Aviation Investigation Final Report

Location:	La Verne, California	**Accident Number:**	LAX04CA173
Date & Time:	March 31, 2004, 12:55 Local	**Registration:**	N74SA
Aircraft:	Piper PA34-200	**Aircraft Damage:**	Substantial
Defining Event:		**Injuries:**	2 None
Flight Conducted Under:	Part 91: General aviation - Instructional		

Analysis

The airplane collided with terrain while the pilot was attempting a go-around during a multiengine training flight. The certified flight instructor (CFI) turned the right engine fuel selector to the "off" position, in an effort to simulate an engine failure. The student followed the proper procedure by correctly identifying the failed engine and flew the airplane accordingly. On short final, about 100 feet above ground level, the airplane was high and not properly aligned with the runway. The CFI opted to make a go-around, and the student inputted full throttle on both engines. The student was unable to maintain airspeed and establish a positive rate of climb. The CFI communicated that he would take over the controls, and attempted to continue the go-around. The airplane would not climb and drifted to the right, across another runway. The airplane continued in a gradual decent, and the stall warning horn sounded. The right wing impacted terrain, and the airplane spun around on the ground. The CFI stated that he had become distracted, and did not remember to turn the fuel selector back to the "on" position after the student had identified the failed engine. He thought this was the reason that the right engine did not respond to the throttle input during the go-around. The CFI reported no preimpact mechanical malfunctions or failures with the airplane.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: the CFI 's failure to correctly reconfigure the right engine fuel selector, resulting in a total loss of power to that engine. Also causal was the CFI's failure to maintain direction control of the airplane and an adequate airspeed, which led to the airplane stalling and colliding with terrain. A factor in the accident was the CFI's diverted attention.

Findings

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

Findings
1. (C) 1 ENGINE - LOSS,TOTAL
2. EMERGENCY PROCEDURE - SIMULATED - PILOT IN COMMAND(CFI)
3. (C) FUEL TANK SELECTOR POSITION - NOT CORRECTED - PILOT IN COMMAND(CFI)
4. (F) DIVERTED ATTENTION - PILOT IN COMMAND(CFI)
5. (C) FUEL SUPPLY - RESTRICTED - PILOT IN COMMAND(CFI)

Occurrence #2: LOSS OF CONTROL - IN FLIGHT
Phase of Operation: GO-AROUND (VFR)

Findings
6. (C) DIRECTIONAL CONTROL - NOT MAINTAINED - PILOT IN COMMAND(CFI)
7. (C) AIRSPEED - NOT MAINTAINED - PILOT IN COMMAND(CFI)
8. STALL/MUSH - ENCOUNTERED - PILOT IN COMMAND(CFI)

Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation: DESCENT - UNCONTROLLED

Findings
9. TERRAIN CONDITION - GROUND

Factual Information

On March 31 2004, about 1255 Pacific standard time, a Piper PA-34-200, N74SA, collided with terrain while attempting a go-around at Brackett Field Airport, La Verne, California. Air Desert Pacific was operating the airplane under the provisions of 14 CFR Part 91. The certified flight instructor (CFI) and student pilot were not injured; the airplane sustained substantial damage. The local instructional flight originated from La Verne about 1150. Day visual meteorological conditions prevailed, and a flight plan had not been filed.

In a written statement, the CFI reported that he was overseeing the student's landing attempt on runway 26R. While inbound, about 4,000 feet mean sea level, the CFI turned the right engine fuel selector to the "off" position, in an effort to simulate an engine failure. The student followed the proper procedure by correctly identifying the failed engine and positioning the left throttle, mixture, and propeller controls in their full forward position, and the right throttle control in the idle position. While on the downwind portion of the traffic pattern, the air traffic control tower cleared them to land on runway 26L. On final approach, the student configured the airplane with full flaps and the landing gear in the extended position.

On short final, about 100 feet above ground level, the airplane was high and not properly aligned with the runway. The CFI opted to make a go-around, and the student inputted full throttle on both engines. The student was unable to maintain airspeed and establish a positive rate of climb. The CFI communicated that he would take over the controls, and attempted to continue the go-around. The airplane would not climb and drifted to the right, across runway 26R. The airplane continued in a gradual decent, and the stall warning horn sounded. The right wing impacted terrain, and the airplane spun around on the ground.

The CFI stated that he had become distracted, and did not remember to turn the fuel selector back to the "on" position after the student had identified the failed engine while inbound. He thought this was the reason that the right engine did not respond to the throttle input during the go-around. He added that it was possible that he could not maintain directional control of the airplane because the student may have failed to relinquish the controls. The CFI reported no preimpact mechanical malfunctions or failures with the airplane.

Pilot Information

Certificate:	Commercial; Flight instructor	**Age:**	25,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	**Toxicology Performed:**	No
Medical Certification:	Class 1 Valid Medical--w/ waivers/lim	**Last FAA Medical Exam:**	October 7, 2002
Occupational Pilot:		**Last Flight Review or Equivalent:**	
Flight Time:	620 hours (Total, all aircraft), 22 hours (Total, this make and model), 142 hours (Last 90 days, all aircraft), 43 hours (Last 30 days, all aircraft)		

Student pilot Information

Certificate:	Private	**Age:**	24,Male
Airplane Rating(s):	Single-engine land	**Seat Occupied:**	
Other Aircraft Rating(s):	None	**Restraint Used:**	
Instrument Rating(s):	None	**Second Pilot Present:**	Yes
Instructor Rating(s):	None	**Toxicology Performed:**	No
Medical Certification:	Class 3 Valid Medical--no waivers/lim.	**Last FAA Medical Exam:**	January 15, 2004
Occupational Pilot:		**Last Flight Review or Equivalent:**	
Flight Time:	223 hours (Total, all aircraft), 3 hours (Total, this make and model), 56 hours (Last 90 days, all aircraft), 56 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Piper	**Registration:**	N74SA
Model/Series:	PA34-200	**Aircraft Category:**	Airplane
Year of Manufacture:		**Amateur Built:**	
Airworthiness Certificate:	Normal	**Serial Number:**	34-7250336
Landing Gear Type:	Retractable - Tricycle	**Seats:**	4
Date/Type of Last Inspection:		**Certified Max Gross Wt.:**	4200 lbs
Time Since Last Inspection:		**Engines:**	2 Reciprocating
Airframe Total Time:		**Engine Manufacturer:**	Lycoming
ELT:		**Engine Model/Series:**	10/LIO-360
Registered Owner:	Air Desert Pacific	**Rated Power:**	200 Horsepower
Operator:		**Operating Certificate(s) Held:**	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	**Condition of Light:**	Day
Observation Facility, Elevation:		**Distance from Accident Site:**	
Observation Time:		**Direction from Accident Site:**	
Lowest Cloud Condition:		**Visibility**	
Lowest Ceiling:		**Visibility (RVR):**	
Wind Speed/Gusts:	/	**Turbulence Type Forecast/Actual:**	/
Wind Direction:		**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:		**Temperature/Dew Point:**	
Precipitation and Obscuration:			
Departure Point:	La Verne, CA (KPOC)	**Type of Flight Plan Filed:**	None
Destination:	La Verne, CA (KPOC)	**Type of Clearance:**	VFR
Departure Time:		**Type of Airspace:**	Class D

Airport Information

Airport:	Brackett Field Airport KPOC	**Runway Surface Type:**	
Airport Elevation:		**Runway Surface Condition:**	
Runway Used:	26L	**IFR Approach:**	None
Runway Length/Width:		**VFR Approach/Landing:**	

Wreckage and Impact Information

Crew Injuries:	2 None	**Aircraft Damage:**	Substantial
Passenger Injuries:		**Aircraft Fire:**	None
Ground Injuries:	N/A	**Aircraft Explosion:**	
Total Injuries:	2 None	**Latitude, Longitude:**	34.091388,-117.781669

Administrative Information

Investigator In Charge (IIC):	Charnon, Nicole
Additional Participating Persons:	Monico Robles; Federal Aviation Administration; El Segundo, CA
Original Publish Date:	June 30, 2004
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.ntsb.gov/Docket?ProjectID=58983