



Aviation Investigation Final Report

Location:	DURANGO, Colorado	Accident Number:	DEN92LA037
Date & Time:	February 23, 1992, 12:18 Local	Registration:	N2550V
Aircraft:	CESSNA 177RG	Aircraft Damage:	Substantial
Defining Event:		Injuries:	4 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

APPROXIMATELY ONE MILE AFTER TAKEOFF ON A CROSS COUNTRY FLIGHT, AT AN ALTITUDE OF APPROXIMATELY 900 FEET AGL, THE ENGINE FAILED DUE TO A MECHANICAL MALFUNCTION. THE PILOT EXECUTED EMERGENCY PROCEDURES AND CONDUCTED A FORCED LANDING IN A FIELD WHICH WAS ROUGH, UNEVEN, AND COVERED WITH SNOW. THE MECHANICAL MALFUNCTION WAS FAILURE OF THE NUMBER TWO CYLINDER CONNECTING ROD.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: A TOTAL LOSS OF POWER DUE TO A MECHANICAL FAILURE OF THE ENGINE. FACTORS WERE: ROUGH AND UNEVEN SNOW COVERED TERRAIN.

Findings

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

Findings

1. (C) ENGINE ASSEMBLY,CONNECTING ROD - FAILURE,TOTAL

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

Findings

2. (F) TERRAIN CONDITION - ROUGH/UNEVEN
3. (F) TERRAIN CONDITION - SNOW COVERED

Factual Information

Pilot Information

Certificate:	Commercial	Age:	31, Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	June 18, 1991
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	1718 hours (Total, all aircraft), 12 hours (Total, this make and model), 1396 hours (Pilot In Command, all aircraft), 62 hours (Last 90 days, all aircraft), 23 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	CESSNA	Registration:	N2550V
Model/Series:	177RG 177RG	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	177RG0613
Landing Gear Type:	Retractable - Tricycle	Seats:	4
Date/Type of Last Inspection:	December 12, 1991 100 hour	Certified Max Gross Wt.:	2800 lbs
Time Since Last Inspection:	70 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	3435 Hrs	Engine Manufacturer:	LYCOMING
ELT:	Installed, not activated	Engine Model/Series:	IO-360-A1B6D
Registered Owner:	SHEPPARD AFB FLYING CLUB	Rated Power:	200 Horsepower
Operator:	SHEPPARD AFB FLYING CLUB	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:	DRO ,6660 ft msl	Distance from Accident Site:	2 Nautical Miles
Observation Time:	11:50 Local	Direction from Accident Site:	220°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	8 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	170°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	5°C / -18°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:		Type of Flight Plan Filed:	IFR
Destination:	AMARILLO , TX (AMA)	Type of Clearance:	IFR
Departure Time:	12:10 Local	Type of Airspace:	Class G

Airport Information

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

Wreckage and Impact Information

Crew Injuries:	2 None	Aircraft Damage:	Substantial
Passenger Injuries:	2 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	4 None	Latitude, Longitude:	37.269355,-107.879394(est)

Administrative Information

Investigator In Charge (IIC): Wiemeyer, Norman

Additional Participating Persons: TOM ARNOLD; SALT LAKE CITY , UT

Original Publish Date: August 13, 1993

Last Revision Date:

Investigation Class: [Class](#)

Note:

Investigation Docket: <https://data.nts.gov/Docket?ProjectID=18199>

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](#).