



National Transportation Safety Board Aviation Accident Final Report

Location:	PALO ALTO, CA	Accident Number:	LAX92LA056
Date & Time:	12/01/1991, 1555 PST	Registration:	N3170Z
Aircraft:	PIPER PA22-150	Aircraft Damage:	Substantial
Defining Event:		Injuries:	4 None

Flight Conducted Under: Part 91: General Aviation - Personal

Analysis

THE PILOT REPORTED THAT HIS AIRPLANE HAD BEEN MODIFIED BY THE INSTALLATION OF A TAIL WHEEL ASSEMBLY. ACCORDING TO THE PILOT, HE LANDED ON RUNWAY 12 AND DURING ROLLOUT LOST DIRECTIONAL CONTROL. THEREAFTER, THE AIRPLANE GROUND LOOPED. AT THE TIME THE WIND WAS FROM 120 DEGREES AT 5 KNOTS. DURING THE POST-ACCIDENT EXAMINATION OF THE AIRPLANE NO EVIDENCE WAS FOUND OF ANY MECHANICAL MALFUNCTIONS. THE PILOT REPORTED HAVING 600 HOURS OF TAIL DRAGGER FLIGHT TIME.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: THE PILOT'S FAILURE TO MAINTAIN DIRECTIONAL CONTROL DURING THE LANDING ROLLOUT.

Findings

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

Findings

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

Occurrence #2: ON GROUND/WATER ENCOUNTER WITH TERRAIN/WATER
Phase of Operation: LANDING - ROLL

Findings

2. GROUND LOOP/SWERVE - INADVERTENT - PILOT IN COMMAND

Factual Information

Pilot Information

Certificate:	Private	Age:	48, Male
Airplane Rating(s):	Single-engine Land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 Valid Medical--w/ waivers/lim.	Last FAA Medical Exam:	03/16/1990
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	1162 hours (Total, all aircraft), 45 hours (Total, this make and model), 1048 hours (Pilot In Command, all aircraft), 16 hours (Last 90 days, all aircraft), 15 hours (Last 30 days, all aircraft), 7 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	PIPER	Registration:	N3170Z
Model/Series:	PA22-150 PA22-150	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	22-7122
Landing Gear Type:	Tailwheel	Seats:	4
Date/Type of Last Inspection:	10/25/1991, Annual	Certified Max Gross Wt.:	2000 lbs
Time Since Last Inspection:	24 Hours	Engines:	1 Reciprocating
Airframe Total Time:	2707 Hours	Engine Manufacturer:	LYCOMING
ELT:	Installed, not activated	Engine Model/Series:	O-320
Registered Owner:	JAMES HAM	Rated Power:	150 hp
Operator:	JAMES HAM	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	PAO, 5 ft msl	Distance from Accident Site:	1 Nautical Miles
Observation Time:	1556 PST	Direction from Accident Site:	1°
Lowest Cloud Condition:	Clear / 0 ft agl	Visibility	5 Miles
Lowest Ceiling:	Broken / 2000 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	5 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	120°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	16° C / 2° C
Precipitation and Obscuration:			
Departure Point:	BAKERSFIELD, CA (BFL)	Type of Flight Plan Filed:	VFR
Destination:		Type of Clearance:	VFR
Departure Time:	1400 PST	Type of Airspace:	Class D; Class E

Airport Information

Airport:	PALO ALTO (PAO)	Runway Surface Type:	Asphalt
Airport Elevation:	5 ft	Runway Surface Condition:	Dry
Runway Used:	12	IFR Approach:	None
Runway Length/Width:	2500 ft / 65 ft	VFR Approach/Landing:	Full Stop

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	3 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	4 None	Latitude, Longitude:	

Administrative Information

Investigator In Charge (IIC):	George E Petterson	Report Date:	05/03/1993
Additional Participating Persons:	HAROLD CACCAMISE; SAN JOSE, 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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The Independent Safety Board Act, as codified at 49 U.S.C. Section 1154(b), precludes the admission into evidence or use of any part of an NTSB report related to an incident or accident in a civil action for damages resulting from a matter mentioned in the report. A factual report that may be admissible under 49 U.S.C. § 1154(b) is available [here](#).