Aviation Investigation Final Report

Location:	HAYWARD, California	**Accident Number:**	LAX99LA064
Date & Time:	January 2, 1999, 11:18 Local	**Registration:**	N4556Z
Aircraft:	Piper PA-22-108	**Aircraft Damage:**	Destroyed
Defining Event:		**Injuries:**	1 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The student pilot was completing the last of his touch-and-go landings at a local airport. During the flare he said the airplane began to drift to the right and said he noticed the left wing getting ready to contact the ground, as if in a ground loop condition. The pilot applied full throttle in an attempt to fly away. He stated the airplane did not want to fly so he elected to close the throttle and attempted to straighten out the airplane for landing. The aircraft contacted the ground and subsequently nosed over. The gascolator was compromised during the crash, which allowed unregulated fuel to enter the engine cowling. The postcrash fire ensued which destroyed the airplane. The pilot reported that the weather conditions at the time of the crash as reported on ATIS were winds 070 at 4 knots.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot-in-command's failure to maintain directional control. A factor in this accident was the inadvertent ground loop swerve.

Findings

Occurrence #1: LOSS OF CONTROL - ON GROUND/WATER
Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings
1. (C) DIRECTIONAL CONTROL - NOT MAINTAINED - PILOT IN COMMAND

2. (F) GROUND LOOP/SWERVE - INADVERTENT - PILOT IN COMMAND
3. REMEDIAL ACTION - ATTEMPTED - PILOT IN COMMAND

Occurrence #2: NOSE OVER
Phase of Operation: LANDING - FLARE/TOUCHDOWN

Occurrence #3: FIRE
Phase of Operation: OTHER

Factual Information

On January 2, 1999, at 1118 hours Pacific standard time, a Piper PA-22-108, N4556Z, nosed over following a loss of control during the flare/touchdown at Hayward, California. The aircraft was destroyed during the impact sequence and postcrash fire. The student pilot was not injured. The flight was being conducted under the provisions of 14 CFR Part 91 and visual meteorological conditions prevailed at the time of the accident.

In the pilot's written statement, he reported that he had stayed in the pattern at Hayward to practice touch-and-go landings and completed two with no problems noted. He stated that this was to be his last landing for the day and noted that his approach speed over the fence was normal. He said he was drifting to the right as he began his flare, and the next thing he remembered was the left wing getting ready to touch the ground, as in a left sliding skid or ground loop condition. He applied full throttle to try and fly the airplane so that the wing would not hit the ground. The pilot said the airplane "did not want to fly," so he elected to close the throttle and straighten the airplane out prior to landing. The airplane nosed over upon landing, which resulted in a broken front landing gear. The pilot said he shut off the fuel, mixture, magnetos, and master switch and exited the airplane. The pilot reported that at the time of the accident, ATIS was reporting the winds to be from 070 degrees at 04 knots.

The Federal Aviation Administration Aviation (FAA) Safety Inspector told Safety Board investigators that the support structure of the nose gear contacted the output side of the gascolator, causing it to break off the fitting which resulted in unregulated fuel pouring into the engine cowling. The aircraft fuel ignited and the fabric began to catch fire, thus eventually destroying the airplane.

An aviation inspector from the FAA interviewed the certified flight instructor (CFI), who had provided training to the student pilot. The CFI stated that in his opinion, the student pilot "possessed excellent flying skills." He further stated that the student pilot had approximately 40 hours of flying time, including 3 to 4 hours of crosswind landings at Palo Alto Airport, an airport known for it's stiff crosswinds. He also said that he felt that the student pilot was "a very cautious and attentive student."

The Safety Board did not take custody of the wreckage.

Pilot Information

Certificate:	Student	**Age:**	51,Male
Airplane Rating(s):	None	**Seat Occupied:**	Left
Other Aircraft Rating(s):	None	**Restraint Used:**	
Instrument Rating(s):	None	**Second Pilot Present:**	No
Instructor Rating(s):	None	**Toxicology Performed:**	No
Medical Certification:	Class 3 Valid Medical--w/ waivers/lim	**Last FAA Medical Exam:**	November 10, 1998
Occupational Pilot:	UNK	**Last Flight Review or Equivalent:**	
Flight Time:	42 hours (Total, all aircraft), 37 hours (Total, this make and model), 42 hours (Last 90 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Piper	**Registration:**	N4556Z
Model/Series:	PA-22-108 PA-22-108	**Aircraft Category:**	Airplane
Year of Manufacture:		**Amateur Built:**	
Airworthiness Certificate:	Normal; Utility	**Serial Number:**	22-8061
Landing Gear Type:	Tricycle	**Seats:**	2
Date/Type of Last Inspection:	July 1, 1998 Annual	**Certified Max Gross Wt.:**	1655 lbs
Time Since Last Inspection:	75 Hrs	**Engines:**	1 Reciprocating
Airframe Total Time:	3900 Hrs	**Engine Manufacturer:**	Lycoming
ELT:	Installed	**Engine Model/Series:**	O-320-A2B
Registered Owner:	ARTHUR J. STAVRO	**Rated Power:**	150 Horsepower
Operator:		**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:	KHW ,47 ft msl	**Distance from Accident Site:**	1 Nautical Miles
Observation Time:	11:27 Local	**Direction from Accident Site:**	180°
Lowest Cloud Condition:	Scattered	**Visibility**	9 miles
Lowest Ceiling:	None	**Visibility (RVR):**	
Wind Speed/Gusts:	5 knots / 8 knots	**Turbulence Type Forecast/Actual:**	/
Wind Direction:	180°	**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:	30 inches Hg	**Temperature/Dew Point:**	13°C / 4°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	(HWD)	**Type of Flight Plan Filed:**	None
Destination:		**Type of Clearance:**	VFLF
Departure Time:	10:50 Local	**Type of Airspace:**	Class D

Airport Information

Airport:	HAYWARD AIR TERMINAL HWD	**Runway Surface Type:**	Asphalt
Airport Elevation:	47 ft msl	**Runway Surface Condition:**	Dry
Runway Used:	28L	**IFR Approach:**	None
Runway Length/Width:	5024 ft / 150 ft	**VFR Approach/Landing:**	Touch and go

Wreckage and Impact Information

Crew Injuries:	1 None	**Aircraft Damage:**	Destroyed
Passenger Injuries:		**Aircraft Fire:**	On-ground
Ground Injuries:	N/A	**Aircraft Explosion:**	None
Total Injuries:	1 None	**Latitude, Longitude:**	37.629497,-122.040931(est)

Administrative Information

Investigator In Charge (IIC):	Childress, Deborah
Additional Participating Persons:	JOSE BENAVIDES; OAKLAND , CA
Original Publish Date:	April 19, 2001
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=45559