

# **Aviation Investigation Final Report**

Location: BROOMFIELD, Colorado Accident Number: DEN90LA106

Date & Time: May 5, 1990, 19:31 Local Registration: N2208X

Aircraft: CESSNA 337 Aircraft Damage: Substantial

**Defining Event:** 2 None

Flight Conducted Under: Part 91: General aviation - Personal

#### **Analysis**

WHILE CONDUCTING A TEST FLT FOLLOWING OVERHAUL OF BOTH ENGINES THE REAR ENGINE FAILED WHILE ON DOWNWIND LEG. THE PLT SECURED THE ENGINE AND ATTEMPTED TO FEATHER THE PROP. THE PROP WOULD NOT FEATHER. THE PLT OVERFLEW AN AVAILABLE RUNWAY WHILE CONDUCTING A PRECAUTIONARY APPROACH AND OVERSHOT THE RUNWAY OF INTENDED LANDING. THE ACFT LANDED IN A RUNUP AREA ADJACENT TO THE RUNWAY IN A HIGH RATE OF DESCENT AND CAME TO REST IN A GRASS AREA BETWEEN THE RUNWAY AND TAXIWAY. THE ACFT SUSTAINED SUBSTANTIAL DAMAGE AND THE PLT AND PAX WERE NOT INJURED. THE ENGINE FAILED DUE TO THE OIL DILUTION LINE BEING CONNECTED TO THE PRESSURE PORT ON THE OIL PUMP INSTEAD OF THE VACUUM PORT, AND MAINTENANCE INSTRUCTIONS DO NOT PROVIDE GUIDANCE FOR THE INSTALLATION.

#### **Probable Cause and Findings**

The National Transportation Safety Board determines the probable cause(s) of this accident to be: THE PILOT'S FAILURE TO PROPERLY EXECUTE A PRECAUTIONARY APPROACH FOLLOWING AN ENGINE FAILURE.

#### **Findings**

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

Phase of Operation: APPROACH - VFR PATTERN - DOWNWIND

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Occurrence #2: FORCED LANDING

Phase of Operation: MANEUVERING - TURN TO LANDING AREA (EMERGENCY)

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Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER

Phase of Operation: LANDING

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## **Factual Information**

#### **Pilot Information**

Certificate:	Private	Age:	35.Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 Valid Medicalno waivers/lim.	Last FAA Medical Exam:	January 30, 1989
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	485 hours (Total, all aircraft), 180 hours (Total, this make and model), 485 hours (Pilot In Command, all aircraft)		

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

Aircraft Make:	CESSNA	Registration:	N2208X
Model/Series:	337 337	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	337-0108
Landing Gear Type:	Retractable - Tricycle	Seats:	6
Date/Type of Last Inspection:	May 1, 1990 Annual	Certified Max Gross Wt.:	4300 lbs
Time Since Last Inspection:		Engines:	2 Reciprocating
Airframe Total Time:	1749 Hrs	Engine Manufacturer:	CONTINENTAL
ELT:	Installed, not activated	Engine Model/Series:	IO-360-CD
Registered Owner:	OUT 'N' ABOUT AVIATION	Rated Power:	210 Horsepower
Operator:	OUT AND ABOUT AVIATION	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:	BJC ,5654 ft msl	Distance from Accident Site:	1 Nautical Miles
Observation Time:	19:39 Local	Direction from Accident Site:	290°
<b>Lowest Cloud Condition:</b>	Clear	Visibility	50 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	6 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	10°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	11°C / -1°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	(BJC)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	19:25 Local	Type of Airspace:	Class D

## **Airport Information**

Airport:	JEFFERSON COUNTY BJC	Runway Surface Type:	Asphalt
Airport Elevation:	5654 ft msl	<b>Runway Surface Condition:</b>	Dry
Runway Used:	29R	IFR Approach:	None
Runway Length/Width:	9000 ft / 100 ft	VFR Approach/Landing:	Traffic pattern

## **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:	39.93972,-105.060119(est)

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#### **Administrative Information**

Investigator In Charge (IIC): Wiemeyer, Norman

Additional Participating PETE LEE; DENVER , CO

Persons:

Original Publish Date: September 21, 1992

Last Revision Date:

Investigation Class: Class

Note:

Investigation Docket: https://data.ntsb.gov/Docket?ProjectID=17927

The National Transportation Safety Board (NTSB) is an independent federal agency charged by Congress with investigating every civil aviation accident in the United States and significant events in other modes of transportation—railroad, transit, highway, marine, pipeline, and commercial space. We determine the probable causes of the accidents and events we investigate, and issue safety recommendations aimed at preventing future occurrences. In addition, we conduct transportation safety research studies and offer information and other assistance to family members and survivors for each accident or event we investigate. We also serve as the appellate authority for enforcement actions involving aviation and mariner certificates issued by the Federal Aviation Administration (FAA) and US Coast Guard, and we adjudicate appeals of civil penalty actions taken by the FAA.

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.

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