was approaching Cohen Island, which is about 6 miles from Homer. At 1100:47, the pilot told the FSS specialist "I'm inbound to the beach for Yukon Island."

At 1101:22, the pilot made a radio call stating, "Okay guys, my engine is surging, but I've got a little power for my climb up, I'm going to circle Yukon for a moment, and I'll let you know what's going on." At 1102:45, the pilot reported that she was going to make a beach landing on Yukon Island, and requested that the FAA notify her base (Smokey Bay Air). The last radio comment was made by the pilot at 1103:18 when she responded to a query from another company pilot about her location.

Several ground witnesses, and the right seat passenger, reported that the airplane's engine was heard to sputter and quit, restart for a moment, and quit again. The airplane began descending toward Yukon Island, which is about 8 nm from Seldovia. The pilot appeared to be

headed for a beach at the southeast tip of the island. Numerous boaters and kayakers were on the beach in the intended landing area. The airplane then banked sharply to the right as it neared the beach, and collided with an unoccupied portion of the beach in a right wing, and nose low attitude. Several boaters and ground witnesses responded to the crash scene, and began emergency care for the occupants. Several of the responders were emergency care-givers. The pilot and passengers were air-lifted to Homer.

Two witnesses indicated that fuel was draining onto the sand from the bottom of the airplane. No comments were made from witnesses about fuel draining from the wings. Some witnesses indicated there was an odor of fuel at the wreckage, and other witnesses reported that they did not see or smell fuel at the wreckage.

PERSONNEL INFORMATION

Pilot Information

The pilot held a commercial pilot certificate with airplane single-engine land, single-engine sea, multiengine land, and instrument airplane ratings. She also held a flight instructor certificate with airplane single-engine land, multiengine land, and instrument airplane ratings. Her most recent second-class medical certificate was issued on July 31, 2006, and contained no limitations.

In the Pilot/Operator Aircraft Accident Report (NTSB Form 6120.1) submitted by the operator, the pilot's total aeronautical experience was listed as 3,095 hours, with 1,201 hours in the accident airplane make and model. The report noted that in the preceding 90 and 30 days prior to the accident, the pilot accrued a total of 133 hours and 28.6 hours, respectively.

The pilot's most recent FAA Part 135.293 check ride was on June 19, 2006.

Flight Operations

During an interview with the pilot on July 18, 2007, she recalled that on the day of the accident, she initially flew a different airplane, and then switched to the accident airplane. She remembered landing at Nanwalek and picking up two passengers, and then continuing to Seldovia to pick another passenger and cargo. She recalled departing for Homer, but had no further memory of the day until she was in a hospital in Anchorage, Alaska.

The pilot said that she and another pilot were the only pilots flying on the day of the accident. Her work schedule was usually 4 days on, and 3 days off. Her daily routine was to arrive at the company office and select an airplane from a list, as the availability of particular company airplanes varied due to maintenance scheduling. She would then preflight her airplane, and fuel it from the company fuel tank. Her normal fueling routine was to fill the left fuel tank, and put about 1 hour of fuel in the right fuel tank. She checked the level of fuel in each tank using a wooden dipstick. The pilot said that the dipstick had notches that corresponded to fuel levels,

and its calibration could be checked by comparing it to calibration marks on a beam in the company hangar. She indicated that the dipsticks had been in use since before she began working for the company.

The pilot said that her usual route of flight from Seldovia, to Homer, was to depart the Seldovia Airport, and fly over the Seldovia Slough toward the coast while climbing to about 2,000 feet agl. She would then fly along the coast, over MacDonald Spit, then toward Homer Spit and the Homer Airport.

The distance from Homer to Seldovia is about 15 nm. From Seldovia to Nanwalek, and back to Seldovia, is about 17.4 nm. From Seldovia to Yukon Island is about 8 nm, for a total of about 40.4 nm.

The pilot said she never had a complete engine failure before.

Company Information

In the FAA's Operations Specifications issued to the company, the owner of the company is listed as president and chief pilot. Operational control of aircraft operations is the responsibility of the owner. The company routinely operated almost continual daily flights between Homer, Seldovia, Port Graham, and Nanwalek. The flights were not on a published schedule, but there were often several a day to each location.

The operator/owner reported that the usual practice for fueling the airplanes making continuous flights between Homer, Seldovia, Port Graham, and Nanwalek, was to fill the left fuel tank before the first flight of the day, which held 40 gallons of usable fuel. The right fuel tank usually only contained about 1 hour of fuel. Pilots would then make 2 to 4 round trips from Homer, and then refill the left fuel tank. The right tank remained with 1 hour of fuel.

According to the owner, fueling of the airplanes was done by each pilot, as needed. The company has a bulk fuel tank on the ramp. The pilots do not record the amount of fuel they add to their assigned airplanes throughout the day. The company only records the total amount of fuel used from the bulk tank at the end of the day. The operator provides wooden dowels, with capacity markings, for use by the pilots to accurately dip, and visually see, the amount of fuel in each tank. Each pilot has a daily time sheet to record their flight pay, but it is not a load manifest. Some pilots will note when they put fuel in their airplanes on their daily time sheet, but not the amount.

The operator reported that on June 18, the day before the accident, the accident airplane was flown by another company pilot. A review of that pilot's statement and his time sheet for the day before the accident, indicated that he filled the left fuel tank (40 gallons usable), measured the right fuel tank as having about 11 gallons (of which 9 gallons would be usable fuel), and departed about 1600. His total usable fuel at that time was about 49 gallons. He then made 3 round trip flights between Homer and Seldovia, which he indicated took between .4 to .5 hours

each (between 24 to 30 minutes each.) The 3 round trip flights required 6 takeoffs and 6 landings. The pilot's total flight time for the 3 round trip flights, would have been between 72 to 90 minutes. The airplane was parked at the end of the day, and not used until the following day, which was the day of the accident. The amount of fuel remaining in the accident airplane is unknown.

The accident pilot's flight-time sheet for the day of the accident was recovered from the airplane wreckage. Her time sheet indicated that she began her day at 0832, flying in another company airplane, N756ZV. She made three flights (3 takeoffs and 3 landings) in N756ZV that concluded at 1008 in Homer.

The company had a ramp operations coordinator who was normally off on the day of the accident, however, he was called into work to fuel a jet. He reported that he saw the pilot at the accident airplane, on a ladder with a fuel hose, about 0945. He did not know the quantity, if any, the pilot may have used, but pilot's typically put about 30 gallons on board for round-robin flights. He said that company procedures include adding fuel and checking engine oil levels prior to each round-robin flight.

According to the pilot's time sheet, she switched to the accident airplane and departed at 1014, 6 minutes after parking the first airplane. Her time sheet indicated that she landed in Seldovia at 1028. She then departed at 1030, and landed at Nanwalek at 1038. She departed at 1040, and landed again in Seldovia at 1048. She then departed at 1052 for the return to Homer, but had a loss of power and crashed about 1103. The accident occurred during the pilot's seventh flight of the day, which was the fourth flight of the day in the accident airplane. The pilot's total time in the accident airplane was about 41 minutes.

AIRCRAFT INFORMATION

The airplane was maintained under the Cessna progressive inspection program. The most recent inspection was June 15, 2007, which was Operation #4 of the inspection program. At that time, the airplane had a total time in service of 12,384 hours, 9 hours before the accident.

The engine had a total time in service of 5,093 hours. The maintenance records note that a major engine overhaul was on October 13, 2004, 1,386 hours before the accident.

According to the airplane owner's manual, the fuel system has two wing-mounted long range fuel tanks, each holding 42 gallons, of which, 40 gallons per tank is usable fuel. Fuel from each tank flows into a reservoir/header tank, one for each fuel tank, to the fuel selector valve. The valve positions are "left", "right", and "off." From the selector valve, fuel flows through a strainer and a by-pass valve in the electric auxiliary fuel pump (when it is not operating) to the engine-driven fuel pump, and then to the fuel control unit and fuel manifold. Vapor and excess fuel from the engine-driven fuel pump and the fuel control unit, are returned via the selector valve to the header tank of the wing tank being used.

The electric auxiliary fuel pump switch has two switch halves. The right half of the switch (Yellow), labeled "LO" is used for starting. The left half of the switch (Red), labeled "HI" is used for engine operation if the engine-driven pump should fail. The HI position operates the electric fuel pump at one of two flow rates, depending upon the throttle position. During cruise, the pump is operating at maximum capacity. When the throttle is moved toward the closed position, the pump rate is automatically reduced to prevent an overly rich fuel mixture. If the auxiliary pump is turned to "HI" with the engine stopped, the intake manifolds will be flooded.

The owner's manual description of the procedure for engine restart, after running a fuel tank dry, states, in part: "To ensure a prompt engine restart in flight after running a fuel tank dry, switch to the tank containing fuel, and place the auxiliary fuel pump switch in the "HI" position momentarily (3 to 5 seconds) with the throttle at least 1/2 open. Excessive use of the "HI" position of the auxiliary pump can cause flooding of the engine as indicated by a short (1 to 2 second) period of power, followed by a loss of power. This can be detected by a fuel flow indication, accompanied by a lack of power. If flooding does occur, turn off the auxiliary fuel pump switch, and normal propeller windmilling should start the engine in 1 to 2 seconds."

The accident pilot's flights in the accident airplane from Homer, to Seldovia, Nanwalek, Seldovia, and then the accident portion that ended at Yukon Island, covered about 40.4 nautical miles. It involved 4 takeoffs and climbs to altitude, and 3 maneuvering descents to each respective airport.

The airplane owner's manual, cruise performance chart, contains endurance/range information at various engine rpm and manifold pressure settings. The various power settings also reflect respective engine percentage of brake horsepower, fuel burn, and airspeed information. The airplane performance values at 2,500 feet msl vary from 2,550 rpm, 25 inches of manifold pressure, at 78 percent power with a fuel burn of 16.4 gallons per hour, and a true airspeed of 160 mph, to 2,200 rpm, 18 inches of manifold pressure, at 38 percent power with a fuel burn of 8.5 gallons per hour, and a true airspeed of 107 mph.

The airplane owner's manual, operational data section, notes that the range charts make no allowance for wind, navigational errors, warm-up, takeoff, or climb.

The airplane owner's manual, maximum rate-of-climb data chart, contains climb performance data at varying airspeeds and varying gross weights, and fuel burn data during climb. At sea level and 59 degrees F, the chart indicated that 2 gallons of fuel is used during takeoff, which includes a warm-up and takeoff allowance. A copy of the endurance/range, and rate-of-climb data charts are included in the public docket of this report.

The operator reported that for flight planning purposes, the company used a fuel consumption rate of 16 gallons per hour; however, records of fueling amounts for each airplane throughout a typical day are not recorded. Only the total daily fuel used by the company fleet is noted.

On April 11, 2008, the operator reported that they conducted several flights to measure fuel

burn. The fuel consumption tests were unmonitored by the NTSB or FAA. The operator indicated that a round trip flight from Homer to Seldovia (2 takeoffs and 2 landings) took an average of 26 minutes, and consumed 6.2 gallons. The operator also reported that 3 round-trip flights were conducted over the same route as the accident airplane, and the flight time averaged 43.6 minutes. The flight route would have required 4 takeoffs and 4 landings. The operator indicated that 2 of the flights used 10.8 gallons, and the third used 11.1 gallons, for an average of 10.95 gallons. That average equates to a fuel consumption rate of 15.07 gallons per hour.

The pilot's time sheet reflected a 6 minute gap between parking the previous airplane at 1008, and departing in the accident airplane at 1014, but a ramp coordinator reported that he saw the pilot with a fuel hose at 0945, approximately 23 minutes prior to the pilot's recorded arrival at 1008.

The operator provided fuel calculations for the accident airplane, with an assumption that no fuel was added by the pilot before she departed in the accident airplane. The operator's calculations indicated that the accident airplane would have had 19.45 gallons of usable fuel in the airplane upon landing at Homer.

Along with the operator's fuel calculations submitted on April 11, the pilot submitted a statement that reflected her inability to recall the amount of fuel she may have added to the accident airplane before departing, but she said that she typically would add about 30 gallons.

The NTSB IIC calculated time and fuel use for the accident airplane using the information contained in the time sheet from the pilot of the previous day, and information from the accident pilot's time sheet on the day of the accident. The pilot who flew the accident airplane on the day before the accident indicated that his flight time between Homer and Seldovia took between .4 and .5 hours each (between 24 to 30 minutes each.) He made three round trips before parking the airplane, which required 6 takeoffs and 6 landings. Three round trips between Homer and Seldovia at .4 to .5 hours equates to between 72 and 90 minutes. On the day of the accident, from takeoff at 1014 until the crash about 1103, the pilot's time in the accident airplane totaled 41 minutes. The flight time from the day before, plus that of the day of the accident, totaled between 113 and 131 minutes.

Using a fuel burn of 15.07 gallons per hour, and with the assumption that no fuel was added by the pilot before she departed in the accident airplane, the 113 to 131 minutes of flight in the accident airplane is a consumption of about 28.38 to 32.90 gallons.

If the Cessna takeoff performance charts are considered, 4 takeoffs could add an additional 8 gallons to the fuel burn, for a total fuel burn of about 36.38 to 40.90 gallons.

Fuel remaining calculations by the operator, and the NTSB IIC, are based on unverified amounts of fuel that were remaining in the accident airplane when it was received from the first pilot. As the actual amount of fuel left in the airplane by the previous pilot could not be

determined, the actual amount of fuel remaining in the airplane at the time of the accident is unknown.

Also on April 11, the operator submitted a "document of interest", in which the topic of vapor lock in Cessna T210 airplanes was discussed, noting that the accident airplane has the same engine and fuel system as a Cessna 210. The submitted documents were excerpts from the Cessna Pilots Association. The operator was asked by the NTSB IIC how many vapor lock events the company fleet of Cessna 206 airplanes had experienced, and on April 16, the operator indicated none.

METEOROLOGICAL INFORMATION

At 1053, an aviation routine weather report (METAR) at Homer was reporting, in part: Wind, 210 degrees (true) at 4 knots; visibility, 10 statute miles; clouds and sky condition, clear; temperature, 52 degrees F; dew point, 46 degrees F; altimeter, 29.97 inHg.

COMMUNICATIONS

A transcript of the air to ground communications between the airplane and the FAA FSS facility at Homer, is included in the public docket of this accident.

WRECKAGE AND IMPACT INFORMATION

Alaska State Trooper personnel, along with a Federal Aviation Administration (FAA) inspector from the Anchorage Flight Standards District Office (FSDO), and a mechanic from the operator, examined the airplane at the accident scene on the day of the accident, about 1700. They reported that the airplane was on the beach in a nose down, and left wing low attitude. The beach had numerous logs, rocks, and fallen trees. The right wing had an aft, leading edge crush about mid-span, and the outboard end of the wing was bent upward and forward. A disruption in the sand was adjacent to the airplane's point of rest, and to the right of the airplane's right wing. The nose gear and the right main landing gear wheel were torn off the airplane.

The fuel selector was on the left fuel tank. The right wing fuel tank system appeared to have been breached. The left fuel tank system appeared to be intact. The FAA inspector indicated he visually examined the left wing tank, and estimated that it contained about 1/2 gallon of fuel. He removed the cover from the engine fuel distribution manifold, and it had "no more than a drop of fuel."

Following recovery of the airplane, the National Transportation Safety Board investigator-in-charge (IIC), and the parties noted in this report, examined the airplane wreckage at Wasilla, Alaska, on June 28, 2007. The examination revealed that the right wing had aft leading edge crushing at the wing lift strut attach point. The outboard end of the right wing had extensive wrinkling and crushing. The outboard end of the left wing had aft leading edge crushing at the

wingtip. The flaps and ailerons remained attached to their respective wing attach points. The right wing lift strut was bent about mid-span.

The right front portion of the fuselage had upward and inward crushing along the bottom edge of the right front firewall area. The nose gear strut was attached, but the nose wheel was torn off. The right main landing gear wheel and tire were torn off. The fuselage, aft of the cabin, was wrinkled and displaced downward. The empennage was intact, and the elevator and rudder appeared undamaged. Flight control system cable continuity was established to the point of impact related damage.

The propeller assembly remained connected to the engine crankshaft, and all of the blades were loose in the hub. Two blades had aft bending, leading edge gouging, and chordwise scratching. The third blade had aft bending, and polishing of the face of the blade.

The crankshaft could be rotated by the propeller. Gear and valve train continuity was established when the crankshaft was rotated. Several intake tube segments and elbows were fractured, and the exhaust tubes had several areas of crushing.

The massive center electrode sparks plugs had light gray deposits. The mechanical fuel pump rotated freely by hand, and the drive coupling was intact.

A fuel line fitting was broken at the fuel control housing. The fuel line with the broken fitting was installed between the fuel pump and the fuel control, and it contained fuel. The broken fitting had distortion and bending consistent with overload. The fuel inlet screen was free of contaminants.

The engine was removed from the airframe and transported to an engine overhaul facility in Anchorage. It was externally examined on June 29, 2007. The engine was placed on an engine test stand. The broken fitting at the fuel control was replaced, along with segments of intake tubes and elbows and the exhaust tubes. A wooden "club" test propeller was installed. The engine was started, and produced its full range of rated rpm.

MEDICAL AND PATHOLOGICAL INFORMATION

The operator reported that following the accident, the pregnant passenger delivered a still-born fetus at the Homer hospital. The other passengers and the pilot sustained extensive injuries that required extended recovery and rehabilitation.

SEARCH AND RESCUE

Transportation for the injured occupants from the accident site to Homer, was by a commercial helicopter operator.

ADDITIONAL INFORMATION

The Safety Board released the wreckage, located in Wasilla, Alaska, to the owner's representatives on July 12, 2007. No parts or components were retained by the Safety Board.

Pilot Information

Certificate:	Commercial; Flight instructor	**Age:**	30,Female
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 multi-engine; Airplane single-engine	**Toxicology Performed:**	No
Medical Certification:	Class 2 Without waivers/limitations	**Last FAA Medical Exam:**	July 1, 2006
Occupational Pilot:	Yes	**Last Flight Review or Equivalent:**	June 1, 2006
Flight Time:	3095 hours (Total, all aircraft), 1201 hours (Total, this make and model), 2895 hours (Pilot In Command, all aircraft), 133 hours (Last 90 days, all aircraft), 29 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	**Registration:**	N72067
Model/Series:	206	**Aircraft Category:**	Airplane
Year of Manufacture:		**Amateur Built:**	
Airworthiness Certificate:	Normal	**Serial Number:**	20601273
Landing Gear Type:	Tricycle	**Seats:**	6
Date/Type of Last Inspection:	June 1, 2007 Continuous airworthiness	**Certified Max Gross Wt.:**	3600 lbs
Time Since Last Inspection:	9 Hrs	**Engines:**	1 Reciprocating
Airframe Total Time:	12384 Hrs as of last inspection	**Engine Manufacturer:**	Continental
ELT:	Installed, activated, did not aid in locating accident	**Engine Model/Series:**	IO-520F
Registered Owner:	Smokey Bay Air Inc.	**Rated Power:**	300 Horsepower
Operator:		**Operating Certificate(s) Held:**	On-demand air taxi (135)
Operator Does Business As:		**Operator Designator Code:**	X53A

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	**Condition of Light:**	Day
Observation Facility, Elevation:	PAHO,84 ft msl	**Distance from Accident Site:**	8 Nautical Miles
Observation Time:	10:53 Local	**Direction from Accident Site:**	360°
Lowest Cloud Condition:	Clear	**Visibility**	10 miles
Lowest Ceiling:	None	**Visibility (RVR):**	
Wind Speed/Gusts:	4 knots /	**Turbulence Type Forecast/Actual:**	/
Wind Direction:	210°	**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:	29.96 inches Hg	**Temperature/Dew Point:**	11°C / 8°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Seldovia, AK (PASO)	**Type of Flight Plan Filed:**	Company VFR
Destination:	Homer, AK (PAHO)	**Type of Clearance:**	VFR
Departure Time:	10:52 Local	**Type of Airspace:**	

Wreckage and Impact Information

Crew Injuries:	1 Serious	**Aircraft Damage:**	Substantial
Passenger Injuries:	3 Serious	**Aircraft Fire:**	None
Ground Injuries:	N/A	**Aircraft Explosion:**	None
Total Injuries:	4 Serious	**Latitude, Longitude:**	59.513889,-151.481384

Administrative Information

Investigator In Charge (IIC):	Erickson, Scott
Additional Participating Persons:	Tom Fast; FAA-AL-FSDO 03; Anchorage, AK Josh Cawthra; Teledyne Continental Motors; Mobile, AL Bill Sheldon; Smokey Bay Air; Homer, AK Peter Basile; Cessna Aircraft Company; Wichita, KS
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Last Revision Date:	
Investigation Class:	Class
Note:	
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