



# Aviation Investigation Final Report

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<b>Location:</b>	San Diego, California	<b>Accident Number:</b>	GAA18CA207
<b>Date &amp; Time:</b>	April 10, 2018, 14:00 Local	<b>Registration:</b>	N4567T
<b>Aircraft:</b>	Piper PA34	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>	Landing gear not configured	<b>Injuries:</b>	2 None
<b>Flight Conducted Under:</b>	Part 91: General aviation - Instructional		

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## Analysis

The flight instructor reported that the pilot receiving instruction performed a simulated single-engine approach. He wanted to be able to communicate more easily with the pilot, so he set the simulated failed engine to 15 inches of mercury manifold pressure since the landing gear warning horn will sound if the manifold pressure is set below 14 inches of mercury. He added that he did not verify the gear was down and locked with the three green extended lights illuminated. He reported that, just before landing, he heard the landing gear warning horn but attributed it to the stall warning horn. The pilot receiving instruction reported that he did not recall hearing any audible alarm. The airplane landed with the gear retracted.

The airplane sustained substantial damage to both the wings.

The flight instructor reported that there were no preaccident mechanical failures or malfunctions with the airplane that would have precluded normal operation.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be:

The pilot receiving instruction and flight instructor's failure to properly configure the landing gear before landing, which resulted in landing with the landing gear retracted.

## Findings

<b>Aircraft</b>	(general) - Not used/operated
<b>Personnel issues</b>	Forgotten action/omission - Instructor/check pilot
<b>Personnel issues</b>	Forgotten action/omission - Student/instructed pilot

## Factual Information

### History of Flight

<b>Landing</b>	Landing gear not configured (Defining event)
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### Flight instructor Information

<b>Certificate:</b>	Airline transport; Commercial; Flight instructor	<b>Age:</b>	56, Male
<b>Airplane Rating(s):</b>	Single-engine land; Multi-engine land	<b>Seat Occupied:</b>	Right
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	Unknown
<b>Instrument Rating(s):</b>	Airplane	<b>Second Pilot Present:</b>	Yes
<b>Instructor Rating(s):</b>	Airplane multi-engine; Airplane single-engine; Instrument airplane	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 2 With waivers/limitations	<b>Last FAA Medical Exam:</b>	April 18, 2016
<b>Occupational Pilot:</b>	Yes	<b>Last Flight Review or Equivalent:</b>	April 11, 2016
<b>Flight Time:</b>	(Estimated) 5239 hours (Total, all aircraft), 833 hours (Total, this make and model), 5065 hours (Pilot In Command, all aircraft), 34 hours (Last 90 days, all aircraft), 13 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

### Pilot Information

<b>Certificate:</b>	Commercial; Flight instructor	<b>Age:</b>	44, Male
<b>Airplane Rating(s):</b>	Single-engine land	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	Unknown
<b>Instrument Rating(s):</b>	Airplane	<b>Second Pilot Present:</b>	Yes
<b>Instructor Rating(s):</b>	Airplane single-engine	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 3 With waivers/limitations	<b>Last FAA Medical Exam:</b>	April 20, 2016
<b>Occupational Pilot:</b>	No	<b>Last Flight Review or Equivalent:</b>	April 15, 2017
<b>Flight Time:</b>	(Estimated) 409 hours (Total, all aircraft), 45 hours (Last 90 days, all aircraft), 20 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Piper	<b>Registration:</b>	N4567T
<b>Model/Series:</b>	PA34 200	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>	1972	<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	34-7250136
<b>Landing Gear Type:</b>	Retractable - Tricycle	<b>Seats:</b>	6
<b>Date/Type of Last Inspection:</b>	March 20, 2018 100 hour	<b>Certified Max Gross Wt.:</b>	4000 lbs
<b>Time Since Last Inspection:</b>		<b>Engines:</b>	2 Reciprocating
<b>Airframe Total Time:</b>	7151 Hrs as of last inspection	<b>Engine Manufacturer:</b>	LYCOMING
<b>ELT:</b>	C126 installed, not activated	<b>Engine Model/Series:</b>	IO-360-C1E6
<b>Registered Owner:</b>	On file	<b>Rated Power:</b>	200 Horsepower
<b>Operator:</b>	On file	<b>Operating Certificate(s) Held:</b>	None

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual (VMC)	<b>Condition of Light:</b>	Day
<b>Observation Facility, Elevation:</b>	KSDM, 525 ft msl	<b>Distance from Accident Site:</b>	1 Nautical Miles
<b>Observation Time:</b>	20:53 Local	<b>Direction from Accident Site:</b>	116°
<b>Lowest Cloud Condition:</b>	Clear	<b>Visibility:</b>	10 miles
<b>Lowest Ceiling:</b>	None	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	7 knots /	<b>Turbulence Type Forecast/Actual:</b>	/ None
<b>Wind Direction:</b>	300°	<b>Turbulence Severity Forecast/Actual:</b>	/ N/A
<b>Altimeter Setting:</b>	29.98 inches Hg	<b>Temperature/Dew Point:</b>	29°C / 7°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	SAN DIEGO, CA (MYF )	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>	San Diego, CA (SDM )	<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	13:30 Local	<b>Type of Airspace:</b>	Class D

## Airport Information

<b>Airport:</b>	BROWN FIELD MUNI SDM	<b>Runway Surface Type:</b>	Asphalt;Concrete
<b>Airport Elevation:</b>	526 ft msl	<b>Runway Surface Condition:</b>	Dry
<b>Runway Used:</b>	26R	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>	7972 ft / 150 ft	<b>VFR Approach/Landing:</b>	Full stop;Traffic pattern

## Wreckage and Impact Information

<b>Crew Injuries:</b>	2 None	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>		<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	2 None	<b>Latitude, Longitude:</b>	32.572498,-116.980552(est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Benhoff, Kathryn
<b>Additional Participating Persons:</b>	Roger Messick; FAA; San Diego, CA
<b>Original Publish Date:</b>	July 5, 2018
<b>Last Revision Date:</b>	
<b>Investigation Class:</b>	<a href="#">Class</a>
<b>Note:</b>	This accident report documents the factual circumstances of this accident as described to the NTSB.
<b>Investigation Docket:</b>	<a href="https://data.nts.gov/Docket?ProjectID=97012">https://data.nts.gov/Docket?ProjectID=97012</a>

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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](#).