



National Transportation Safety Board Aviation Accident Final Report

Location:	Pawhuska, OK	Accident Number:	DFW05LA027
Date & Time:	12/01/2004, 1350 CST	Registration:	N6300P
Aircraft:	Cessna P210N	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 None

Flight Conducted Under: Part 91: General Aviation - Positioning

Analysis

The 4,000-hour pilot reported that during cruise flight, the engine lost power. While descending, the pilot further stated that he disengaged the autopilot, advanced the mixture to full, cycled the fuel pump, and switched from the left to the right fuel tank, and "the engine momentarily gained power for a few minutes." Subsequently, the engine lost power again and the pilot elected to land on a gravel road. During the landing roll, the left main wheel separated, and the left main landing gear collapsed as the airplane came to rest in an upright position. Prior to the recovery of the airplane, the Federal Aviation Administration inspector was able to start the engine using the right fuel tank. The engine ran for approximately 10 minutes with no abnormalities noted before the inspector shut the engine down using the mixture control. During the recovery process, the inspector noted that approximately one gallon of fuel was drained from the left wing fuel tank and approximately 35 gallons of fuel were drained from the right wing fuel tank. As stated in the FAA approved pilot's operating handbook, the unusable fuel quantity for both fuel tanks is one gallon.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's mismanagement of the fuel by his failure to adequately set the fuel selector position which resulted in fuel exhaustion and the loss of engine power.

Findings

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

Findings

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

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

Occurrence #3: ON GROUND/WATER COLLISION WITH OBJECT
Phase of Operation: LANDING - ROLL

Findings

4. OBJECT - OTHER

Factual Information

On December 1, 2004, approximately 1350 central standard time, a Cessna P210N single-engine airplane, N6300P, was substantially damaged during a forced landing following a loss of engine power near Pawhuska, Oklahoma. The airline transport rated pilot, sole occupant of the airplane, was not injured. The airplane was registered to Larson Implement, Inc., of Leeds, North Dakota, and operated by Silver Wings Aviation, Inc., of Santa Monica, California. Visual meteorological conditions prevailed, and a flight plan was not filed for the 14 Code of Federal Regulations Part 91 positioning flight. The cross-country flight originated from the Salina Municipal Airport (SLN), near Salina, Kansas, at 1300, destined for Tulsa, Oklahoma.

The 4,000-hour pilot reported in the NTSB Pilot/Operator Aircraft Accident Report (NTSB Form 6120.1/2) that after departure from SLN during the climb to his intended cruising altitude, the engine began to "run rough." As the engine continued to run rough, the pilot leaned the engine mixture while checking the cylinder head temperature, and "the engine seemed to smooth out."

During cruise flight at an altitude of 7,500 feet mean sea level (msl), the pilot stated that "the engine failed," and he immediately disengaged the autopilot, advanced the mixture to full, cycled the fuel pump, and switched the fuel selector to the "fullest tank."

Subsequently, the engine lost power again, and the pilot attempted to glide the airplane towards the Pawhuska Municipal Airport (H76). After realizing he was unable to make it to the airport, the pilot elected to land on a gravel road. During the landing roll, the left main wheel separated, and the left main landing gear collapsed as the airplane came to rest in an upright position.

During a telephone interview with an NTSB representative, the pilot reported that after the loss of engine power, he switched from the left fuel tank to the right fuel tank and "the engine momentarily gained power for a few minutes."

Examination of the airplane by a Federal Aviation Administration (FAA) inspector, who responded to the accident site, revealed that the left horizontal stabilizer was bent upward. Prior to the recovery of the airplane, the FAA inspector was able to start the engine using the right fuel tank. The engine ran for approximately 10 minutes with no abnormalities noted before the inspector shut the engine down using the mixture control. During the recovery process, the inspector noted that approximately one gallon of fuel was drained from the left wing fuel tank, and approximately 44 gallons of fuel were drained from the right wing fuel tank.

As stated in the FAA approved pilot's operating handbook, the unusable fuel quantity for both fuel tanks is one gallon. A fuel receipt obtained from the Fixed Base Operator (FBO) at SLN

indicated that the airplane was refueled with 34.5 gallons of 100 Low Lead aviation fuel prior to departure.

Pilot Information

Certificate:	Airline Transport	Age:	52, Male
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	Airplane Multi-engine; Airplane Single-engine	Toxicology Performed:	No
Medical Certification:	Class 3 Valid Medical--w/ waivers/lim.	Last FAA Medical Exam:	12/04/2004
Occupational Pilot:		Last Flight Review or Equivalent:	11/15/2003
Flight Time:	4000 hours (Total, all aircraft), 300 hours (Total, this make and model), 3500 hours (Pilot In Command, all aircraft), 10 hours (Last 90 days, all aircraft), 5 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N6300P
Model/Series:	P210N	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	P2100166
Landing Gear Type:	Retractable - Tricycle	Seats:	6
Date/Type of Last Inspection:	06/16/2004, Annual	Certified Max Gross Wt.:	4000 lbs
Time Since Last Inspection:	7 Hours	Engines:	1
Airframe Total Time:	2068.9 Hours at time of accident	Engine Manufacturer:	Continental
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	TSIO-520-HCP
Registered Owner:	Lawson Implement Inc.	Rated Power:	325 hp
Operator:	Silver Wings Aviation	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	PNC, 1007 ft msl	Distance from Accident Site:	10 Nautical Miles
Observation Time:	1452 CST	Direction from Accident Site:	180°
Lowest Cloud Condition:	Clear	Visibility	10 Miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	6 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	150°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.11 inches Hg	Temperature/Dew Point:	8° C / -6° C
Precipitation and Obscuration:			
Departure Point:	Salina, KS (SLN)	Type of Flight Plan Filed:	None
Destination:	Tulsa, OK	Type of Clearance:	None
Departure Time:	1300 CST	Type of Airspace:	Class G

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	36.671667, -96.405556

Administrative Information

Investigator In Charge (IIC):	Frank McGill	Report Date:	02/24/2005
Additional Participating Persons:	Lawrence G Smith; Federal Aviation Administration; Oklahoma City, OK		
Publish Date:			
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 pubinquiry@ntsb.gov , or at 800-877-6799. Dockets released after this date are available at http://dms.nts.gov/pubdms/ .		

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The Independent Safety Board Act, as codified at 49 U.S.C. Section 1154(b), precludes the admission into evidence or use of any part of an NTSB report related to an incident or accident in a civil action for damages resulting from a matter mentioned in the report. A factual report that may be admissible under 49 U.S.C. § 1154(b) is available [here](#).