



# National Transportation Safety Board Aviation Accident Data Summary

<b>Location:</b>	Goodyear, AZ	<b>Accident Number:</b>	LAX04LA111
<b>Date &amp; Time:</b>	02/01/2004, 1100 MST	<b>Registration:</b>	N2234S
<b>Aircraft:</b>	Cessna T210L	<b>Injuries:</b>	2 Serious, 1 Minor, 1 None
<b>Flight Conducted Under:</b>	Part 91: General Aviation - Personal		

## Analysis

The airplane experienced a forced landing after a loss of power due to fuel exhaustion. The pilot stated that they had departed Burbank, California, en route to Gila Bend, Arizona, where they were going to refuel. The pilot reported to FAA inspectors that he had fueled the airplane to its 90-gallon capacity the day before the accident and had flown the airplane for 1 hour after that. During the accident flight, the pilot had used a richer mixture to aid in cooling one cylinder. He told the inspector that this may have led to a miscalculation of the fuel consumption during the flight. As the flight neared the vicinity of Gila Bend, the pilot contacted Albuquerque Air Route Traffic Control Center (ARTCC) and reported a low fuel situation and that he was going to land at Gila Bend for fuel. The controller contacted the Gila Bend airport and determined that there was no fuel available there and suggested that the pilot should divert to another airport. They then headed towards Buckeye Municipal Airport, but were later notified by ARTCC that Buckeye also did not have fuel. At this time they diverted to the Phoenix Goodyear Airport and advised the tower that they were low on fuel and coming in to land. As they approached the airport, the pilot switched fuel tanks but the airplane exhibited signs of fuel exhaustion. The engine lost power, and the pilot landed in a plowed field about 1 mile from the airport. Post accident inspection by FAA inspectors found no fuel onboard the airplane. All fuel lines and tanks were intact. The inspectors found no evidence of a fuel leak. According to the Pilot's Operating Handbook, the Cessna T210L has a fuel capacity of 90 gallons; .5 gallons are unusable on each side. According to the engine's manufacturer, the average fuel burn is about 18 gallons per hour at 75 percent horsepower.

## Probable Cause

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's inadequate fuel consumption calculations and in-flight planning/decision, which resulted in fuel exhaustion.

## Findings

Occurrence #1: LOSS OF ENGINE POWER(TOTAL) - NONMECHANICAL  
Phase of Operation: APPROACH

### Findings

1. (C) FLUID,FUEL - EXHAUSTION
2. (C) FUEL CONSUMPTION CALCULATIONS - INADEQUATE - PILOT IN COMMAND
3. (C) IN-FLIGHT PLANNING/DECISION - INADEQUATE - PILOT IN COMMAND

Occurrence #2: FORCED LANDING  
Phase of Operation: EMERGENCY LANDING  
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Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER  
Phase of Operation: LANDING

#### Findings

4. TERRAIN CONDITION - GROUND

### Pilot Information

<b>Certificate:</b>	Private	<b>Age:</b>	54
<b>Airplane Rating(s):</b>	Single-engine Land	<b>Instrument Rating(s):</b>	Airplane
<b>Other Aircraft Rating(s):</b>	None	<b>Instructor Rating(s):</b>	None
<b>Flight Time:</b>	1425 hours (Total, all aircraft)		

### Aircraft and Owner/Operator Information

<b>Aircraft Manufacturer:</b>	Cessna	<b>Registration:</b>	N2234S
<b>Model/Series:</b>	T210L	<b>Engines:</b>	1 Reciprocating
<b>Operator:</b>	Thomas J. Frith-Smith	<b>Engine Manufacturer:</b>	Continental
<b>Air Carrier Operating Certificate:</b>	None	<b>Engine Model/Series:</b>	TSIO-520-H
<b>Flight Conducted Under:</b>	Part 91: General Aviation - Personal		

### Meteorological Information and Flight Plan

<b>Observation Facility, Elevation:</b>	PHX, 1103 ft msl	<b>Weather Information Source:</b>	Weather Observation Facility
<b>Conditions at Accident Site:</b>	Visual Conditions	<b>Lowest Ceiling:</b>	None
<b>Condition of Light:</b>	Day	<b>Wind Speed/Gusts, Direction:</b>	Calm
<b>Temperature:</b>	12°C / -8°C	<b>Visibility</b>	10 Miles
<b>Precipitation and Obscuration:</b>			
<b>Departure Point:</b>	Burbank, CA (BUR)	<b>Destination:</b>	Goodyear, AZ (GYR)

### Wreckage and Impact Information

<b>Crew Injuries:</b>	1 Serious	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>	1 Serious, 1 Minor, 1 None	<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None

## Administrative Information

Investigator In Charge (IIC): HOWARD D PLAGENS

Adopted Date: 12/28/2004

Investigation Docket: 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 [pubinq@ntsb.gov](mailto:pubinq@ntsb.gov), or at 800-877-6799. Dockets released after this date are available at <http://dms.nts.gov/pubdms/>.

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