



Aviation Investigation Final Report

Location:	Opa Locka, Florida	Accident Number:	MIA05CA072
Date & Time:	March 6, 2005, 17:30 Local	Registration:	N21427
Aircraft:	Piper PA-44-180	Aircraft Damage:	Substantial
Defining Event:		Injuries:	2 None
Flight Conducted Under:	Part 91: General aviation - Instructional		

Analysis

The CFI stated they were conducting instrument approaches and landings at Opa Locka Airport. During a takeoff, he gave his student the indication of a simulated engine failure, the student then retarded the throttles and initiated a descent to land. While on descent, the CFI and dual student noticed a higher than normal descent rate and both corrected by adding back pressure on the control column and adding engine power. After touchdown the instructor heard an abnormal noise and decided to taxi to the ramp. Once the airplane was secure, the CFI conducted an inspection and found damage to the fuselage and terminated the flight. The pilots stated there were no mechanical failures or malfunctions to the airplane or any of its systems prior to the accident.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The dual student's improper descent rate during a simulated engine failure and simulated forced landing and the CFI's inadequate remedial action which resulted in a hard landing.

Findings

Occurrence #1: HARD LANDING
Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings
1. ENGINE SHUTDOWN - SIMULATED - PILOT IN COMMAND(CFI)

2. (C) DESCENT - IMPROPER - DUAL STUDENT
3. (C) REMEDIAL ACTION - INADEQUATE - PILOT IN COMMAND(CFI)

Factual Information

On March 6, 2005, about 1730 eastern standard time, a Piper PA-44-180, N21427, registered to and operated by Delta Connection Academy Inc., as a Title 14 CFR Part 91 instructional flight, had a hard landing at the Opa Locka Airport, Opa Locka, Florida. Visual meteorological conditions prevailed and no flight plan was filed. The commercial-rated pilot-in-command/certified flight instructor (CFI) and the commercial-rated dual student reported no injuries, and the airplane incurred substantial damage. The flight originated from North Perry Airport, Pembroke Pines, Florida, earlier that day, about 1600.

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Flight instructor Information

Certificate:	Commercial; Flight instructor	Age:	22, 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:	No
Instructor Rating(s):	Airplane multi-engine; Airplane single-engine; Instrument airplane	Toxicology Performed:	No
Medical Certification:	Class 1 None	Last FAA Medical Exam:	January 27, 2005
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	July 28, 2004
Flight Time:	1589 hours (Total, all aircraft), 148 hours (Total, this make and model), 1451 hours (Pilot In Command, all aircraft), 127 hours (Last 90 days, all aircraft), 45 hours (Last 30 days, all aircraft), 4 hours (Last 24 hours, all aircraft)		

Student pilot Information

Certificate:	Commercial	Age:	28,Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):		Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 1 Valid Medical-w/ waivers/lim	Last FAA Medical Exam:	February 4, 2004
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:	245 hours (Total, all aircraft), 19 hours (Total, this make and model), 32 hours (Last 90 days, all aircraft), 19 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Piper	Registration:	N21427
Model/Series:	PA-44-180	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	44-7995050
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:	February 8, 2005 AAIP	Certified Max Gross Wt.:	3800 lbs
Time Since Last Inspection:	55.1 Hrs	Engines:	2 Reciprocating
Airframe Total Time:	9407.2 Hrs at time of accident	Engine Manufacturer:	Avco Lycoming
ELT:	Installed, not activated	Engine Model/Series:	O-360-E1A6D
Registered Owner:	Delta Connection Academy	Rated Power:	180 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:	OPF, 52 ft msl	Distance from Accident Site:	
Observation Time:	16:53 Local	Direction from Accident Site:	
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	7 knots / None	Turbulence Type Forecast/Actual:	/
Wind Direction:	70°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.12 inches Hg	Temperature/Dew Point:	23°C / 11°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Pembroke, FL (HWV)	Type of Flight Plan Filed:	VFR
Destination:	Opa Locka, FL (OPF)	Type of Clearance:	VFR
Departure Time:	16:00 Local	Type of Airspace:	Class C

Airport Information

Airport:	Opa Locka OPF	Runway Surface Type:	Asphalt
Airport Elevation:		Runway Surface Condition:	Dry
Runway Used:	9L	IFR Approach:	None
Runway Length/Width:	8002 ft / 150 ft	VFR Approach/Landing:	Simulated forced landing

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:	25.911666, -80.278335

Administrative Information

Investigator In Charge (IIC):	Obregon, Jose
Additional Participating Persons:	Dan Hutchings Jr; FSDO 19; Miami, FL
Original Publish Date:	June 8, 2005
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=61105

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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](#).