



# Aviation Investigation Final Report

<b>Location:</b>	MAMMOTH LAKES, California	<b>Accident Number:</b>	LAX99LA254
<b>Date &amp; Time:</b>	July 17, 1999, 13:17 Local	<b>Registration:</b>	N1692H
<b>Aircraft:</b>	Piper PA32R-300	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	2 None
<b>Flight Conducted Under:</b>	Part 91: General aviation		

## Analysis

The pilot added full fuel prior to departure. The AWOS (Automated Weather Observing System) reported the density altitude was 9,400 feet. He reviewed the procedures for a high altitude takeoff, completed an engine run up, and leaned for departure. After taxiing into position for takeoff, he applied the brakes then power. The runway was slightly uphill and the pilot did not feel the airplane was developing full power, but he did not abort the takeoff. The airplane climbed approximately 200 feet, but would not climb higher. After deciding an attempt to turn could induce a stall, the pilot lowered the landing gear and airspeed as much as possible. He maintained a controlled descent into the terrain and estimated his speed at touchdown was 50 to 60 knots. The pilot felt the density altitude prevented the airplane from climbing. The airport had an elevation of 7,128 feet msl (mean sea level). An aviation routine weather report (METAR) issued reported the temperature was 73 degrees Fahrenheit and the altimeter setting was 30.22 inHg.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's failure to attain and maintain an adequate airspeed for the prevailing density altitude. The pilot's failure to abort the takeoff is also causal.

## Findings

Occurrence #1: LOSS OF CONTROL - IN FLIGHT  
Phase of Operation: TAKEOFF - INITIAL CLIMB

Findings

1. AIRPORT FACILITIES,RUNWAY/LANDING AREA CONDITION - UPHILL
2. PLANNING/DECISION - INADEQUATE - PILOT IN COMMAND
3. (F) WEATHER CONDITION - HIGH DENSITY ALTITUDE
4. (C) AIRSPEED - INADEQUATE - PILOT IN COMMAND
5. (C) ABORTED TAKEOFF - NOT PERFORMED - PILOT IN COMMAND
6. STALL/MUSH - ENCOUNTERED - PILOT IN COMMAND

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Occurrence #2: IN FLIGHT COLLISION WITH TERRAIN/WATER

Phase of Operation: DESCENT - UNCONTROLLED

## Factual Information

On July 17, 1999, at 1317 hours Pacific daylight time, a Piper PA32R-300, N1692H, sustained substantial damage when it collided with terrain during the takeoff initial climb from the Mammoth Lakes, California, airport. The commercial pilot and his passenger were not injured. The airplane was owned and operated by the pilot under the provisions of 14 CFR Part 91 for a cross-country personal flight. The pilot departed Mammoth Lakes 3 to 4 minutes prior to the accident en route to Oxnard, California. Visual meteorological conditions prevailed and a VFR flight plan was filed, but not yet activated.

The pilot stated he flew into Mammoth Lakes the day before the accident. He was planning to fly to Oxnard and then on to Monterrey, California, where the airplane was based. He added full fuel prior to departure. The pilot listened to the AWOS (Automated Weather Observing System), which reported a density altitude of 9,400 feet. He reviewed the procedures for a high altitude takeoff, completed an engine run up, and leaned for departure. After taxiing into position for takeoff, he applied the brakes, then power. The pilot stated the runway was slightly uphill and he did not feel the airplane was developing full power, but did not abort the takeoff. The airplane climbed approximately 200 feet, but would not climb higher. After deciding an attempt to turn could induce a stall, the pilot lowered the landing gear and airspeed as much as possible. He maintained a controlled descent into the terrain and estimated his speed at touchdown was 50 to 60 knots.

The pilot said he felt the density altitude prevented the airplane from climbing. The airport facilities/directory indicated Mammoth Lakes had an elevation of 7,128 feet msl (mean sea level). An aviation routine weather report (METAR) issued for Mammoth Lakes at 1251 reported the temperature was 73 degrees Fahrenheit and the altimeter setting was 30.22 inHg.

## Pilot Information

<b>Certificate:</b>	Commercial; Flight instructor	<b>Age:</b>	51, Male
<b>Airplane Rating(s):</b>	Single-engine land; Multi-engine land	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>	Glider	<b>Restraint Used:</b>	
<b>Instrument Rating(s):</b>	Airplane	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	Airplane multi-engine; Airplane single-engine; Instrument airplane	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 3 Valid Medical-w/ waivers/lim	<b>Last FAA Medical Exam:</b>	January 14, 1999
<b>Occupational Pilot:</b>	UNK	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	1280 hours (Total, all aircraft), 12 hours (Total, this make and model), 972 hours (Pilot In Command, all aircraft), 12 hours (Last 90 days, all aircraft), 12 hours (Last 30 days, all aircraft), 4 hours (Last 24 hours, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Piper	<b>Registration:</b>	N1692H
<b>Model/Series:</b>	PA32R-300 PA32R-300	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	32R-7780177
<b>Landing Gear Type:</b>	Retractable - Tricycle	<b>Seats:</b>	6
<b>Date/Type of Last Inspection:</b>	February 19, 1999 Annual	<b>Certified Max Gross Wt.:</b>	3600 lbs
<b>Time Since Last Inspection:</b>	22 Hrs	<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	3089 Hrs	<b>Engine Manufacturer:</b>	Lycoming
<b>ELT:</b>	Installed, activated, did not aid in locating accident	<b>Engine Model/Series:</b>	IO-540-KIG5D
<b>Registered Owner:</b>	MICHAEL L. PHILLIPS	<b>Rated Power:</b>	300 Horsepower
<b>Operator:</b>		<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>	MMH ,7128 ft msl	<b>Distance from Accident Site:</b>	
<b>Observation Time:</b>	12:51 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>	11 knots / 14 knots	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	200°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>	30 inches Hg	<b>Temperature/Dew Point:</b>	23°C / -1°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	(MMH )	<b>Type of Flight Plan Filed:</b>	VFR
<b>Destination:</b>	OXNARD , CA (OXR )	<b>Type of Clearance:</b>	VFR
<b>Departure Time:</b>	13:13 Local	<b>Type of Airspace:</b>	Class G

## Airport Information

<b>Airport:</b>	MAMMOTH LAKES MMH	<b>Runway Surface Type:</b>	Asphalt
<b>Airport Elevation:</b>	7128 ft msl	<b>Runway Surface Condition:</b>	Dry
<b>Runway Used:</b>	27	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>	7000 ft / 100 ft	<b>VFR Approach/Landing:</b>	None

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 None	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>	1 None	<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	2 None	<b>Latitude, Longitude:</b>	37.580505,-118.840583(est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Plagens, Howard
<b>Additional Participating Persons:</b>	KEN KELLY; RENO , NV
<b>Original Publish Date:</b>	August 14, 2001
<b>Last Revision Date:</b>	
<b>Investigation Class:</b>	<a href="#">Class</a>
<b>Note:</b>	
<b>Investigation Docket:</b>	<a href="https://data.nts.gov/Docket?ProjectID=46810">https://data.nts.gov/Docket?ProjectID=46810</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](#).