



Aviation Investigation Final Report

Location:	MONTAGUE, California	Accident Number:	LAX91LA294
Date & Time:	July 7, 1991, 12:45 Local	Registration:	N3160N
Aircraft:	CESSNA 140	Aircraft Damage:	Substantial
Defining Event:		Injuries:	2 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

DURING CRUISE FLIGHT THE PILOT HEARD A LOUD BANGING NOISE COMING FROM THE ENGINE COMPARTMENT. THE PILOT REPORTED BEING UNABLE TO MAINTAIN ALTITUDE, AND HE MADE A FORCED LANDING. DURING ROLLOUT THE AIRPLANE COLLIDED WITH A BERM AND NOSED OVER. AN EXAMINATION OF THE ENGINE REVEALED THE NUMBER ONE CYLINDER'S EXHAUST VALVE WAS BROKEN. THE VALVE HAD BEEN IN USE FOR AT LEAST 973 OPERATIONAL HOURS PRIOR TO THE ACCIDENT.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: THE FAILURE OF AN EXHAUST VALVE IN THE ENGINE.

Findings

Occurrence #1: LOSS OF ENGINE POWER
Phase of Operation: APPROACH

Findings
1. (C) ENGINE ASSEMBLY, VALVE, EXHAUST - FAILURE, TOTAL

Occurrence #2: FORCED LANDING
Phase of Operation: DESCENT - EMERGENCY

Occurrence #3: ON GROUND/WATER ENCOUNTER WITH TERRAIN/WATER
Phase of Operation: LANDING - ROLL

Findings

2. TERRAIN CONDITION - BERM

Occurrence #4: NOSE OVER
Phase of Operation: LANDING - ROLL

Factual Information

Pilot Information

Certificate:	Private	Age:	55, Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Unknown
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):		Toxicology Performed:	No
Medical Certification:	Class 3 Valid Medical--w/ waivers/lim	Last FAA Medical Exam:	December 26, 1989
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:	275 hours (Total, all aircraft), 87 hours (Total, this make and model), 201 hours (Pilot In Command, all aircraft), 59 hours (Last 90 days, all aircraft), 18 hours (Last 30 days, all aircraft), 3 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	CESSNA	Registration:	N3160N
Model/Series:	140 140	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:		Serial Number:	13418
Landing Gear Type:	Tailwheel	Seats:	2
Date/Type of Last Inspection:	March 11, 1991 Annual	Certified Max Gross Wt.:	1500 lbs
Time Since Last Inspection:	28 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	1668 Hrs	Engine Manufacturer:	CONTINENTAL
ELT:	Installed, activated	Engine Model/Series:	85F
Registered Owner:	JACK W. POTTER	Rated Power:	85 Horsepower
Operator:	JACK W. POTTER	Operating Certificate(s) Held:	None
Operator Does Business As:		Operator Designator Code:	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:		Distance from Accident Site:	
Observation Time:		Direction from Accident Site:	
Lowest Cloud Condition:	Clear	Visibility	30 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/
Wind Direction:	0°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	AURORA , OR (3S2)	Type of Flight Plan Filed:	None
Destination:	AUBURN , CA (AUN)	Type of Clearance:	None
Departure Time:	10:30 Local	Type of Airspace:	

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:	1 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 None	Latitude, Longitude:	41.760421,-122.390159(est)

Administrative Information

Investigator In Charge (IIC):	Pollack, Wayne
Additional Participating Persons:	JAMES SHEPPARD; SACRAMENTO , CA
Original Publish Date:	March 31, 1993
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=27275

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The NTSB does not assign fault or blame for an accident or incident; rather, as specified by NTSB regulation, “accident/incident investigations are fact-finding proceedings with no formal issues and no adverse parties ... and are not conducted for the purpose of determining the rights or liabilities of any person” (Title 49 *Code of Federal Regulations* section 831.4). Assignment of fault or legal liability is not relevant to the NTSB’s statutory mission to improve transportation safety by investigating accidents and incidents and issuing safety recommendations. In addition, statutory language prohibits the admission into evidence or use of any part of an NTSB report related to an accident in a civil action for damages resulting from a matter mentioned in the report (Title 49 *United States Code* section 1154(b)). A factual report that may be admissible under 49 *United States Code* section 1154(b) is available [here](#).