



National Transportation Safety Board Aviation Accident Data Summary

Location:	Ketchikan, AK	Accident Number:	ANC08LA095
Date & Time:	08/01/2008, 1906 AKD	Registration:	N59214
Aircraft:	CESSNA T210	Injuries:	1 Minor, 1 None
Flight Conducted Under:	Part 91: General Aviation - Personal		

Analysis

The private pilot departed on an instrument flight rules (IFR), personal, cross-country flight after requesting that his airplane's fuel tanks be filled. The destination airport was about 521 nautical miles away. IFR conditions prevailed along the en route portion of the flight, but visual conditions prevailed at the destination airport. The airplane's fuel capacity was 90 gallons, and the engine consumed about 16.5 gallons per hour. The airplane was in cruise flight above the clouds and the pilot requested a visual approach from the south when he was about 19 miles southeast of the destination airport. The airport does not have terminal radar coverage, and is served by a flight service station. The request for a visual approach was not approved due to mountain obscuration south of the airport. The pilot was cleared for the ILS distance measuring equipment (DME) approach. The pilot was initially uncertain of his approach options, which included a radial transition to the localizer, outbound on the localizer with a procedure turn, or a no-procedure turn at 40 DME. He eventually understood and accepted the radial transition clearance, which required him to intercept the localizer course inbound on a 35-mile DME arc. As the airplane approached the inbound localizer heading, the pilot did not make the inbound turn. Air Route Traffic Control Center and Flight Service Station (FSS) personnel made various attempts to contact the pilot to request that he execute a missed approach procedure, but there was no immediate response. The pilot eventually reported that he had descended into visual conditions, but indicated that he was not sure where he was in relation to the airport. He determined his position and began to fly toward the airport at 3,000 feet. Communication with the airplane was garbled and broken for a short while since the airplane was now about 27 miles west of the airport. FSS personnel requested assistance from other airplanes in the area to locate the accident airplane and relay radio communications. About 7 minutes before the accident, the pilot radioed that he was low on fuel and probably would not make it to the airport. He ditched the airplane about 5.4 miles west-northwest of the airport after his fuel supply was exhausted. The pilot and the sole passenger escaped the sinking airplane and were rescued by a float-equipped airplane that had responded to the FSS request for assistance. The pilot reported that he missed the inbound turn onto the localizer because his autopilot failed to capture the localizer. He also said that during the flight headwinds were greater than expected, the cloud ceiling at the destination airport was lower than expected, and the fuel vendor at the departure airport may have not completely filled the fuel tanks to their maximum capacity. The pilot said that he did not visually inspect the fuel tanks prior to departure and that there was no mechanical malfunction of the airplane.

Flight Events

Approach-IFR initial approach - Miscellaneous/other
Approach - Fuel exhaustion
Approach - Ditching

Probable Cause

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's failure to ensure that there was sufficient fuel on board the airplane for the planned flight, and his inadequate flight planning and navigation, which resulted in fuel exhaustion and ditching short of the planned destination. Contributing to the accident was the pilot's geographic disorientation during his approach to the airport.

Findings

Aircraft-Fluids/misc hardware-Fluids-Fuel-Fluid level - C
 Personnel issues-Psychological-Perception/orientation/illu-Geographic disorient (lost)-Pilot - F
 Personnel issues-Task performance-Planning/preparation-Flight planning/navigation-Pilot - C
 Environmental issues-Physical environment-Terrain-Water-Contributed to outcome

Pilot Information

Certificate:	Private	Age:	66
Airplane Rating(s):	Single-engine Land	Instrument Rating(s):	Airplane
Other Aircraft Rating(s):	None	Instructor Rating(s):	None
Flight Time:	2652 hours (Total, all aircraft), 2485 hours (Pilot In Command, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Manufacturer:	CESSNA	Registration:	N59214
Model/Series:	T210	Engines:	1 Reciprocating
Operator:	Robert C. Davis	Engine Manufacturer:	Continental
Air Carrier Operating Certificate:	None	Engine Model/Series:	TSIO-520H
Flight Conducted Under:	Part 91: General Aviation - Personal		

Meteorological Information and Flight Plan

Observation Facility, Elevation:	PAKT, 88 ft msl	Weather Information Source:	Weather Observation Facility
Conditions at Accident Site:	Visual Conditions	Lowest Ceiling:	Overcast / 4500 ft agl
Condition of Light:	Day	Wind Speed/Gusts, Direction:	5 knots, 350°
Temperature:	14° C / 11° C	Visibility	10 Miles
Precipitation and Obscuration:			
Departure Point:	Bellingham, WA (KBLI)	Destination:	Ketchikan, AK (PAKT)

Airport Information

Airport:	Ketchikan (PAKT)	Runway Surface Type:	
Runway Used:	N/A	Runway Surface Condition:	
Runway Length/Width:			

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	1 Minor	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None

Administrative Information

Investigator In Charge (IIC):	Scott R Erickson	Adopted Date:	04/15/2009
Investigation Docket:	NTSB accident and incident dockets serve as permanent archival information for the NTSB's investigations. Dockets released prior to June 1, 2009 are publicly available from the NTSB's Record Management Division at pubinq@ntsb.gov , or at 800-877-6799. Dockets released after this date are available at http://dms.nts.gov/pubdms/ .		

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