



AVIATION



HIGHWAY



MARINE



RAILROAD



PIPELINE

Aviation Investigation Final Report

Location:	Cahokia, Illinois	Accident Number:	CHI08CA078
Date & Time:	February 7, 2008, 19:54 Local	Registration:	N554PC
Aircraft:	Piper PA-44-180	Aircraft Damage:	Substantial
Defining Event:	Loss of control in flight	Injuries:	2 None
Flight Conducted Under:	Part 91: General aviation - Instructional		

Analysis

After completing several practice instrument approaches at night, the flight crew decided to finish the flight with a simulated single-engine approach and landing. The simulated right engine failure was accomplished using the manufacturer's recommended procedures. The flight crew was cleared for the instrument landing system (ILS) runway 30L approach, circle-to-land on runway 12R. The dual-student flew the instrument approach to the minimum descent altitude and then circled to the south to join the right downwind for runway 12R. The dual-student climbed to traffic pattern altitude while on downwind and extended the landing gear when abeam the touchdown point. When the airplane turned onto final approach, it was slightly above the glide slope, at 90 knots, and left of the extended runway centerline. When the airplane was on 1/4 mile final for the runway, it was on glide slope and fully configured for landing. At this time, the airplane was still left of the extended centerline, approximately aligned with the runway edge lighting. About 20-30 feet above ground level, the dual-student banked the airplane about 10-15 degrees to the right. The flight instructor stated that the student's actions made him uncomfortable, given the proximity to the ground. He assumed control of the airplane and initiated a go-around. The airplane yawed and banked to the left as he advanced the engine throttles and pitched up for the go-around. His corrective flight control inputs were ineffective, and the airplane impacted left-wing low in the grass area off the left side of the runway. No flight control anomalies were noted during a post-accident inspection.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The flight instructor's failure to correct for proper runway alignment during final approach and

his failure to maintain aircraft control during his subsequent go-around. Contributing to the accident was the dual-student's failure to properly align with the runway centerline during final approach and the dark night.

Findings

Environmental issues	Dark - Not specified
Personnel issues	Lack of action - Pilot
Personnel issues	Aircraft control - Pilot
Aircraft	Directional control - Not attained/maintained

Factual Information

History of Flight

Approach-VFR go-around	Loss of control in flight (Defining event)
Approach-VFR go-around	Collision with terr/obj (non-CFIT)

Flight instructor 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; Instrument airplane	Toxicology Performed:	No
Medical Certification:	Class 1 With waivers/limitations	Last FAA Medical Exam:	February 1, 2007
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	September 1, 2007
Flight Time:	746 hours (Total, all aircraft), 97 hours (Total, this make and model), 693 hours (Pilot In Command, all aircraft), 82 hours (Last 90 days, all aircraft), 26 hours (Last 30 days, all aircraft), 5 hours (Last 24 hours, all aircraft)		

Student pilot Information

Certificate:	Private	Age:	21,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):	None	Toxicology Performed:	No
Medical Certification:	Class 1 Without waivers/limitations	Last FAA Medical Exam:	January 1, 2007
Occupational Pilot:	No	Last Flight Review or Equivalent:	May 1, 2007
Flight Time:	182 hours (Total, all aircraft), 32 hours (Total, this make and model), 62 hours (Pilot In Command, all aircraft), 12 hours (Last 90 days, all aircraft), 6 hours (Last 30 days, all aircraft), 0 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Piper	Registration:	N554PC
Model/Series:	PA-44-180	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	4496073
Landing Gear Type:	Retractable - Tricycle	Seats:	4
Date/Type of Last Inspection:	November 1, 2007 100 hour	Certified Max Gross Wt.:	3800 lbs
Time Since Last Inspection:		Engines:	2 Reciprocating
Airframe Total Time:	2742 Hrs at time of accident	Engine Manufacturer:	Lycoming
ELT:	Installed, not activated	Engine Model/Series:	O-360-A1H6
Registered Owner:	Saint Louis University, Parks College	Rated Power:	180 Horsepower
Operator:		Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Night/dark
Observation Facility, Elevation:	CPS,413 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	19:52 Local	Direction from Accident Site:	
Lowest Cloud Condition:		Visibility	10 miles
Lowest Ceiling:	Overcast / 8500 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	5 knots / None	Turbulence Type Forecast/Actual:	/
Wind Direction:	140°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.94 inches Hg	Temperature/Dew Point:	2°C / -2°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Cahokia, IL (CPS)	Type of Flight Plan Filed:	None
Destination:	Cahokia, IL (CPS)	Type of Clearance:	VFR;VFR flight following
Departure Time:	18:00 Local	Type of Airspace:	

Airport Information

Airport:	St. Louis Downtown Airport CPS	Runway Surface Type:	Asphalt
Airport Elevation:	413 ft msl	Runway Surface Condition:	Dry
Runway Used:	12R	IFR Approach:	Circling;ILS
Runway Length/Width:	6997 ft / 100 ft	VFR Approach/Landing:	Full stop

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:	38.570556,-90.156112

Administrative Information

Investigator In Charge (IIC):	Fox, Andrew
Additional Participating Persons:	Larry R McCracken; Federal Aviation Administration - St. Louis FSDO; St. Ann, MO
Original Publish Date:	May 28, 2008
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=67679

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