



National Transportation Safety Board Aviation Accident Final Report

Location:	Milton, FL	Accident Number:	MIA05LA036
Date & Time:	12/02/2004, 1312 CST	Registration:	N7510W
Aircraft:	Piper PA-28-180	Aircraft Damage:	Destroyed
Defining Event:		Injuries:	1 Serious
Flight Conducted Under:	Part 91: General Aviation - Personal		

Analysis

The pilot stated that the preflight was normal, fuel was "clear", no water was present, and he had approximately 35 gallons of fuel in the fuel tanks. He taxied to runway 36 and did an engine run-up prior to takeoff. He noted that the fuel selector was on the right fuel tank. He departed on runway 36, and shortly after liftoff the airplane engine started to run "rough", the pilot then switched the fuel tank selector to the left tank, he could not remember if the fuel tank selector was on a detent or not. He made a 180-degree turn to return back to the field and crashed 116 feet west of the north end of runway 18. The pilot added, during that time with the engine problem, he placed his right hand on the yoke and with the left hand he reached for the fuel selector slapping it to the left tank position. In the process he was leaning into and pulling on the yoke. With FAA oversight, Lycoming and Piper conducted examination of the airplane and engine. The airplane's engine examination revealed no indication of pre-impact anomalies or failure. The fuel lines were examined and no indication of fuel contamination was present. Fuel was found in all fuel lines forward of the gascolator on the firewall. The fuel tank selector was found in the off position. The FAA inspector stated that the witnesses who assisted with the accident recovery did not change the fuel selector position.

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 as a result of the improper fuel selector position.

Findings

Occurrence #1: LOSS OF ENGINE POWER
Phase of Operation: TAKEOFF - INITIAL CLIMB

Findings

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

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

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

Findings

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

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

Findings

5. TERRAIN CONDITION - GROUND

Factual Information

On December 02, 2004, about 1312 central standard time, a Piper PA-28-180, N7510W, registered to and operated by a private individual as a Title 14 CFR Part 91 personal flight, had a loss of engine power during takeoff and impacted the ground at Peter Prince Field, Milton, Florida. Visual meteorological conditions prevailed, and no flight plan was filed. The commercial-rated pilot received serious injuries, and the airplane incurred substantial damage. The flight was originating at the time of the accident.

The pilot stated that the preflight was normal, fuel was "clear", no water was present, and had approximately 35 gallons of fuel in the fuel tanks. He taxied to runway 36 and did an engine run-up prior to takeoff. He noted that the fuel selector was on the right fuel tank. He departed on runway 36, and shortly after liftoff the airplane engine started to run "rough", the pilot then switched the fuel tank selector to the left tank, he could not remember if the fuel tank selector was on a detent or not. He made a 180-degree turn to return back to the field and crashed west of the north end of runway 18. The pilot added, during that time with the engine problem, he placed his right hand on the yoke and with the left hand he reached for the fuel selector slapping it to the left tank position. In the process he was leaning into and pulling on the yoke.

A pilot witness stated, he observed the airplane when it departed runway 36. When the airplane was about 200 feet above the ground, it sounded like the engine was throttled back and shortly after the engine was absence of sound, but the propeller was still windmilling. The airplane made a 120-degree turn to the left with a 30-degree nose down and 30-degree left wing bank as it descended through 100 feet. The airplane impacted the ground left wing first, then the nose, and turned left about 90 degrees as it skidded a short distance. He ran toward the accident airplane. As he approached the airplane he saw the pilot was injured and heard the electrical fuel pump running. He managed to turn off the ignition as he was talking to the 911 operator. He was concern due to the sound of the electrical fuel pump operating was still heard. Shortly after rescue personnel arrived.

An examination of the crash site, airplane, airplane's systems and airplane's engine was conducted by the responding FAA inspector with representatives of Textron Lycoming and New Piper Aircraft, Inc. The accident airplane impacted the grass overrun area; 100 feet short and 80 feet to the left of the runway centerline on a heading of 220 degree. The accident airplane slid about 90 feet before coming to a stop, at latitude 30 degrees, 38 .586 minutes north and longitude 86 degrees, 59.666 minutes west, upright on a heading of 090 degrees.

The fuselage sustained impact damage and the left front of the fuselage was buckled aft of the firewall. The left wing was partially separated from the fuselage at the wing root. The right wing remained attached to the fuselage. The stabilator had damage on the left side. The landing gears were separated from their respective attaching points. Continuity for the flight controls was established. A copious amount of fuel remained in both tanks. The fuel tank selector was found in the off position. An operational test of the fuel selector was performed. No abnormalities were noted with the fuel selector.

Examination of the airplane's engine showed the fuel lines had no indication of contamination present. Fuel was found in all fuel lines forward of the gascolator on the firewall. The carburetor's fuel bowl had clean fuel present, the accelerator pump functioned, the internal passages and nozzle were clear, the screen was clean, and the needle valve in normal unremarkable condition. Both magnetos produced sparks. The spark plugs had no damage and

were observed to have service wear with normal gray color combustion deposit. The oil sump drain was broken and the oil drained onto the ground, quantity was not determined. The remaining engine's oil system was unremarkable. The crankshaft was rotated by hand and continuity of crankshaft, camshaft, valve train, and accessory drives were noted. All four cylinders produced compression while the engine was rotated. The engine examination revealed no evidence of pre-impact failure.

Witnesses stated to the responding FAA inspector, the fuel mixture was found in the full position and no one that assisted in the accident recovery had contact with the fuel selector.

Pilot Information

Certificate:	Commercial	Age:	71, Male
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Seat Occupied:	Left
Other Aircraft Rating(s):		Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):		Toxicology Performed:	No
Medical Certification:	Class 3 With Waivers/Limitations	Last FAA Medical Exam:	11/01/2004
Occupational Pilot:		Last Flight Review or Equivalent:	10/01/2002
Flight Time:	5700 hours (Total, all aircraft), 348 hours (Total, this make and model), 4 hours (Last 90 days, all aircraft), 3 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Piper	Registration:	N7510W
Model/Series:	PA-28-180	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	28-2907
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:	11/01/2004, Annual	Certified Max Gross Wt.:	1392 lbs
Time Since Last Inspection:	2 Hours	Engines:	1 Reciprocating
Airframe Total Time:	3623.44 Hours as of last inspection	Engine Manufacturer:	Lycoming
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	O-360-A3A
Registered Owner:	Richard C. Miller	Rated Power:	180
Operator:	Richard C. Miller	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	KNSE, 170 ft msl	Distance from Accident Site:	5 Nautical Miles
Observation Time:	1255 CST	Direction from Accident Site:	330°
Lowest Cloud Condition:	Thin Broken / 6000 ft agl	Visibility	7 Miles
Lowest Ceiling:	Overcast / 15000 ft agl	Visibility (RVR):	
Wind Speed/Gusts:	4 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:		Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.14 inches Hg	Temperature/Dew Point:	15° C / 4° C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Milton, FL (2R4)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	1312 CST	Type of Airspace:	

Airport Information

Airport:	Milton Santa Rosa (2R4)	Runway Surface Type:	Asphalt
Airport Elevation:	82 ft	Runway Surface Condition:	Dry
Runway Used:	36	IFR Approach:	None
Runway Length/Width:	3700 ft / 75 ft	VFR Approach/Landing:	None

Wreckage and Impact Information

Crew Injuries:	1 Serious	Aircraft Damage:	Destroyed
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Serious	Latitude, Longitude:	30.637500, -86.993611

Administrative Information

Investigator In Charge (IIC):	Jose L Obregon	Report Date:	12/20/2005
Additional Participating Persons:	Robert L Bullock; FAA / FSDO-09; Birmingham, AL George Hollingsworth; New Piper Aircraft, Inc.; Reston, VA Edward Rogalski; Textron Lycoming; Bellview, FL		
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 pubinq@ntsb.gov , or at 800-877-6799. Dockets released after this date are available at http://dms.nts.gov/pubdms/ .		

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](#).