

Aviation Investigation Final Report

Location:	HAWTHORNE, Cal	ifornia	Accident Number:	LAX91FA355
Date & Time:	August 13, 1991, 1	2:49 Local	Registration:	N4553P
Aircraft:	PIPER	PA-23-250	Aircraft Damage:	Substantial
Defining Event:			Injuries:	3 Minor
Flight Conducted Under:	Part 91: General aviation - Instructional			

Analysis

THE CFI TURNED OFF THE AIRPLANE'S RIGHT ENGINE FUEL SELECTOR TO SIMULATE AN ENGINE FAILURE DURING THE INITIAL CLIMB-OUT FROM THE AIRPORT. AFTER THE DUAL STUDENT PERFORMED THE ENGINE-OUT EMERG CHECKLIST, WHICH INCLUDED FEATHERING THE RIGHT ENGINE PROPELLER, THE CFI INSTRUCTED THE DUAL STUDENT TO RE-ENTER THE RIGHT TRAFFIC PATTERN. THE AIRPLANE WAS NOT EQUIPPED WITH AN UNFEATHERING PROPELLER SYSTEM. THE DUAL STUDENT OVERSHOT THE FINAL APPROACH COURSE WHEN THE CFI NOTED THAT THE LEFT MAIN LANDING GEAR DOWN LIGHT WAS NOT ILLUMINATED. THE CFI TOOK THE CONTROLS AND EXECUTED A SINGLE ENGINE GO-AROUND. THE AIRPLANE FAILED TO CLIMB AND THE CFI ELECTED TO LAND ON A STREET. THE AIRPLANE COLLLIDED WITH A SIGN AND A PICKUP TRUCK BEFORE COMING TO REST.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: OVERCONFIDENCE IN THE AIRPLANE'S ABILITY AND HIS PERSONAL ABILITY BY THE INSTRUCTOR PILOT (CFI), BY INTENTIONALLY SHUTTING OFF FUEL TO AN ENGINE DURING A CRITICAL PART OF FLIGHT. THE AIRCRAFT'S LACK OF SINGLE ENGINE PERFORMANCE WAS A RELATED FACTOR.

Findings

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

Findings

- 1. (C) OVERCONFIDENCE IN PERSONAL ABILITY PILOT IN COMMAND(CFI)
- 2. (C) OVERCONFIDENCE IN AIRCRAFT'S ABILITY PILOT IN COMMAND(CFI)
- 3. (C) EMERGENCY PROCEDURE INTENTIONAL PILOT IN COMMAND(CFI)
- 4. FLUID, FUEL SWITCHED OFF
- 5. PROPELLER FEATHERING PERFORMED

Occurrence #2: AIRFRAME/COMPONENT/SYSTEM FAILURE/MALFUNCTION Phase of Operation: APPROACH

Findings 6. (F) LANDING GEAR - UNDETERMINED 7. GO-AROUND - ATTEMPTED - PILOT IN COMMAND(CFI)

Occurrence #3: FORCED LANDING Phase of Operation: DESCENT - EMERGENCY

Findings 8. AIRCRAFT PERFORMANCE, ENGINE OUT CAPABILITY - INADEQUATE

Occurrence #4: ON GROUND/WATER COLLISION WITH OBJECT Phase of Operation: LANDING - ROLL

Findings 9. OBJECT - SIGN 10. OBJECT - VEHICLE

Factual Information

Pilot Information

Certificate:	Airline transport; Flight instructor	Age:	32,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 Medicalno waivers/lim.	Last FAA Medical Exam:	February 1, 1991
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	1700 hours (Total, all aircraft), 300 hours (Total, this make and model), 1500 hours (Pilot In Command, all aircraft), 80 hours (Last 90 days, all aircraft), 30 hours (Last 30 days, all aircraft), 3 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	PIPER	Registration:	N4553P
Model/Series:	PA-23-250 PA-23-250	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	27-59
Landing Gear Type:	Retractable - Tricycle	Seats:	6
Date/Type of Last Inspection:	July 17, 1991 Annual	Certified Max Gross Wt.:	5200 lbs
Time Since Last Inspection:	50 Hrs	Engines:	2 Reciprocating
Airframe Total Time:	5300 Hrs	Engine Manufacturer:	LYCOMING
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	0-540
Registered Owner:	GDW CONSTRUCTION COMPANY	Rated Power:	250 Horsepower
Operator:	GDW CONSTRUCTION COMPANY	Operating Certificate(s) Held:	None
Operator Does Business As:		Operator Designator Code:	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	HHR ,63 ft msl	Distance from Accident Site:	25 Nautical Miles
Observation Time:	12:47 Local	Direction from Accident Site:	250°
Lowest Cloud Condition:	Unknown	Visibility	15 miles
Lowest Ceiling:	Broken / 2500 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	6 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	200°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	TORRANCE , CA (TOA)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	VFR
Departure Time:	12:00 Local	Type of Airspace:	Class D

Airport Information

Airport:	HAWTHORNE MUNI	Runway Surface Type:	Concrete
Airport Elevation:	63 ft msl	Runway Surface Condition:	Dry
Runway Used:	7	IFR Approach:	None
Runway Length/Width:	4956 ft / 100 ft	VFR Approach/Landing:	Go around

Wreckage and Impact Information

Crew Injuries:	2 Minor	Aircraft Damage:	Substantial
Passenger Injuries:	1 Minor	Aircraft Fire:	On-ground
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	3 Minor	Latitude, Longitude:	33.910423,-118.339538(est)

Administrative Information

Investigator In Charge (IIC):	Wall, James		
Additional Participating Persons:	JEAN PYATT; LOS ANGELES , CA		
Original Publish Date:	March 31, 1993		
Last Revision Date:			
Investigation Class:	<u>Class</u>		
Note:			
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=27021		

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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 <u>here</u>.