



Aviation Investigation Final Report

Location:	Lumberton, New Jersey	Accident Number:	NYC07CA133
Date & Time:	June 7, 2007, 10:15 Local	Registration:	N2173S
Aircraft:	Piper PA-44-180	Aircraft Damage:	Substantial
Defining Event:		Injuries:	2 None
Flight Conducted Under:	Part 91: General aviation - Instructional		

Analysis

According to the flight instructor of the PA-44, while conducting a training flight with his student, he simulated a left engine failure and the student proceeded to enter the traffic pattern for runway 19. Upon touchdown, "the rear of the airplane and the right wing raised off the ground" and the flight instructor instructed his student to "Go-Around." The airplane began to track left and the flight instructor took the controls. He was unable to maintain directional control, and the airplane exited the runway collapsing the left main gear and substantially damaging the airplane. The student pilot reported that the flight instructor simulated the engine failure by "cutting off fuel to the left engine," and the flight instructor reported he must have "forgotten to turn the fuel back on" during the go-around. No mechanical deficiencies were reported with the airplane.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The flight instructor's improper decision to simulate an engine failure in the traffic pattern by cutting off fuel to the engine, and his subsequent failure to maintain directional control during an aborted landing.

Findings

Occurrence #1: LOSS OF ENGINE POWER(PARTIAL) - NONMECHANICAL
Phase of Operation: APPROACH

Findings

1. (C) IN-FLIGHT PLANNING/DECISION - IMPROPER - PILOT IN COMMAND(CFI)

Occurrence #2: LOSS OF CONTROL - ON GROUND/WATER

Phase of Operation: LANDING - ABORTED

Findings

2. (C) DIRECTIONAL CONTROL - NOT MAINTAINED - PILOT IN COMMAND(CFI)

Occurrence #3: MAIN GEAR COLLAPSED

Phase of Operation: LANDING - ABORTED

Factual Information

According to the flight instructor of the PA-44, while conducting a training flight with his student, he simulated a left engine failure and the student proceeded to enter the traffic pattern for runway 19. Upon touchdown, "the rear of the airplane and the right wing raised off the ground" and the flight instructor instructed his student to "Go-Around." The airplane began to track left and the flight instructor took the controls. He was unable to maintain directional control, and the airplane exited the runway collapsing the left main gear and substantially damaging the airplane. The student pilot reported that the flight instructor simulated the engine failure by "cutting off fuel to the left engine," and the flight instructor reported he must have "forgotten to turn the fuel back on" during the go-around. No mechanical deficiencies were reported with the airplane.

Flight instructor Information

Certificate:	Commercial; Flight instructor	Age:	28, Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Right
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	Airplane multi-engine; Airplane single-engine; Instrument airplane	Toxicology Performed:	No
Medical Certification:	Class 1 Without waivers/limitations	Last FAA Medical Exam:	July 1, 2006
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	November 1, 2005
Flight Time:	1053 hours (Total, all aircraft), 84 hours (Total, this make and model), 789 hours (Pilot In Command, all aircraft), 159 hours (Last 90 days, all aircraft), 69 hours (Last 30 days, all aircraft), 4 hours (Last 24 hours, all aircraft)		

Student pilot Information

Certificate:		Age:	27,Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):		Toxicology Performed:	No
Medical Certification:	Class 2 With waivers/limitations	Last FAA Medical Exam:	December 1, 2005
Occupational Pilot:	No	Last Flight Review or Equivalent:	May 1, 2007
Flight Time:			

Aircraft and Owner/Operator Information

Aircraft Make:	Piper	Registration:	N2173S
Model/Series:	PA-44-180	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	44-7995245
Landing Gear Type:	Retractable - Tricycle	Seats:	4
Date/Type of Last Inspection:	May 1, 2007 Annual	Certified Max Gross Wt.:	3800 lbs
Time Since Last Inspection:		Engines:	2 Reciprocating
Airframe Total Time:	7287 Hrs as of last inspection	Engine Manufacturer:	Lycoming
ELT:	Installed, not activated	Engine Model/Series:	0-360-E1A6D
Registered Owner:	Margaret M Froman	Rated Power:	180 Horsepower
Operator:	Hortman Aviation Services	Operating Certificate(s) Held:	None
Operator Does Business As:	Flight Instruction	Operator Designator Code:	CMDS

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	KVAY, 53 ft msl	Distance from Accident Site:	2 Nautical Miles
Observation Time:	09:54 Local	Direction from Accident Site:	270°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	/ None	Turbulence Type Forecast/Actual:	/
Wind Direction:		Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.11 inches Hg	Temperature/Dew Point:	19°C / 9°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Robbinsville, NJ (N87)	Type of Flight Plan Filed:	None
Destination:	Lumberton, NJ (N14)	Type of Clearance:	None
Departure Time:	09:30 Local	Type of Airspace:	

Airport Information

Airport:	Flying W Airport N14	Runway Surface Type:	Asphalt
Airport Elevation:	49 ft msl	Runway Surface Condition:	Dry
Runway Used:	19	IFR Approach:	None
Runway Length/Width:	3496 ft / 75 ft	VFR Approach/Landing:	Go around; Traffic pattern

Wreckage and Impact Information

Crew Injuries:	2 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 None	Latitude, Longitude:	39.934165, -74.80722

Administrative Information

Investigator In Charge (IIC):	Andrews, Jill
Additional Participating Persons:	Paul Bassilato; FAA/FSDO; Philadelphia, PA
Original Publish Date:	August 30, 2007
Last Revision Date:	
Investigation Class:	Class
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=65939

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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](#).