



# Aviation Investigation Final Report

<b>Location:</b>	VISALIA, California	<b>Accident Number:</b>	LAX91LA265
<b>Date &amp; Time:</b>	June 18, 1991, 13:40 Local	<b>Registration:</b>	N306AT
<b>Aircraft:</b>	GLASAIR                      SH-2-RG	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	2 Minor
<b>Flight Conducted Under:</b>	Part 91: General aviation - Personal		

## Analysis

THE CERTIFICATED PRIVATE PILOT/OWNER STATED THAT AN HOUR AND HALF INTO THE FLIGHT THE ENGINE STARTED TO RUN ROUGH AND LOST RPM. ALL INSTRUMENTS WERE IN THE GREEN. HE HEADED THE AIRCRAFT FOR A SUITABLE AIRPORT BUT THE ENGINE QUIT IN THE PATTERN. DUE TO WINDS HE WAS UNABLE TO MAKE THE RUNWAY. EXAMINATION OF THE ENGINE BY FAA INSPECTORS REVEALED THAT THE NUMBER 4 CYLINDER EXHAUST VALVE FAILED.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: TOTAL LOSS OF ENGINE POWER DUE TO THE FAILURE OF THE NUMBER 4 ENGINE EXHAUST VALVE.

## Findings

Occurrence #1: LOSS OF ENGINE POWER(PARTIAL) - MECH FAILURE/MALF  
Phase of Operation: CRUISE - NORMAL

Findings  
1. (C) ENGINE ASSEMBLY, VALVE, EXHAUST - FAILURE, TOTAL  
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Occurrence #2: FORCED LANDING  
Phase of Operation: DESCENT - EMERGENCY

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

Findings

2. (F) WEATHER CONDITION - HIGH WIND

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Occurrence #4: GEAR COLLAPSED  
Phase of Operation: LANDING - ROLL

## Factual Information

### Pilot Information

<b>Certificate:</b>	Private	<b>Age:</b>	63, Male
<b>Airplane Rating(s):</b>	Single-engine land	<b>Seat Occupied:</b>	Unknown
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	
<b>Instrument Rating(s):</b>	None	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>		<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 3 Valid Medical-w/ waivers/lim	<b>Last FAA Medical Exam:</b>	August 3, 1989
<b>Occupational Pilot:</b>	UNK	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	1330 hours (Total, all aircraft), 370 hours (Total, this make and model), 1330 hours (Pilot In Command, all aircraft), 16 hours (Last 90 days, all aircraft), 4 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	GLASAIR	<b>Registration:</b>	N306AT
<b>Model/Series:</b>	SH-2-RG SH-2-RG	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	Yes
<b>Airworthiness Certificate:</b>		<b>Serial Number:</b>	306
<b>Landing Gear Type:</b>	Retractable - Tricycle	<b>Seats:</b>	2
<b>Date/Type of Last Inspection:</b>	January 2, 2000 Unknown	<b>Certified Max Gross Wt.:</b>	1900 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>	Installed, activated, did not aid in locating accident	<b>Engine Model/Series:</b>	IO-360-A1B
<b>Registered Owner:</b>	FRANK R. SIGLER	<b>Rated Power:</b>	200 Horsepower
<b>Operator:</b>	FRANK R. SIGLER	<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>		<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>	30 miles
<b>Lowest Ceiling:</b>	None	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	20 knots /	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	310°	<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>	FALLBROOK , CA (L18 )	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>	LAKE TAHOE , CA (TVL )	<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	12:00 Local	<b>Type of Airspace:</b>	

## Airport Information

<b>Airport:</b>		<b>Runway Surface Type:</b>	
<b>Airport Elevation:</b>		<b>Runway Surface Condition:</b>	
<b>Runway Used:</b>	0	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>		<b>VFR Approach/Landing:</b>	Forced landing

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 Minor	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>	1 Minor	<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	2 Minor	<b>Latitude, Longitude:</b>	36.400089,-119.379615(est)

## Administrative Information

**Investigator In Charge (IIC):** Petterson, George

**Additional Participating Persons:**

**Original Publish Date:** May 7, 1993

**Last Revision Date:**

**Investigation Class:** [Class](#)

**Note:**

**Investigation Docket:** <https://data.ntsb.gov/Docket?ProjectID=27252>

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