



# National Transportation Safety Board Aviation Accident Data Summary

<b>Location:</b>	Boulder City, NV	<b>Accident Number:</b>	LAX02LA123
<b>Date &amp; Time:</b>	04/02/2002, 1645 PST	<b>Registration:</b>	N48908
<b>Aircraft:</b>	Cessna 152	<b>Injuries:</b>	2 None
<b>Flight Conducted Under:</b>	Part 91: General Aviation - Instructional		

## Analysis

The airplane made an off airport forced landing following a loss of engine power immediately after departure. After takeoff, upon reaching 300 to 400 feet above ground level (agl), the engine experienced a rapid loss of power. The pilot maneuvered the airplane in a gliding configuration and, after determining that the airplane was unable to reach airport, opted to perform a forced landing in a dry riverbed. While in the landing flare, the airplane collided with vegetation and came to an abrupt stop after impacting a large bush. A review of the airplane's maintenance records disclosed that the engine had a history of ongoing problems with the idle mixture. In an effort to address those problems, the operator had the carburetor overhauled about a week prior the accident. The mixture discrepancy occurred again following the carburetor overhaul. After the accident, an engine examination revealed that spark plugs from the number one cylinder, as well as the top number two plug, appeared dark and sooty, with the bottom number two plug being oily. In addition, the bottom number three and four plugs were covered in lead deposits. Investigators performed an engine run, where it accelerated up to 1,600 revolutions per minute (rpm) and, despite black smoke emitting from the exhaust stack, ran smoothly; after leaning out the mixture, it accelerated up to 2,100 rpm and the exhaust cleared. A detailed examination of the carburetor revealed no mechanical malfunctions or anomalies other than an excessively low idle fuel flow.

## Probable Cause

The National Transportation Safety Board determines the probable cause(s) of this accident to be: a loss of engine power due to an undetermined malfunction of the carburetor.

## Findings

Occurrence #1: LOSS OF ENGINE POWER  
Phase of Operation: TAKEOFF - INITIAL CLIMB

### Findings

1. FUEL SYSTEM, CARBURETOR - EXCESSIVE FLOW/OUTPUT
2. (C) REASON FOR OCCURRENCE UNDETERMINED

Occurrence #2: FORCED LANDING  
Phase of Operation: EMERGENCY LANDING AFTER TAKEOFF

Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER  
Phase of Operation: EMERGENCY DESCENT/LANDING

## Findings

### 3. TERRAIN CONDITION - HIGH VEGETATION

#### Pilot Information

<b>Certificate:</b>	Flight Instructor; Commercial	<b>Age:</b>	31
<b>Airplane Rating(s):</b>	Multi-engine Land; Single-engine Land	<b>Instrument Rating(s):</b>	Airplane
<b>Other Aircraft Rating(s):</b>	None	<b>Instructor Rating(s):</b>	Airplane Single-engine
<b>Flight Time:</b>	713 hours (Total, all aircraft), 126 hours (Total, this make and model), 615 hours (Pilot In Command, all aircraft), 209 hours (Last 90 days, all aircraft), 84 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

#### Student Pilot Information

<b>Certificate:</b>	Student	<b>Age:</b>	
<b>Airplane Rating(s):</b>	None	<b>Instrument Rating(s):</b>	None
<b>Other Aircraft Rating(s):</b>	None	<b>Instructor Rating(s):</b>	None
<b>Flight Time:</b>			

#### Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Cessna	<b>Registration:</b>	N48908
<b>Model/Series:</b>	152	<b>Engines:</b>	1 Reciprocating
<b>Operator:</b>	AIR EXCEL, INC.	<b>Engine Manufacturer:</b>	Lycoming
<b>Operating Certificate(s) Held:</b>	None	<b>Engine Model/Series:</b>	O-235-L2C
<b>Flight Conducted Under:</b>	Part 91: General Aviation - Instructional		

#### Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual Conditions	<b>Condition of Light:</b>	Day
<b>Observation Facility, Elevation:</b>	LAS, 2127 ft msl	<b>Weather Information Source:</b>	Weather Observation Facility
<b>Lowest Ceiling:</b>	None	<b>Wind Speed/Gusts, Direction:</b>	7 knots / , 100°
<b>Temperature:</b>	31 °C	<b>Visibility</b>	10 Miles
<b>Precipitation and Obscuration:</b>			
<b>Departure Point:</b>	Boulder City, NV (61B)	<b>Destination:</b>	

#### Airport Information

<b>Airport:</b>	Boulder City Municipal Airport (61B)	<b>Runway Surface Type:</b>	Asphalt
<b>Runway Used:</b>	27L	<b>Runway Surface Condition:</b>	Dry; Rough; Vegetation
<b>Runway Length/Width:</b>	4800 ft / 75 ft		

## Wreckage and Impact Information

<b>Crew Injuries:</b>	2 None	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>	N/A	<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Latitude, Longitude:</b>	35.947222, -114.860833		

## Administrative Information

<b>Investigator In Charge (IIC):</b>	HOWARD D PLAGENS	<b>Adopted Date:</b>	07/07/2005
<b>Investigation Docket:</b>	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 <a href="mailto:pubinq@ntsb.gov">pubinq@ntsb.gov</a> , or at 800-877-6799. Dockets released after this date are available at <a href="http://dms.nts.gov/pubdms/">http://dms.nts.gov/pubdms/</a> .		

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