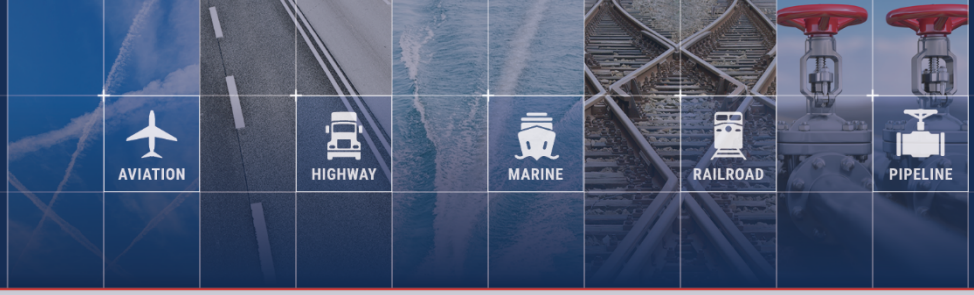

Aviation Investigation Final Report

Location:	SAN BERNARDINO, California	**Accident Number:**	LAX00LA111
Date & Time:	February 26, 2000, 16:20 Local	**Registration:**	N99590
Aircraft:	Ercoupe (Eng & Research Corp.) 415-C	**Aircraft Damage:**	Substantial
Defining Event:		**Injuries:**	1 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The vintage airplane was in cruise flight when the engine began to run roughly, then lost power totally. The pilot performed an off airport landing and collided with a fence. Postaccident examination of the engine revealed that the number 1 engine cylinder exhaust valve had failed at the valve neck.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: the total failure of the engine number 1 cylinder exhaust valve.

Findings

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

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

Occurrence #2: ON GROUND/WATER COLLISION WITH OBJECT
Phase of Operation: EMERGENCY LANDING

Factual Information

On February 26, 2000, about 1620 hours Pacific standard time, an Ercoupe 415-C, N99590, was substantially damaged when it force landed in a field and collided with a fence at San Bernardino, California. The airplane was owned and operated by the private pilot who was not injured. Visual meteorological conditions prevailed for the personal flight operating under 14 CFR Part 91. No flight plan was filed. The flight originated at Riverside, California, at 1600, and was destined for Apple Valley, California.

The pilot reported that the engine began to vibrate during cruise flight, and then quit.

Postaccident examination of the engine revealed that the number 1 engine cylinder's exhaust valve had failed at the neck of the valve.

A Federal Aviation Administration inspector stated that the pilot and the airplane were both properly certificated and in compliance with the regulations at the time of the accident.

Pilot Information

Certificate:	Private	**Age:**	59,Male
Airplane Rating(s):	Single-engine land	**Seat Occupied:**	Left
Other Aircraft Rating(s):	None	**Restraint Used:**	
Instrument Rating(s):	Airplane	**Second Pilot Present:**	No
Instructor Rating(s):	None	**Toxicology Performed:**	No
Medical Certification:	Class 3 Valid Medical--w/ waivers/lim	**Last FAA Medical Exam:**	February 19, 1998
Occupational Pilot:	No	**Last Flight Review or Equivalent:**	
Flight Time:	670 hours (Total, all aircraft), 135 hours (Total, this make and model), 600 hours (Pilot In Command, all aircraft), 20 hours (Last 90 days, all aircraft), 6 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Ercoupe (Eng & Research Corp.)	**Registration:**	N99590
Model/Series:	415-C 415-C	**Aircraft Category:**	Airplane
Year of Manufacture:		**Amateur Built:**	
Airworthiness Certificate:	Normal	**Serial Number:**	2213
Landing Gear Type:	Tricycle	**Seats:**	2
Date/Type of Last Inspection:	February 6, 2000 Annual	**Certified Max Gross Wt.:**	1800 lbs
Time Since Last Inspection:	6 Hrs	**Engines:**	1 Reciprocating
Airframe Total Time:	2400 Hrs	**Engine Manufacturer:**	Continental
ELT:	Installed, not activated	**Engine Model/Series:**	C85-12F
Registered Owner:	ROBERT L. CASPARY	**Rated Power:**	85 Horsepower
Operator:		**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:	ONT ,943 ft msl	**Distance from Accident Site:**	8 Nautical Miles
Observation Time:	15:53 Local	**Direction from Accident Site:**	230°
Lowest Cloud Condition:	Clear	**Visibility**	10 miles
Lowest Ceiling:	None	**Visibility (RVR):**	
Wind Speed/Gusts:	/	**Turbulence Type Forecast/Actual:**	/
Wind Direction:	0°	**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:	30 inches Hg	**Temperature/Dew Point:**	19°C / 3°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	RIVERSIDE , CA (RIR)	**Type of Flight Plan Filed:**	None
Destination:	APPLE VALLEY , CA (APV)	**Type of Clearance:**	None
Departure Time:	16:00 Local	**Type of Airspace:**	Class G

Airport Information

Airport:		**Runway Surface Type:**	
Airport Elevation:		**Runway Surface Condition:**	
Runway Used:	0	**IFR Approach:**	
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:**	33.799194,-116.359924(est)

Administrative Information

Investigator In Charge (IIC):	Petterson, George
Additional Participating Persons:	GARY KAPPA; RIVERSIDE , CA MIKE GRIMES; MOBILE , AL
Original Publish Date:	July 17, 2001
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=48718