



# Aviation Investigation Final Report

<b>Location:</b>	Woodlake, California	<b>Accident Number:</b>	LAX07CA013
<b>Date &amp; Time:</b>	October 6, 2006, 17:00 Local	<b>Registration:</b>	N40AW
<b>Aircraft:</b>	Aviat A-1A	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	1 None
<b>Flight Conducted Under:</b>	Part 91: General aviation - Personal		

## Analysis

During the landing rollout, the left main landing gear wheel dropped into a hole and the landing gear collapsed, which caused structural damage to the left wing and fuselage of the airplane. The pilot said he was flying in a mountain area looking for spots to conduct a ground training exercise for a group with which he is associated. The pilot decided to land. The landing area chosen by the pilot was a meadow on top of a mountain, with 2-foot-tall grass that masked the roughness of the terrain and holes that were in the ground. The pilot reported no mechanical anomalies with the airplane.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: the collapse of the landing gear during the landing roll out due to an encounter with rough uneven terrain. Also causal was the pilot's in-flight decision to land on the unsuitable mountainous uneven terrain with hidden obstructions.

## Findings

Occurrence #1: ON GROUND/WATER ENCOUNTER WITH TERRAIN/WATER  
Phase of Operation: LANDING - ROLL

Findings

1. TERRAIN CONDITION - MOUNTAINOUS/HILLY
2. (C) TERRAIN CONDITION - ROUGH/UNEVEN
3. TERRAIN CONDITION - HIDDEN OBSTRUCTION(S)
4. (C) IN-FLIGHT PLANNING/DECISION - INADEQUATE - PILOT IN COMMAND
5. (C) UNSUITABLE TERRAIN OR TAKEOFF/LANDING/TAXI AREA - SELECTED - PILOT IN COMMAND

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Occurrence #2: MAIN GEAR COLLAPSED  
Phase of Operation: LANDING - ROLL

## Factual Information

On October 6, 2006, about 1700 Pacific daylight time, an Aviat Aircraft Inc, A-1A (Husky), N40AW, had the left landing gear collapse during the landing rollout on uneven mountainous terrain on Red Mountain near Woodlake, California. The owner operated the airplane under the provisions of 14 CFR Part 91. The pilot, the sole occupant, borrowed the airplane for the personal flight, and was not injured. Visual meteorological conditions prevailed for the local area flight that departed Visalia Municipal Airport (VIS), Visalia, California, about 1630, with the accident site as the intended destination. The global positioning system (GPS) coordinates of the accident site were 35 degrees 42 minutes north latitude and 118 degrees 33 minutes west longitude.

In the pilot's written statement to the National Transportation Safety Board, the pilot reported that he was flying around the foothills looking for waypoints for an upcoming flight training exercise. He landed on a meadow on Red Mountain. During the landing rollout the left main landing gear hit a hole and collapsed. The left wing struck the ground, the airplane rotated about 20 degrees to the left, and the propeller struck the ground. The airplane sustained structural damage to the left wing and the left side of the fuselage near the landing gear. The pilot reported no mechanical anomalies with the airplane.

The Federal Aviation Administration (FAA) Flight Standards District Office, Fresno, California, was notified of the incident on October 13, 2006. An FAA airworthiness inspector responded to the site on October 19, 2006, and determined there was structural damage to the airplane. According to the FAA inspector, the landing was done on an upslope, and 2-foot-tall grass surrounded the area .

The Safety Board investigator-in-charge (IIC) was notified about the damage to the airplane on October 20, 2006, and upgraded the incident to an accident.

## Pilot Information

<b>Certificate:</b>	Airline transport	<b>Age:</b>	68, Male
<b>Airplane Rating(s):</b>	Single-engine land; Single-engine sea; Multi-engine land; Multi-engine sea	<b>Seat Occupied:</b>	
<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>	None	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 2	<b>Last FAA Medical Exam:</b>	March 1, 2006
<b>Occupational Pilot:</b>		<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	36000 hours (Total, all aircraft), 800 hours (Total, this make and model), 10 hours (Last 90 days, all aircraft), 5 hours (Last 30 days, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Aviat	<b>Registration:</b>	N40AW
<b>Model/Series:</b>	A-1A	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>		<b>Serial Number:</b>	1452
<b>Landing Gear Type:</b>	Tricycle	<b>Seats:</b>	
<b>Date/Type of Last Inspection:</b>		<b>Certified Max Gross Wt.:</b>	
<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>	O-360
<b>Registered Owner:</b>	On file	<b>Rated Power:</b>	
<b>Operator:</b>	On file	<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>	VIS	<b>Distance from Accident Site:</b>	
<b>Observation Time:</b>		<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>	/	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>		<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>		<b>Temperature/Dew Point:</b>	
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	Visalia, CA (VIS)	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>		<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	19:30 Local	<b>Type of Airspace:</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>	
<b>Total Injuries:</b>	1 None	<b>Latitude, Longitude:</b>	35.7,-118.550003

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Cornejo, Tealeye
<b>Additional Participating Persons:</b>	Jim Murray; Federal Aviation Administration; Fresno, CA
<b>Original Publish Date:</b>	January 31, 2007
<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=64729">https://data.nts.gov/Docket?ProjectID=64729</a>

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