



# Aviation Investigation Final Report

<b>Location:</b>	SACRAMENTO, California	<b>Accident Number:</b>	LAX99LA179
<b>Date &amp; Time:</b>	May 11, 1999, 09:14 Local	<b>Registration:</b>	N23NL
<b>Aircraft:</b>	Hamilton SPECIAL SC-1	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>	PITTS	<b>Injuries:</b>	1 None
<b>Flight Conducted Under:</b>	Part 91: General aviation - Personal		

## Analysis

The pilot reported that he began the flare higher than normal and the airplane subsequently stalled about 3 to 4 feet above the runway surface. After the initial bounce, the aircraft drifted left and contacted the surface again. The left wing contacted the pavement and the aircraft ground looped. The airplane nosed over and came to rest inverted on the runway. The Sacramento weather observation facility reported that the winds at the time of the accident were from 310 degrees at 6 knots.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's misjudged flare, which led to bounced landing, and his failure to maintain directional control of the aircraft during the bounced landing recovery.

## Findings

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

### Findings

1. (C) FLARE - MISJUDGED - PILOT IN COMMAND
2. (C) RECOVERY FROM BOUNCED LANDING - INADEQUATE - PILOT IN COMMAND
3. (C) DIRECTIONAL CONTROL - NOT MAINTAINED - PILOT IN COMMAND
4. GROUND LOOP/SWERVE - ENCOUNTERED - PILOT IN COMMAND

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Occurrence #2: NOSE OVER  
Phase of Operation: LANDING - ROLL

## Factual Information

On May 11, 1999, at 0914 hours Pacific daylight time, an amateur built experimental Hamilton Pitts Special SC-1, N23NL, nosed over while landing at the Sacramento Executive Airport, Sacramento, California. The aircraft, operated by the pilot, sustained substantial damage. The commercial pilot was not injured. The flight originated at the Sacramento Executive Airport about 0800, and was being conducted as a local area personal flight under the provisions of 14 CFR Part 91 of the Federal Aviation Regulations. Visual meteorological conditions prevailed and no flight plan was filed.

The pilot reported that he setup the final approach to runway 20. He stated that he began the flare higher than normal and the aircraft subsequently stalled about 3 to 4 feet above the runway surface. After the initial bounce, the aircraft drifted left and contacted the surface again. The left wing contacted the pavement and the aircraft ground looped. The airplane nosed over and came to rest inverted on the runway. The Sacramento weather observation facility reported that the winds at the time of the accident were from 310 degrees at 6 knots.

### Pilot Information

<b>Certificate:</b>	Commercial; Flight instructor	<b>Age:</b>	39, Male
<b>Airplane Rating(s):</b>	Single-engine land	<b>Seat Occupied:</b>	Center
<b>Other Aircraft Rating(s):</b>	Helicopter	<b>Restraint Used:</b>	
<b>Instrument Rating(s):</b>	Airplane; Helicopter	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	Helicopter	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 2 Valid Medical--no waivers/lim.	<b>Last FAA Medical Exam:</b>	September 7, 1998
<b>Occupational Pilot:</b>	UNK	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	3748 hours (Total, all aircraft), 3 hours (Total, this make and model), 2910 hours (Pilot In Command, all aircraft), 202 hours (Last 90 days, all aircraft), 48 hours (Last 30 days, all aircraft), 6 hours (Last 24 hours, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Hamilton	<b>Registration:</b>	N23NL
<b>Model/Series:</b>	PITTS SPECIAL SC-1 PITTS SPEC	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	Yes
<b>Airworthiness Certificate:</b>	Experimental (Special)	<b>Serial Number:</b>	RH1
<b>Landing Gear Type:</b>	Tailwheel	<b>Seats:</b>	1
<b>Date/Type of Last Inspection:</b>	May 5, 1999 Annual	<b>Certified Max Gross Wt.:</b>	1050 lbs
<b>Time Since Last Inspection:</b>	2 Hrs	<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	359 Hrs	<b>Engine Manufacturer:</b>	Lycoming
<b>ELT:</b>	Not installed	<b>Engine Model/Series:</b>	O-320-A2B
<b>Registered Owner:</b>	MICHAEL MACKES	<b>Rated Power:</b>	150 Horsepower
<b>Operator:</b>	SCOTT MONROE	<b>Operating Certificate(s) Held:</b>	None
<b>Operator Does Business As:</b>		<b>Operator Designator Code:</b>	

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual (VMC)	<b>Condition of Light:</b>	Day
<b>Observation Facility, Elevation:</b>	SAC ,24 ft msl	<b>Distance from Accident Site:</b>	
<b>Observation Time:</b>	09:16 Local	<b>Direction from Accident Site:</b>	
<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>	6 knots /	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	310°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>	30 inches Hg	<b>Temperature/Dew Point:</b>	17°C / 10°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	(SAC )	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>		<b>Type of Clearance:</b>	VFR
<b>Departure Time:</b>	08:00 Local	<b>Type of Airspace:</b>	Class D

## Airport Information

<b>Airport:</b>	SACRAMENTO EXECUTIVE SAC	<b>Runway Surface Type:</b>	Asphalt
<b>Airport Elevation:</b>	24 ft msl	<b>Runway Surface Condition:</b>	Dry
<b>Runway Used:</b>	20	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>	5503 ft / 150 ft	<b>VFR Approach/Landing:</b>	Full stop;Traffic pattern

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 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>	1 None	<b>Latitude, Longitude:</b>	38.510364,-121.490196(est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Rich, Jeff
<b>Additional Participating Persons:</b>	KEN MEYER; SACRAMENTO , CA
<b>Original Publish Date:</b>	November 22, 2000
<b>Last Revision Date:</b>	
<b>Investigation Class:</b>	<a href="#">Class</a>
<b>Note:</b>	
<b>Investigation Docket:</b>	<a href="https://data.ntsb.gov/Docket?ProjectID=46270">https://data.ntsb.gov/Docket?ProjectID=46270</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](#).