



# **Aviation Investigation Final Report**

Location: SHERIDAN, Wyoming Accident Number: DEN89LA122

Date & Time: May 21, 1989, 15:00 Local Registration: N7557M

Aircraft: CESSNA 175 Aircraft Damage: Substantial

**Defining Event:** 2 None

Flight Conducted Under: Part 91: General aviation - Personal

### **Analysis**

THE PLT RPRTD THAT AFTER TAKEOFF, THE ENG WAS NOT DEVELOPING SUFFICIENT POWER TO CLIMB OR RETURN TO THE AIRPORT. SUBSEQUENTLY, HE FLEW DOWN A CANYON & LANDED IN A HAY FIELD. DRG THE LANDING ROLL, THE ACFT HIT AN UNSEEN DITCH & THE NOSE GEAR COLLAPSED. AN EXAM OF THE ENG REVEALED THAT THE #4 EXHAUST VALVE WAS STICKING. ELEVATION OF THE ARPT WAS 4012 FT.

## **Probable Cause and Findings**

The National Transportation Safety Board determines the probable cause(s) of this accident to be: BINDING (STUCK) #4 EXHAUST VALVE. HIGH VEGETATION (HAY) AND A HIDDEN OBSTRUCTION (DITCH) WERE CONTRIBUTING FACTORS.

### **Findings**

Occurrence #1: LOSS OF ENGINE POWER(PARTIAL) - MECH FAILURE/MALF

Phase of Operation: TAKEOFF - INITIAL CLIMB

#### **Findings**

1. (C) ENGINE ASSEMBLY, VALVE, EXHAUST - BINDING (MECHANICAL)

2. (F) WEATHER CONDITION - HIGH DENSITY ALTITUDE

3. CLIMB - NOT POSSIBLE

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Occurrence #2: FORCED LANDING

Phase of Operation: DESCENT - EMERGENCY

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

Phase of Operation: LANDING - ROLL

### **Findings**

4. (F) TERRAIN CONDITION - HIGH VEGETATION

5. (F) TERRAIN CONDITION - HIDDEN OBSTRUCTION(S)

6. (F) TERRAIN CONDITION - DITCH

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

#### Findings

7. LANDING GEAR, NOSE GEAR - OVERLOAD

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# **Factual Information**

### **Pilot Information**

Certificate:	Private	Age:	54,Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	Yes
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 Valid Medicalw/ waivers/lim	Last FAA Medical Exam:	April 5, 1989
Occupational Pilot:	No Last Flight Review or Equivalent:		
Flight Time:	1900 hours (Total, all aircraft), 7 hours (Total, this make and model), 15 hours (Last 30 days, all aircraft), 3 hours (Last 24 hours, all aircraft)		

## **Aircraft and Owner/Operator Information**

Aircraft Make:	CESSNA	Registration:	N7557M
Model/Series:	175 175	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	55857
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:	January 15, 1989 Annual	Certified Max Gross Wt.:	2350 lbs
Time Since Last Inspection:	20 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	2636 Hrs	Engine Manufacturer:	CONTINENTAL
ELT:	Installed, not activated	Engine Model/Series:	GO-300-A
Registered Owner:	CLAYTON C. COLE	Rated Power:	175 Horsepower
Operator:	CLAYTON C. COLE	Operating Certificate(s) Held:	None
Operator Does Business As:		Operator Designator Code:	

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# 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:	
<b>Lowest Cloud Condition:</b>	Clear	Visibility	25 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	5 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	310°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	21°C
Precipitation and Obscuration:	No Obscuration; No Precipita	ation	
Departure Point:	(SHR)	Type of Flight Plan Filed:	None
Destination:	BRULE , NE (43V)	Type of Clearance:	None
Departure Time:	15:00 Local	Type of Airspace:	Class G

## **Airport Information**

Airport:	SHERIDAN SHR	Runway Surface Type:	
Airport Elevation:	4012 ft msl	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:	44.790443,-106.949378(est)

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#### **Administrative Information**

Investigator In Charge (IIC): Collins, Robert **Additional Participating** RICHARD BRODOWY; HELENA Persons: WAYNE E ROSE; STERLING , CO **Original Publish Date:** June 18, 1990 **Last Revision Date:** Investigation Class: Class Note: **Investigation Docket:** https://data.ntsb.gov/Docket?ProjectID=17711

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