



National Transportation Safety Board

Aviation Accident Data Summary

Location:	POLACCA, AZ	Accident Number:	LAX99LA240
Date & Time:	07/01/1999, 1850 MST	Registration:	N5943M
Aircraft:	Cessna 421B	Injuries:	1 Minor
Flight Conducted Under:	Part 91: General Aviation - Positioning		

Analysis

During the initial climb after takeoff, both engines lost power and the pilot force landed in the desert. The airplane was on a positioning flight following a right engine change because of a previous engine failure, which had occurred about 1 month prior to the accident. The airplane had remained parked on the ramp at the airport without security. The operator said that they usually provided security for airplanes parked in remote locations due to past incidents of vandalism and fuel theft, but did not do so on this occasion. The pilot of the accident airplane did not visually check the fuel quantity; instead, he relied on the fuel gauges. He did not open the cowling on either engine but relied on the mechanic's word that the aircraft was ready for flight. After takeoff, when he changed the left fuel selector from the main to the auxiliary tank, the engine quit. He turned toward the runway, switched the fuel selector back to the main tank, and turned the left fuel boost pump switch to high. The left engine fuel flow was near zero and there was no effect with the boost pump. He then noticed that the right engine was losing power. He did not feather either propeller. When he determined he would not reach the runway, he stalled the airplane into bushes to cushion the landing. Postaccident examination revealed that there was no fuel found in either the left or right main tip tanks. The left tip main tank was broken open during the forced landing with no evidence of fuel spray on the surrounding vegetation. Aircraft recovery personnel found 18 gallons of fuel in the left auxiliary tank and 23 gallons of fuel in the right auxiliary fuel tank. The right engine air induction tube was disconnected at the inlet flange to the fuel/air metering control unit. Fuel consumption calculations on the preceding flights and ground runs failed to account for approximately 74 gallons of fuel. Both engines operated to manufacturer's specifications during postaccident examinations in test cells. Fuel analysis of samples from the various tanks contained high particulate contamination consisting of rust, dirt, iron, and flakes of aluminum.

Probable Cause

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's inadequate preflight inspection, which failed to determine the fuel supply in each fuel tank, and his mismanagement of the fuel supply, which resulted in fuel starvation.

Findings

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

Findings

1. (C) 1 ENGINE
2. (C) FLUID,FUEL - STARVATION
3. (C) AIRCRAFT PREFLIGHT - INADEQUATE - PILOT IN COMMAND

4. (C) FUEL SUPPLY - NOT VERIFIED - PILOT IN COMMAND

Occurrence #2: LOSS OF ENGINE POWER(TOTAL) - NONMECHANICAL
Phase of Operation: MANEUVERING - TURN TO LANDING AREA (EMERGENCY)

Findings

- 5. FLUID,FUEL - STARVATION
- 6. 2 ENGINES
- 7. AIRCRAFT PREFLIGHT - INADEQUATE - PILOT IN COMMAND
- 8. (F) FUEL SUPPLY - NOT VERIFIED - PILOT IN COMMAND
- 9. INDUCTION AIR DUCTING - DISCONNECTED
- 10. MAINTENANCE,INSTALLATION - IMPROPER - COMPANY MAINTENANCE PERSONNEL

Occurrence #3: FORCED LANDING
Phase of Operation: EMERGENCY DESCENT/LANDING

Findings

- 11. TERRAIN CONDITION - NONE SUITABLE

Occurrence #4: IN FLIGHT COLLISION WITH OBJECT
Phase of Operation: DESCENT - EMERGENCY

Findings

- 12. OBJECT - TREE(S)

Pilot Information

Certificate:	Commercial	Age:	53
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Instrument Rating(s):	Airplane
Other Aircraft Rating(s):	None	Instructor Rating(s):	Airplane Multi-engine; Airplane Single-engine; Instrument Airplane
Flight Time:	8800 hours (Total, all aircraft), 1200 hours (Total, this make and model), 8500 hours (Pilot In Command, all aircraft), 130 hours (Last 90 days, all aircraft), 30 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N5943M
Model/Series:	421B 421B	Engines:	2 Reciprocating
Operator:	SCENIC AVIATION INC.	Engine Manufacturer:	Continental
Operating Certificate(s) Held:	On-demand Air Taxi (135)	Engine Model/Series:	GTSIO 520
Flight Conducted Under:	Part 91: General Aviation - Positioning		

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Dusk
Observation Facility, Elevation:	KFL, 7011 ft msl	Weather Information Source:	Weather Observation Facility
Lowest Ceiling:	None / 0 ft agl	Wind Speed/Gusts, Direction:	16 knots / , 240°
Temperature:	34° C	Visibility	10 Miles
Precipitation and Obscuration:			
Departure Point:		Destination:	BLANDING, UT (BDG)

Airport Information

Airport:	POLACCA AIRSTRIP (4PH)	Runway Surface Type:	
Runway Used:	0	Runway Surface Condition:	
Runway Length/Width:			

Wreckage and Impact Information

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

Administrative Information

Investigator In Charge (IIC):	DEBORAH L CHILDRESS	Adopted Date:	04/06/2001
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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