



Aviation Investigation Final Report

Location:	GRAND JUNCTION, Colorado	Accident Number:	DEN93LA074
Date & Time:	July 8, 1993, 11:50 Local	Registration:	N8967P
Aircraft:	PIPER PA-24-260	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

WHILE EN ROUTE ON A CROSS COUNTRY FLIGHT, THE AIRCRAFT ELECTRICAL SYSTEM FAILED. AS A RESULT, WHEN THE PILOT PUT THE LANDING GEAR DOWN HE HAD NO GEAR LIGHTS. HE STATED THAT THE MANUAL SYSTEM APPEARED TO BE IN THE PROPER POSITION FOR THE GEAR TO BE DOWN AND LOCKED, BUT DURING LANDING ROLL, HE HAD DIFFICULTY IN MAINTAINING DIRECTIONAL CONTROL AND THE LANDING GEAR COLLAPSED.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: FAILURE OF THE PILOT IN COMMAND TO FOLLOW MANUAL GEAR EXTENSION PROCEDURES. A FACTOR WAS A TOTAL ELECTRICAL FAILURE.

Findings

Occurrence #1: AIRFRAME/COMPONENT/SYSTEM FAILURE/MALFUNCTION
Phase of Operation: CRUISE - NORMAL

Findings
1. (F) ELECTRICAL SYSTEM - FAILURE, TOTAL

Occurrence #2: GEAR COLLAPSED
Phase of Operation: LANDING - ROLL

Findings

2. (C) PROCEDURES/DIRECTIVES - NOT FOLLOWED - PILOT IN COMMAND

Factual Information

On July 8, 1993, at 1150 mountain daylight time, a Piper PA-24-260, N8967P, landed gear up at Walker Field, Grand Junction, Colorado. The commercial pilot, and sole occupant, was not injured; however, the aircraft sustained substantial damage. No flight plan was filed for the personal flight from Animas Air Park, Durango, Colorado. Visual meteorological conditions prevailed.

According to the information provided by the pilot on NTSB Form 6120.1/2, he had previous problems with the electrical system, which he had corrected prior to the flight; however, he reported the electrical system failed while en route. He further reported that he had no gear lights and it appeared that the manual gear indicator was in the proper position to show the gear was down and locked. The pilot did not go through manual gear extension procedures. During landing roll, he had difficulty with directional control and the landing gear collapsed.

No information is available as to the cause of the electrical failure.

Pilot Information

Certificate:	Commercial; Private	Age:	41, Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	Balloon	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 Valid Medical-w/ waivers/lim	Last FAA Medical Exam:	April 15, 1992
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:	1185 hours (Total, all aircraft), 28 hours (Total, this make and model), 1093 hours (Pilot In Command, all aircraft), 21 hours (Last 90 days, all aircraft), 11 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	PIPER	Registration:	N8967P
Model/Series:	PA-24-260 PA-24-260	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	24-4424
Landing Gear Type:	Retractable - Tricycle	Seats:	5
Date/Type of Last Inspection:	Annual	Certified Max Gross Wt.:	3100 lbs
Time Since Last Inspection:	100 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	8000 Hrs	Engine Manufacturer:	LYCOMING
ELT:	Installed, not activated	Engine Model/Series:	IO-540
Registered Owner:	G W W COMMANCHE, INC.	Rated Power:	260 Horsepower
Operator:		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:		Distance from Accident Site:	
Observation Time:	11:50 Local	Direction from Accident Site:	
Lowest Cloud Condition:	Scattered / 12000 ft AGL	Visibility	70 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	6 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	240°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	28°C / -18°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	DURANGO , CO (5CO)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	10:50 Local	Type of Airspace:	Class D

Airport Information

Airport:	WALKER FIELD GJT	Runway Surface Type:	Asphalt
Airport Elevation:	4800 ft msl	Runway Surface Condition:	Dry
Runway Used:	4	IFR Approach:	None
Runway Length/Width:	5501 ft / 75 ft	VFR Approach/Landing:	Traffic pattern

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	38.999969,-108.729164(est)

Administrative Information

Investigator In Charge (IIC):	Wiemeyer, Norman
Additional Participating Persons:	RICHARD KLARMAN; SALT LAKE CITY , UT
Original Publish Date:	September 26, 1994
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=11091

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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](#).