



National Transportation Safety Board Aviation Accident Final Report

Location:	Mineral Wells, TX	Accident Number:	CEN09CA169
Date & Time:	02/02/2009, 1850 CST	Registration:	N5451P
Aircraft:	PIPER PA-24-250	Aircraft Damage:	Substantial
Defining Event:	Sys/Comp malf/fail (non-power)	Injuries:	1 None
Flight Conducted Under:	Part 91: General Aviation - Personal		

Analysis

While departing the airport, the airplane's landing gear system failed to fully retract when actuated by the private pilot. Several attempts were made by the pilot to fully lower the landing gear, including the use of the "emergency landing gear system." The pilot elected to return to the airport and land in the grass parallel to the runway. During the landing the airplane's firewall was damaged. An inspection conducted on the airplane revealed that the wire cables which operate the landing gear were insufficiently lubricated during the previous annual inspection which was accomplished 18 days 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 the airframe and power plant mechanic to ensure proper lubrication of wire cables in the landing gear system during the annual inspection which precluded safe operation of the landing gear system.

Findings

Aircraft	Gear extension and retract sys - Not serviced/maintained (Cause) Gear extension and retract sys - Failure (Cause)
Personnel issues	Scheduled/routine maintenance - Maintenance personnel (Cause)

Factual Information

History of Flight

Prior to flight	Aircraft maintenance event
Initial climb	Sys/Comp malf/fail (non-power) (Defining event)
Landing	Landing gear not configured

Pilot Information

Certificate:	Private	Age:	64, 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 With Waivers/Limitations	Last Medical Exam:	08/21/2007
Occupational Pilot:		Last Flight Review or Equivalent:	09/18/2007
Flight Time:	2300 hours (Total, all aircraft), 700 hours (Total, this make and model), 15 hours (Last 90 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Manufacturer:	PIPER	Registration:	N5451P
Model/Series:	PA-24-250	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	24-506
Landing Gear Type:	Retractable - Tricycle	Seats:	4
Date/Type of Last Inspection:	01/15/2009, Annual	Certified Max Gross Wt.:	
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	4803 Hours	Engine Manufacturer:	Lycoming
ELT:	Installed, not activated	Engine Model/Series:	O-540
Registered Owner:	On file	Rated Power:	250 hp
Operator:	On file	Air Carrier Operating Certificate:	None

Meteorological Information and Flight Plan

Observation Facility, Elevation:	MWL	Observation Time:	1853 CST
Distance from Accident Site:		Condition of Light:	Dusk
Direction from Accident Site:		Conditions at Accident Site:	Visual Conditions
Lowest Cloud Condition:	Clear	Temperature/Dew Point:	10°C / -13°C
Lowest Ceiling:	None	Visibility	10 Miles
Wind Speed/Gusts, Direction:	5 knots, 200°	Visibility (RVR):	
Altimeter Setting:	30.23 inches Hg	Visibility (RVV):	
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Mineral Wells, TX (MWL)	Type of Flight Plan Filed:	None
Destination:	Mineral Wells, TX (MWL)	Type of Clearance:	None
Departure Time:	CST	Type of Airspace:	

Airport Information

Airport:	Mineral Wells Airport (MWL)	Runway Surface Type:	
Airport Elevation:		Runway Surface Condition:	
Runway Used:	N/A	IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	Full Stop; Straight-in

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 None		

Administrative Information

Investigator In Charge (IIC):	Jason T Aguilera	Adopted Date:	05/12/2009
Additional Participating Persons:	Arnold L Thormeyer; FAA FSDO; Fort Worth, TX		
Publish Date:	05/12/2009		
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.		
Investigation Docket:	NTSB accident and incident dockets serve as permanent archival information for the NTSB's investigations. Dockets released prior to June 1, 2009 are publicly available from the NTSB's Record Management Division at pubinq@ntsb.gov , or at 800-877-6799. Dockets released after this date are available at http://dms.nts.gov/pubdms/ .		

The National Transportation Safety Board (NTSB), established in 1967, is an independent federal agency mandated by Congress through the Independent Safety Board Act of 1974 to investigate transportation accidents, determine the probable causes of the accidents, issue safety recommendations, study transportation safety issues, and evaluate the safety effectiveness of government agencies involved in transportation. The NTSB makes public its actions and decisions through accident reports, safety studies, special investigation reports, safety recommendations, and statistical reviews.

The Independent Safety Board Act, as codified at 49 U.S.C. Section 1154(b), precludes the admission into evidence or use of any part of an NTSB report related to an incident or accident in a civil action for damages resulting from a matter mentioned in the report.