



# Aviation Investigation Final Report

<b>Location:</b>	WASCO, California	<b>Accident Number:</b>	LAX91LA364
<b>Date &amp; Time:</b>	August 12, 1991, 07:00 Local	<b>Registration:</b>	N4663
<b>Aircraft:</b>	GRUMMAN G-164	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	1 None
<b>Flight Conducted Under:</b>	Part 137: Agricultural		

## Analysis

THE PILOT OF AN AGRICULTURAL AIRCRAFT NOSED OVER DURING A FORCED LANDING AFTER A LOSS OF ENGINE POWER DURING AN AERIAL APPLICATION. AN EXAMINATION OF THE ENGINE REVEALED THAT THE CAMSHAFT HAD FRACTURED. THE ENGINE WAS OVERHAULED 1100 HOURS PRIOR TO THE ACCIDENT. TOTAL TIME ON THE TIME ENGINE WAS ABOUT 4218 HOURS.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: A TOTAL LOSS OF ENGINE POWER DUE TO A FRACTURE OF THE CAMSHAFT AND THE SUBSEQUENT FORCED LANDING INTO A SOFT FIELD.

## Findings

Occurrence #1: LOSS OF ENGINE POWER(TOTAL) - MECH FAILURE/MALF  
Phase of Operation: MANEUVERING - AERIAL APPLICATION

### Findings

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

Findings

2. (F) TERRAIN CONDITION - CROP

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Occurrence #3: ON GROUND/WATER ENCOUNTER WITH TERRAIN/WATER

Phase of Operation: LANDING - FLARE/TOUCHDOWN

## Factual Information

### Pilot Information

<b>Certificate:</b>	Commercial; Flight instructor	<b>Age:</b>	62, Male
<b>Airplane Rating(s):</b>	Single-engine land; Multi-engine land	<b>Seat Occupied:</b>	Center
<b>Other Aircraft Rating(s):</b>	None	<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	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 2 Valid Medical--w/ waivers/lim	<b>Last FAA Medical Exam:</b>	August 30, 1990
<b>Occupational Pilot:</b>	Yes	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	18000 hours (Total, all aircraft), 4000 hours (Total, this make and model), 150 hours (Last 90 days, all aircraft), 50 hours (Last 30 days, all aircraft), 5 hours (Last 24 hours, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	GRUMMAN	<b>Registration:</b>	N4663
<b>Model/Series:</b>	G-164 G-164	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Restricted (Special)	<b>Serial Number:</b>	1078
<b>Landing Gear Type:</b>	Tailwheel	<b>Seats:</b>	1
<b>Date/Type of Last Inspection:</b>	August 26, 1988 100 hour	<b>Certified Max Gross Wt.:</b>	3750 lbs
<b>Time Since Last Inspection:</b>		<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	5423 Hrs	<b>Engine Manufacturer:</b>	P&W
<b>ELT:</b>	Not installed	<b>Engine Model/Series:</b>	R1340
<b>Registered Owner:</b>	MERLE D. HALLMARK	<b>Rated Power:</b>	600 Horsepower
<b>Operator:</b>	JACK R. JAMES	<b>Operating Certificate(s) Held:</b>	
<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>	Dawn
<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>	7 miles
<b>Lowest Ceiling:</b>	None	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	2 knots /	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	330°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>		<b>Temperature/Dew Point:</b>	31°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>		<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>		<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	07:00 Local	<b>Type of Airspace:</b>	Class G

## Airport Information

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

## Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	35.639495,-119.440124(est)

## Administrative Information

**Investigator In Charge (IIC):** Wilcox, Thomas

**Additional Participating Persons:**

**Original Publish Date:** April 8, 1993

**Last Revision Date:**

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

**Note:**

**Investigation Docket:** <https://data.nts.gov/Docket?ProjectID=27333>

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