

National Transportation Safety Board Aviation Accident Final Report

Location: MONTGOMERY, AL Accident Number: ATL99LA098

Date & Time: 05/29/1999, 1724 CDT Registration: N601JS

Aircraft: Piper PA-60-600 Aircraft Damage: Substantial

Defining Event: Injuries: 6 None

Flight Conducted Under: Part 91: General Aviation - Personal

Analysis

During the takeoff roll and initial climb both engines were producing normal power. As the airplane climbed through 150 feet, the left engine lost power. The pilot reported that he feathered the left propeller. He further stated that following the securing of the left engine, the right engine began to 'power down.' The pilot reported that he was unable to maintain a climb attitude and was forced to land on the airport in a grassy area. The subsequent examination of the cockpit disclosed that the left engine throttle was in the full forward position, and the right throttle lever was in the mid-range position. Both propeller levers were found full forward. The left engine mixture lever was in the full forward position, and the right mixture lever full aft, or lean, position. The functional check of both engines was conducted. Initially the left engine would not start, but after troubleshooting the fuel system, the left fuel boost pump was determined to have been defective. The 'loss of engine power after liftoff' checklist requires that the pilot identify the inoperative engine and to feather the propeller for the inoperative engine.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's inadvertent shutdown of the wrong engine that resulted in the total loss of engine power. A factor was the loss of engine power due to fuel starvation when the left fuel boost pump failed.

Findings

Occurrence #1: LOSS OF ENGINE POWER

Phase of Operation: TAKEOFF

Findings

1. 1 ENGINE

2. (F) FUEL SYSTEM, ELECTRIC BOOST PUMP - FAILURE, TOTAL

3. (F) FLUID - STARVATION

Occurrence #2: FORCED LANDING

Phase of Operation: DESCENT - EMERGENCY

Findings

4. (C) CHECKLIST - NOT FOLLOWED - PILOT IN COMMAND

5. (C) WRONG ENGINE SHUTDOWN - INADVERTENT - PILOT IN COMMAND

Occurrence #3: ON GROUND/WATER ENCOUNTER WITH TERRAIN/WATER

Phase of Operation: EMERGENCY LANDING

Findings

6. TERRAIN CONDITION - GRASS

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Factual Information

On May 29, 1999, at 1724 central daylight time, a Piper PA-60-600, N601JS, collided with the ground during a forced landing at the Montgomery International Airport in Montgomery, Alabama. The personal flight was operated by the pilot under the provisions of Title 14 CFR Part 91 with no flight plan filed. Visual flight weather conditions prevailed at the time of the accident. The commercial pilot reported that he and five passengers were not injured. The airplane received substantial structural damage. The flight departed Montgomery, Alabama, at 1723.

The pilot reported that he and his passengers were enroute back to Columbus, Georgia. The pilot also stated that he completed a preflight inspection of the airplane, and he completed a before takeoff run-up for both engines. The pilot recalled that during the takeoff roll, and initial climb both engines were producing normal power. As the airplane climbed through 150 feet, the pilot experienced a loss of power on the left engine. Following the loss of engine power, the pilot recalled that he feathered the left propeller. He further stated that following the securing of the left engine, the right engine began to "power down." The pilot reported that he was unable to maintain a climb attitude and was forced to land on the airport in a grassy area. As the pilot maneuvered the airplane for the forced landing, the right wing struck the ground.

The subsequent examination of the cockpit disclosed that the left engine throttle was in the full forward position. The right throttle lever was in the mid-range position. Both propeller levers were found full forward. The left engine mixture lever was also found in the near full forward position, and the right mixture lever was found in the full aft, or lean, position. Both engine boost pumps were in the "on" position. The cockpit throttle, mixture, and propeller control lever positions were confirmed on the respective engine.

The functional check of both engines was conducted with each engine still installed on the airframe. Existing airframe and engine components were used during the functional check. The left engine was operated through the mid-power range. Initially the left engine would not start, but after troubleshooting the fuel system, the left fuel boost pump was determined to have been defective. The functional check of the left engine was completed, and it also operated within the mid-power range.

A review of the operator's before takeoff checklist disclosed that the fuel boost pump is in the "on" position. The "loss of engine power after liftoff" checklist requires that the pilot identify the inoperative engine and to feather the propeller for the inoperative engine.

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Pilot Information

Certificate:	Commercial	Age:	55, 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:	
Medical Certification:	Class 2 Valid Medicalw/waivers/lim.	Last FAA Medical Exam:	10/09/1997
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	5000 hours (Total, all aircraft), 1000 hours (Total, this make and model), 5000 hours (Pilot In Command, all aircraft), 15 hours (Last 90 days, all aircraft), 5 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Piper	Registration:	N601JS
Model/Series:	PA-60-600 PA-60-600	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	60-0553-179
Landing Gear Type:	Retractable - Tricycle	Seats:	6
Date/Type of Last Inspection:	12/11/1998, Annual	Certified Max Gross Wt.:	5500 lbs
Time Since Last Inspection:	25 Hours	Engines:	2 Reciprocating
Airframe Total Time:	2322 Hours	Engine Manufacturer:	Lycoming
ELT:	Installed, not activated	Engine Model/Series:	IO-540-KIJ5
Registered Owner:	ALPHA BETA AVIATION, INC.	Rated Power:	290 hp
Operator:	ALPHA BETA AVIATION, INC.	Operating Certificate(s) Held:	None

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Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	MGM, 221 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	1725 CDT	Direction from Accident Site:	0°
Lowest Cloud Condition:	Clear / 0 ft agl	Visibility	10 Miles
Lowest Ceiling:	None / 0 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	4 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:		Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	28°C / 19°C
Precipitation and Obscuration:			
Departure Point:	(47J)	Type of Flight Plan Filed:	None
Destination:	COLUMBUS, GA (CSG)	Type of Clearance:	IFR
Departure Time:	1723 CDT	Type of Airspace:	Class C

Airport Information

Airport:	MONTGOMERY REGIONAL (MGM)	Runway Surface Type:	Asphalt
Airport Elevation:	221 ft	Runway Surface Condition:	Dry
Runway Used:	10	IFR Approach:	None
Runway Length/Width:	9000 ft / 150 ft	VFR Approach/Landing:	Forced Landing

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	5 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	6 None	Latitude, Longitude:	

Administrative Information

Investigator In Charge (IIC):	PHILLIP POWELL	Report Date:	08/14/2001
Additional Participating Persons:	EMEIL CERONE; BIRMINGHAM, AL		
Publish Date:			
Investigation Docket:	NTSB accident and incident dockets serve as prinvestigations. Dockets released prior to June Record Management Division at publicq@ntsb. this date are available at http://dms.ntsb.gov	1, 2009 are public gov, or at 800-877-	y available from the NTSB's

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The National Transportation Safety Board (NTSB), established in 1967, is an independent federal agency mandated by Congress through the Independent Safety Board Act of 1974 to investigate transportation accidents, determine the probable causes of the accidents, issue safety recommendations, study transportation safety issues, and evaluate the safety effectiveness of government agencies involved in transportation. The NTSB makes public its actions and decisions through accident reports, safety studies, special investigation reports, safety recommendations, and statistical reviews.

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.

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