



Aviation Investigation Final Report

Location:	Redmond, Oregon	Accident Number:	SEA04LA153
Date & Time:	August 1, 2004, 16:47 Local	Registration:	N9394P
Aircraft:	Piper PA-24-260	Aircraft Damage:	Substantial
Defining Event:		Injuries:	3 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

On landing, just as the airplane touched down, the landing gear collapsed resulting in substantial damage to the airframe. The pilot reported that he lowered the landing gear after entering the downwind for the landing runway. He stated that after lowering the gear, the "down and locked" indicator light illuminated confirming the gear was down. He further stated the landing flare was normal, however the airplane continued to settle, eventually landing with the gear in the up position. Post accident evaluation of the landing gear system, to include a gear swing, revealed no anomalies that would have prevented the landing gear from fully extending to the down and locked position.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: Unknown malfunction of the landing gear system for undetermined reasons that resulted in a gear collapse during landing.

Findings

Occurrence #1: AIRFRAME/COMPONENT/SYSTEM FAILURE/MALFUNCTION
Phase of Operation: LANDING

Findings

1. (C) LANDING GEAR - MALFUNCTION

Occurrence #2: GEAR COLLAPSED

Phase of Operation: LANDING

Factual Information

On August 1, 2004, at 1647 Pacific daylight time, a Piper PA-24-260 (Comanche), N9394P, sustained substantial damage following a wheels up landing at Roberts Field Airport, Redmond, Oregon. The airplane, which is owned by the pilot, was being operated as a visual flight rules (VFR) cross-country flight under the provisions of Title 14, CFR Part 91, when the accident occurred. The private pilot and two passengers aboard the airplane were not injured in the accident. Visual meteorological conditions prevailed for the cross-country flight that originated at Tacoma Narrows (KTIW), Tacoma, Washington.

During a telephone conversation with the National Transportation Safety Board IIC, on August 4, the pilot reported that he lowered the landing gear after entering the downwind for the landing runway. He stated that after lowering the gear, the "down and locked" indicator light illuminated confirming the gear was down. He further stated the landing flare was normal, however the airplane continued to settle, eventually landing with the gear in the up position.

Post accident evaluation of the landing gear system, to include a gear swing, revealed no anomalies that would have prevented the landing gear from fully extending to the down and locked position.

Pilot Information

Certificate:	Private	Age:	55, 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--no waivers/lim.	Last FAA Medical Exam:	October 9, 2003
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	June 26, 2004
Flight Time:	1064 hours (Total, all aircraft), 137 hours (Total, this make and model), 980 hours (Pilot In Command, all aircraft), 27 hours (Last 90 days, all aircraft), 20 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Piper	Registration:	N9394P
Model/Series:	PA-24-260	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	24-4897
Landing Gear Type:	Retractable - Tricycle	Seats:	4
Date/Type of Last Inspection:	March 24, 2004 Annual	Certified Max Gross Wt.:	3200 lbs
Time Since Last Inspection:	30 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	4244 Hrs as of last inspection	Engine Manufacturer:	Lycoming
ELT:	Installed, not activated	Engine Model/Series:	IO-540
Registered Owner:	Andreas G. Nager	Rated Power:	260 Horsepower
Operator:		Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	KRDM,3100 ft msl	Distance from Accident Site:	
Observation Time:	15:56 Local	Direction from Accident Site:	
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	10 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	340°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.81 inches Hg	Temperature/Dew Point:	32°C / 6°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	TACOMA, WA (TIW)	Type of Flight Plan Filed:	None
Destination:	REDMOND, OR (RDM)	Type of Clearance:	VFR
Departure Time:	15:30 Local	Type of Airspace:	Class D

Airport Information

Airport:	ROBERTS FIELD RDM	Runway Surface Type:	Asphalt
Airport Elevation:	3100 ft msl	Runway Surface Condition:	Dry
Runway Used:	28	IFR Approach:	None
Runway Length/Width:	7006 ft / 100 ft	VFR Approach/Landing:	Traffic pattern

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	2 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	3 None	Latitude, Longitude:	44.253887,-121.149719

Administrative Information

Investigator In Charge (IIC):	Hogenson, Dennis
Additional Participating Persons:	Edward P Starr; FAA-FSDO; Hillsboro, OR
Original Publish Date:	April 28, 2005
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=59816

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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](#).