



Aviation Investigation Final Report

Location:	New Orleans, Louisiana	Accident Number:	CEN11FA292
Date & Time:	April 16, 2011, 14:15 Local	Registration:	N3621Z
Aircraft:	Piper PA-22/20	Aircraft Damage:	Substantial
Defining Event:	Loss of engine power (partial)	Injuries:	1 Minor
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot had just taken off and was about 400 feet above ground level when the engine began to run rough and then lose all power. The pilot switched the fuel selector from the left fuel tank to the right tank and pumped the engine primer but could not restore power. The pilot force-landed the airplane on a road. During the landing roll, the airplane struck a minivan that could not get out of the way of the airplane. A postaccident examination showed little fuel in the airplane's left fuel tank. The right fuel tank was full of fuel. The airplane's engine and other systems showed no preimpact anomalies. The pilot said that his practice was to take off on the left tank and switch tanks once he was stable in the air. On the day of the accident, the pilot made several short flights and forgot to switch from the left tank on those flights; thus all the fuel from the left tank was used up before the accident flight.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's inadequate in-flight fuel management, which resulted in fuel starvation and a total loss of engine power.

Findings

Personnel issues	Lack of action - Pilot
Aircraft	Fuel - Fluid management

Factual Information

History of Flight

Enroute-climb to cruise	Loss of engine power (partial) (Defining event)
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On April 16, 2011, about 1415 central daylight time, a Piper PA-22/20, N3621Z, was substantially damaged during a forced landing, following a loss of engine power after takeoff from the Lakefront Airport (NEW), New Orleans, Louisiana. The private pilot, the sole occupant, sustained minor injuries, and reportedly the driver of a struck vehicle was not injured. The airplane was registered to and operated by a private individual under the provisions of 14 Code of Federal Regulations Part 91 as a personal flight. Visual meteorological conditions prevailed and a flight plan had not been filed for the flight destined for the Saint Charles Airport (LS40), Ama, Louisiana, which began around 1400.

According to the pilot, after a morning of local flying he dropped off a passenger at NEW and departed for LS40. After takeoff, the airplane's engine began to run "extremely rough." The pilot stated that he switched the airplane's fuel selector from the left fuel tank, to the right fuel tank, and then back to the left tank position. The pilot further reported that when he pumped the engine's primer it appeared to help, but being at a low altitude and descending, he focused on landing the airplane. During the ensuing forced landing to a road, the airplane's right wing impacted a moving minivan. The airplane's right main landing gear collapsed and the airplane came to rest in an upright and right wing low position. A post accident examination of the airplane at the scene showed the airplane's right wing spars were bent upward and aft. There was a small amount of fuel over the left sump of the left wing tank. The right wing tank was full of fuel. The fuel selector was on the left fuel tank. The airplane wreckage was retained for further examination.

The airplane was examined at Marrero, Louisiana, on April 18, 2011. The airplane's engine showed no anomalies that would have precluded its normal operation. During the examination, the pilot, who was present, said that he'd been operating the engine with fuel from the left tank all that day. He said that he didn't switch fuel tanks because he'd flown a number of short "hops" [flights] that day. He said his usual practice was to takeoff with the engine feeding from the left tank, and after the airplane was leveled off and stable in the air, he would select the right tank from which the engine would feed. On the day of the accident, he had forgotten to switch tanks. He had just taken off and was about 400 feet above ground level when he lost power. When he couldn't get the engine to catch after switching tanks, he committed to the landing.

Pilot Information

Certificate:	Private	Age:	60, Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 With waivers/limitations	Last FAA Medical Exam:	April 29, 2010
Occupational Pilot:	No	Last Flight Review or Equivalent:	August 31, 2009
Flight Time:	694 hours (Total, all aircraft), 379 hours (Total, this make and model), 644 hours (Pilot In Command, all aircraft), 8 hours (Last 90 days, all aircraft), 6 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Piper	Registration:	N3621Z
Model/Series:	PA-22/20	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	22-7513
Landing Gear Type:	Tailwheel	Seats:	4
Date/Type of Last Inspection:	March 6, 2011 Annual	Certified Max Gross Wt.:	2000 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	3593 Hrs as of last inspection	Engine Manufacturer:	Lycoming
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	O-320 Series
Registered Owner:	On file	Rated Power:	
Operator:	On file	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	NEW,8 ft msl	Distance from Accident Site:	4 Nautical Miles
Observation Time:	13:53 Local	Direction from Accident Site:	30°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	15 knots / 21 knots	Turbulence Type Forecast/Actual:	/
Wind Direction:	290°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.97 inches Hg	Temperature/Dew Point:	23°C / 5°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	New Orleans, LA (NEW)	Type of Flight Plan Filed:	None
Destination:	Ama, LA (LS40)	Type of Clearance:	VFR
Departure Time:	14:00 Local	Type of Airspace:	

Wreckage and Impact Information

Crew Injuries:	1 Minor	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Minor	Latitude, Longitude:	30.004167,-90.108886(est)

Administrative Information

Investigator In Charge (IIC):	LeBaron, Timothy
Additional Participating Persons:	Dean O Johnson; Federal Aviation Administration; Baton Rouge, LA
Original Publish Date:	November 5, 2012
Last Revision Date:	
Investigation Class:	Class
Note:	The NTSB traveled to the scene of this accident.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=78897

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The NTSB does not assign fault or blame for an accident or incident; rather, as specified by NTSB regulation, “accident/incident investigations are fact-finding proceedings with no formal issues and no adverse parties ... and are not conducted for the purpose of determining the rights or liabilities of any person” (Title 49 *Code of Federal Regulations* section 831.4). Assignment of fault or legal liability is not relevant to the NTSB’s statutory mission to improve transportation safety by investigating accidents and incidents and issuing safety recommendations. In addition, statutory language prohibits the admission into evidence or use of any part of an NTSB report related to an accident in a civil action for damages resulting from a matter mentioned in the report (Title 49 *United States Code* section 1154(b)). A factual report that may be admissible under 49 *United States Code* section 1154(b) is available [here](#).