



National Transportation Safety Board Aviation Accident Final Report

Location:	Corona, CA	Accident Number:	LAX03LA018
Date & Time:	11/01/2002, 1730 PST	Registration:	N5129P
Aircraft:	Piper PA-24-180	Aircraft Damage:	Substantial
Defining Event:		Injuries:	2 None
Flight Conducted Under:	Part 91: General Aviation - Personal		

Analysis

Following an unstabilized approach, the private pilot landed the airplane hard in a nose low attitude and bounced. Thereafter, the pilot was unsuccessful in his recovery efforts and lost control of the airplane as it bounced again. The airplane swerved off the runway overloading the landing gear until it collapsed. The pilot was a ground school instructor, did not hold a certified flight instructor certificate, and was flying from the right seat. The airplane's owner, who also held a private pilot certificate, occupied the left seat. The owner indicated that his ground school instructor's handling of the airplane's controls from the right seat was problematic, and he almost lost control of the airplane during takeoff. During a subsequent approach for landing, the instructor flew the airplane a little low and fast. Upon touchdown the airplane veered to the right with the right edge of the runway well under the right wing. The instructor applied left rudder while pulling the nose up. The stall warning buzzer activated, and the instructor lowered the nose abruptly, striking the runway with the nose wheel. The airplane bounced and veered off the runway. A professional pilot, who witnessed the accident airplane's final approach, reported that the approach looked unusual and was not stabilized. The airplane appeared to dive toward the runway and was descending fast. The wings rocked and the airplane yawed. The airplane contacted the runway with its nose and right main wheels first. It then bounced about 20 feet into the air and yawed right. Then it yawed left and contacted the runway with its left main wheel and nose wheel. It bounced again and continued turning left. The airplane contacted the ground for the third and last time while in a left wing low attitude.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's misjudged landing flare. Also causal were the pilot's improper bounced landing recovery procedures and inadvertent swerve, resulting in the landing gear collapsing from overload.

Findings

Occurrence #1: HARD LANDING

Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings

1. (C) FLARE - MISJUDGED - PILOT IN COMMAND

Occurrence #2: LOSS OF CONTROL - ON GROUND/WATER

Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings

2. (C) RECOVERY FROM BOUNCED LANDING - IMPROPER - PILOT IN COMMAND

3. (C) GROUND LOOP/SWERVE - INADVERTENT - PILOT IN COMMAND

Occurrence #3: COMPLETE GEAR COLLAPSED

Phase of Operation: LANDING - ROLL

Findings

4. LANDING GEAR - OVERLOAD

Factual Information

On November 1, 2002, about 1730 Pacific standard time, a Piper PA-24-180, N5129P, experienced a hard bounced landing at the Corona Municipal Airport, Corona, California. Thereafter, the private pilot lost control of the airplane, it veered off runway 25, and its landing gear collapsed. The airplane was substantially damaged. Neither the private pilot nor the airplane owner (passenger), who also held a private pilot certificate, was injured. The airplane was being operated on a personal flight under the provisions of 14 CFR Part 91. Visual meteorological conditions prevailed, and no flight plan had been filed. The flight originated from Corona about 1725.

According to the airplane's owner, he had purchased the airplane on October 23, 2002. The owner reported that while he was attending a ground school class at a local community college, his ground school instructor offered to show him how to fly the airplane at no charge. The instructor reportedly stated that after the student was proficient flying the airplane, he could go to a certified flight instructor and obtain a complex airplane logbook endorsement.

On November 1, the two pilots met at the Corona Airport, and the owner proceeded to fly the airplane around the traffic pattern from the left seat. The ground school instructor monitored the owner's performance from the right seat. Upon completion of four full stop landings, the owner offered to let the instructor fly his airplane.

The ground school instructor, who did not hold a certified flight instructor certificate, proceeded to fly the airplane from the right seat. The instructor subsequently reported having 1 hour of flying experience in this model of airplane.

The airplane's owner provided the National Transportation Safety Board investigator with the following (summarized) account of the instructor's performance from commencement of their flight to the accident:

The ground school instructor took control of the airplane and proceeded to taxi to runway 25. He applied full power, rotated too soon, and almost lost control on takeoff. The instructor regained control and executed a touch-and-go with little to no problems. His second attempt was better, and everything was fine while in the pattern. As he was setting up for his second touch-and-go, he was a little low and fast on final while adjusting his speed. He contacted the ground and started to veer to the right with the right edge of the runway well under the right wing. He applied left rudder while pulling the nose up and turning the aileron to the left. The stall warning buzzer went off and he lowered the nose abruptly, striking the runway with the nose wheel and bouncing as the airplane was turning left. The airplane crossed the runway to the left at a sharp angle and bounced around until the airplane came to a stop.

At the time of the accident, a professional pilot was taxiing toward runway 25 for a planned departure. The professional pilot reported to the Safety Board investigator that the accident airplane's approach looked unusual and was not stabilized. The airplane appeared to dive toward the runway and was descending fast. The wings rocked and the airplane yawed. The airplane contacted the runway with its nose and right main wheels first. It then bounced about 20 feet into the air and yawed right. Then it yawed left and contacted the runway with its left main wheel and nose wheel. It bounced up and continued turning left. It hit the ground for the third and last time while in a left wing low attitude.

Under the direction of the Safety Board investigator, the airplane was examined by the

proprietor of the Eastman Aircraft Company, Corona, following its recovery from the accident site. According to the proprietor, the examination revealed airframe damage consistent with an airplane having landed diagonally to the runway with the right wing forward. This damage is also consistent with excessive side load to the nose gear and the right main landing gear.

The ground school instructor subsequently acknowledged that, at the time of the accident, he had been the pilot handling the flight controls. In his written statement to the Safety Board investigator he did not describe his approach, but he did state that the accident landing was normal. He reported that after a short rollout of about 100 to 150 feet, the airplane turned right. According to the instructor, he had applied full left pedal and the airplane responded slowly. When the airplane was realigned with the runway, power was applied for stability. The airplane moved left, still aligned with the runway, and then the gear failed.

Pilot Information

Certificate:	Private	Age:	45, Male
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Seat Occupied:	Right
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt
Instrument Rating(s):	None	Second Pilot Present:	Yes
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medical--w/ waivers/lim.	Last FAA Medical Exam:	04/23/2002
Occupational Pilot:		Last Flight Review or Equivalent:	05/31/2002
Flight Time:	259 hours (Total, all aircraft), 1 hours (Total, this make and model), 18 hours (Last 90 days, all aircraft), 1 hours (Last 30 days, all aircraft), 0 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Piper	Registration:	N5129P
Model/Series:	PA-24-180	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	24-142
Landing Gear Type:	Retractable - Tricycle	Seats:	4
Date/Type of Last Inspection:	Annual	Certified Max Gross Wt.:	2550 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	Lycoming
ELT:	Installed, not activated	Engine Model/Series:	O-360-A1A
Registered Owner:	Robert R. Samora	Rated Power:	180 hp
Operator:	Robert R. Samora	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Dusk
Observation Facility, Elevation:	CNO, 652 ft msl	Distance from Accident Site:	5 Nautical Miles
Observation Time:	1753 PST	Direction from Accident Site:	325°
Lowest Cloud Condition:	Clear	Visibility	5 Miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	7 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	260°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.98 inches Hg	Temperature/Dew Point:	15° C / 10° C
Precipitation and Obscuration:			
Departure Point:	Corona, CA (AJO)	Type of Flight Plan Filed:	None
Destination:	Corona, CA (AJO)	Type of Clearance:	None
Departure Time:	1725 PST	Type of Airspace:	Class E

Airport Information

Airport:	Corona Municipal (AJO)	Runway Surface Type:	Asphalt
Airport Elevation:	533 ft	Runway Surface Condition:	Dry
Runway Used:	25	IFR Approach:	None
Runway Length/Width:	3200 ft / 60 ft	VFR Approach/Landing:	Full Stop; Traffic Pattern

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	1 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 None	Latitude, Longitude:	33.897778, -117.604167

Administrative Information

Investigator In Charge (IIC): WAYNE POLLACK **Report Date:** 10/28/2004

Additional Participating Persons: Steven Groover; Federal Aviation Administration; Riverside, CA

Publish Date:

Investigation Docket: NTSB accident and incident dockets serve as permanent archival information for the NTSB's investigations. Dockets released prior to June 1, 2009 are publicly available from the NTSB's Record Management Division at pubinq@ntsb.gov, or at 800-877-6799. Dockets released after this date are available at <http://dms.nts.gov/pubdms/>.

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