



Aviation Investigation Final Report

Location:	CHANTILLY, Virginia	Accident Number:	BF085LA014
Date & Time:	February 4, 1985, 11:15 Local	Registration:	N5682P
Aircraft:	PIPER PA-24-250	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 Minor
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

WHILE RETRACTING THE LANDING GEAR AFTER TAKEOFF, THE GEAR HESITATED BRIEFLY AT ABOUT MIDPOINT BEFORE RETRACTING FULLY. ATTEMPTS TO EXTEND THE GEAR THROUGH NORMAL AND EMERGENCY PROCEDURES FAILED. THE ACFT LANDED AT DULLES INTERNATIONAL AIRPORT WITH THE GEAR IN AN INTERMEDIATE POSITION. IT WAS THE PLT'S DECISION TO LAND IN THE GRASS TO THE LEFT OF RWY 30. IMMEDIATELY AFTER GROUND CONTACT, THE ACFT IMPACTED A TWO FEET HIGH EMBANKMENT. EXAMINATION OF THE WRECKAGE REVEALED THAT THE LANDING GEAR MOTOR CIRCUIT BREAKER WAS TRIPPED. RETRACTION TEST INDICATED THAT THE MAIN GEAR FUNCTIONED PROPERLY, HOWEVER EXTENSIVE DAMAGE PRECLUDED TESTING OF THE NOSE GEAR. PRIOR TO THE ACCIDENT, WHILE THE ACFT WAS TIED DOWN, ANOTHER TAXIING ACFT STRUCK ITS SPINNER AREA, NECESSITATING MAINT ATTENTION, WHICH IMMEDIATELY PRECEDED THE ACCIDENT FLT.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be:

Findings

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

Findings

1. (C) LANDING GEAR,NORMAL RETRACTION/EXTENSION ASSEMBLY - JAMMED
2. (C) LANDING GEAR,EMERGENCY EXTENSION ASSEMBLY - JAMMED
3. (C) LANDING GEAR,NOSE GEAR - UNDETERMINED

Occurrence #2: COMPLETE GEAR COLLAPSED

Phase of Operation: LANDING - FLARE/TOUCHDOWN

Occurrence #3: ON GROUND/WATER ENCOUNTER WITH TERRAIN/WATER

Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings

4. (F) TERRAIN CONDITION - DIRT BANK/RISING EMBANKMENT
5. (F) TERRAIN CONDITION - SNOW COVERED
6. (C) UNSUITABLE TERRAIN OR TAKEOFF/LANDING/TAXI AREA - SELECTED - PILOT IN COMMAND

Factual Information

Pilot Information

Certificate:	Commercial	Age:	50, 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 2 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	July 8, 1984
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	800 hours (Total, all aircraft), 600 hours (Total, this make and model), 800 hours (Pilot In Command, all aircraft), 173 hours (Last 90 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	PIPER	Registration:	N5682P
Model/Series:	PA-24-250 PA-24-250	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	24-754
Landing Gear Type:	Retractable - Tricycle	Seats:	4
Date/Type of Last Inspection:	June 8, 1984 Annual	Certified Max Gross Wt.:	2800 lbs
Time Since Last Inspection:	49 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	2100 Hrs	Engine Manufacturer:	LYCOMING
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	O-540-A1C5
Registered Owner:	DAVID B. KESSLER	Rated Power:	250 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:	IAD ,313 ft msl	Distance from Accident Site:	
Observation Time:	11:22 Local	Direction from Accident Site:	
Lowest Cloud Condition:	Clear	Visibility	12 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	5 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	30°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	-4°C / -13°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	GAITHERSBURG , MD (GAI)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	VFR
Departure Time:	10:30 Local	Type of Airspace:	Class D

Airport Information

Airport:	DULLES INTERNATIONAL IAD	Runway Surface Type:	Grass/turf
Airport Elevation:	313 ft msl	Runway Surface Condition:	Snow
Runway Used:	0	IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	Straight-in

Wreckage and Impact Information

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

Administrative Information

Investigator In Charge (IIC):	Richardson, Brian
Additional Participating Persons:	PETER H SCHENCK; WASHINGTON , DC JOHN BROWN; WASHINGTON , DC
Original Publish Date:	
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=11157

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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](#).