



# Aviation Investigation Final Report

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|                                |                                      |                         |             |
|--------------------------------|--------------------------------------|-------------------------|-------------|
| <b>Location:</b>               | Livermore, California                | <b>Accident Number:</b> | LAX03CA246  |
| <b>Date &amp; Time:</b>        | July 13, 2003, 10:30 Local           | <b>Registration:</b>    | N25SF       |
| <b>Aircraft:</b>               | Maysmike Pitts S1S                   | <b>Aircraft Damage:</b> | Substantial |
| <b>Defining Event:</b>         |                                      | <b>Injuries:</b>        | 1 None      |
| <b>Flight Conducted Under:</b> | Part 91: General aviation - Personal |                         |             |

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## Analysis

The airplane ground looped during the landing roll. After practicing touch-and-go's at another airport, the pilot returned for landing. The touchdown was normal except for a "slight bounce." During the roll out, the left wing lifted and the airplane turned slightly to the left. The pilot applied "rudder correction with [the] stick full back." The airplane continued to turn left and he attempted differential braking; however, the airplane continued to turn left. The airplane came to rest facing about 90 degrees left of the runway heading. The right wing sustained a broken spar and broken ribs, and the right landing gear was bent during the turn. In a post accident examination, all flight controls functioned properly and no preimpact anomalies were found. The winds reported at 0953 were 240 degree at 6 knots. The winds reported at 1053 were 230 degrees at 7 knots.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's inadequate compensation for crosswind conditions, which resulted in a loss of directional control and a ground loop.

## Findings

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Occurrence #1: LOSS OF CONTROL - ON GROUND/WATER

Phase of Operation: LANDING - ROLL

### Findings

1. WEATHER CONDITION - CROSSWIND
2. (C) COMPENSATION FOR WIND CONDITIONS - INADEQUATE - PILOT IN COMMAND
3. (C) DIRECTIONAL CONTROL - NOT MAINTAINED - PILOT IN COMMAND
4. (C) GROUND LOOP/SWERVE - INADVERTENT - PILOT IN COMMAND

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Occurrence #2: ON GROUND/WATER ENCOUNTER WITH TERRAIN/WATER

Phase of Operation: LANDING - ROLL

### Findings

5. TERRAIN CONDITION - RUNWAY

## Factual Information

On July 13, 2003, about 1030 Pacific daylight time, an experimental Maysmike Pitts S1S, N25SF, ground looped during the landing roll out at Livermore Airport (LVK), Livermore, California. The pilot was operating the airplane under the provisions of 14 CFR Part 91. The pilot was not injured; the airplane sustained substantial damage. The flight departed Livermore about 0900 for the local area personal flight. Visual meteorological conditions prevailed and no flight plan had been filed.

In a written statement, the pilot reported after practicing touch-and-go's at Byron Airport (C83), Byron, California, he returned for landing at Livermore, runway 25. The touchdown was normal except for a "slight bounce." During the roll out, the left wing lifted and the airplane turned slightly to the left. The pilot applied "rudder correction with [the] stick full back." The airplane continued to turn left and he attempted differential braking; however, the airplane continued to turn left. The airplane came to rest facing about 90 degrees left of the runway heading. The right wing sustained a broken spar and broken ribs, and the right landing gear was bent during the turn.

The Federal Aviation Administration (FAA) inspector examined the airplane. All flight controls functioned properly and no preimpact anomalies were found.

The winds reported by the Livermore Aviation Routine Weather Report (METAR) at 0953 were 240 degree at 6 knots. The winds reported at 1053 were 230 degrees at 7 knots.

### Pilot Information

|                                  |  |  |                |
|----------------------------------|--|--|----------------|
| <b>Certificate:</b>              | Private  | <b>Age:</b>                              | 40, Male       |
| <b>Airplane Rating(s):</b>       | Single-engine land   | <b>Seat Occupied:</b>                    |                |
| <b>Other Aircraft Rating(s):</b> | None   | <b>Restraint Used:</b>                   |                |
| <b>Instrument Rating(s):</b>     | None   | <b>Second Pilot Present:</b>             |                |
| <b>Instructor Rating(s):</b>     | None   | <b>Toxicology Performed:</b>             | No             |
| <b>Medical Certification:</b>    | Class 3 Valid Medical-w/<br>waivers/lim  | <b>Last FAA Medical Exam:</b>            | April 11, 2003 |
| <b>Occupational Pilot:</b>       |  | <b>Last Flight Review or Equivalent:</b> |                |
| <b>Flight Time:</b>              | 277 hours (Total, all aircraft), 39 hours (Total, this make and model), 8 hours (Last 90 days, all aircraft), 4 hours (Last 30 days, all aircraft) |  |                |

## Aircraft and Owner/Operator Information

|                                      |                        |                                       |                 |
|--------------------------------------|------------------------|---------------------------------------|-----------------|
| <b>Aircraft Make:</b>                | Maysmike               | <b>Registration:</b>                  | N25SF           |
| <b>Model/Series:</b>                 | Pitts S1S              | <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>                 | MLM-001         |
| <b>Landing Gear Type:</b>            | Tailwheel              | <b>Seats:</b>                         |                 |
| <b>Date/Type of Last Inspection:</b> |                        | <b>Certified Max Gross Wt.:</b>       | 1150 lbs        |
| <b>Time Since Last Inspection:</b>   |                        | <b>Engines:</b>                       | 1 Reciprocating |
| <b>Airframe Total Time:</b>          |                        | <b>Engine Manufacturer:</b>           | Lycoming        |
| <b>ELT:</b>                          |                        | <b>Engine Model/Series:</b>           | AEIO-360 Ser    |
| <b>Registered Owner:</b>             | Douglas Hiranaka       | <b>Rated Power:</b>                   |                 |
| <b>Operator:</b>                     |                        | <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> | KLVK,400 ft msl                  | <b>Distance from Accident Site:</b>         |             |
| <b>Observation Time:</b>                | 10:53 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>                | 7 knots /                        | <b>Turbulence Type Forecast/Actual:</b>     | /           |
| <b>Wind Direction:</b>                  | 230°                             | <b>Turbulence Severity Forecast/Actual:</b> | /           |
| <b>Altimeter Setting:</b>               | 30.1 inches Hg                   | <b>Temperature/Dew Point:</b>               | 24°C / 14°C |
| <b>Precipitation and Obscuration:</b>   | No Obscuration; No Precipitation |   |             |
| <b>Departure Point:</b>                 | Livermore, CA (KLVK)             | <b>Type of Flight Plan Filed:</b>           | None        |
| <b>Destination:</b>                     |                                  | <b>Type of Clearance:</b>                   | VFR         |
| <b>Departure Time:</b>                  | 09:00 Local                      | <b>Type of Airspace:</b>                    | Class D     |

## Airport Information

|                             |                |                                  |      |
|-----------------------------|----------------|----------------------------------|------|
| <b>Airport:</b>             | Livermore KLVK | <b>Runway Surface Type:</b>      |      |
| <b>Airport Elevation:</b>   |                | <b>Runway Surface Condition:</b> |      |
| <b>Runway Used:</b>         | 25             | <b>IFR Approach:</b>             | None |
| <b>Runway Length/Width:</b> |                | <b>VFR Approach/Landing:</b>     |      |

## 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> | 37.693332,-121.820274 |

## Administrative Information

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|--|---|
| <b>Investigator In Charge (IIC):</b>     | Charnon, Nicole   |
| <b>Additional Participating Persons:</b> | Harold Carnahan; Oakland FSDO; Oakland, CA  |
| <b>Original Publish Date:</b>            | November 25, 2003   |
| <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=57580">https://data.nts.gov/Docket?ProjectID=57580</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](#).