



Aviation Investigation Final Report

Location:	CHANTILLY, Virginia	Accident Number:	BF088LA072
Date & Time:	August 4, 1988, 12:58 Local	Registration:	N7866Y
Aircraft:	PIPER PA-30-160R	Aircraft Damage:	Substantial
Defining Event:		Injuries:	2 None
Flight Conducted Under:	Part 91: General aviation - Instructional		

Analysis

THE INSTR & STU PLT WERE DOING A PRACTICE LANDING ON RWY 27 AT THE FRONT ROYAL AIRPORT WHEN THE ACFT LANDED HARD AND BOUNCED ABOUT 20 FT HIGH. A GO AROUND WAS MADE, HOWEVER, THE LANDING GEAR WOULD NOT RETRACT. AFTER TWO FLYOVERS OF THE ARPT IT WAS CONFIRMED THAT THE L MAIN GEAR WAS DAMAGED. THE INSTR DECIDED TO FLY TO DULLES INTL ARPT WHERE A LANDING WAS MADE ON THE TWO EXTENDED LANDING GEAR. THE STU WAS A CERTIFIED COMMERCIAL PLT WHO WAS PRACTICING FOR A FLIGHT CHECK. HE HAD 11 TOTAL FLT HRS IN THIS ACFT AND THIS WAS HIS SIXTH FLIGHT IN IT.

Probable Cause and Findings

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

Findings

Occurrence #1: HARD LANDING
Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings

1. (C) ALTITUDE - MISJUDGED - DUAL STUDENT
2. (C) DESCENT - EXCESSIVE - DUAL STUDENT
3. (C) LEVEL OFF - DELAYED - DUAL STUDENT
4. (F) LACK OF TOTAL EXPERIENCE IN TYPE OF AIRCRAFT - DUAL STUDENT

5. (C) SUPERVISION - INADEQUATE - PILOT IN COMMAND(CFI)

Occurrence #2: MAIN GEAR COLLAPSED
Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings
6. LANDING GEAR,MAIN GEAR - OVERLOAD

Factual Information

Pilot Information

Certificate:	Commercial; Flight instructor	Age:	57, Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Right
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	Airplane multi-engine; Airplane single-engine; Instrument airplane	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medical-w/ waivers/lim	Last FAA Medical Exam:	September 25, 1987
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	8802 hours (Total, all aircraft), 425 hours (Total, this make and model), 8356 hours (Pilot In Command, all aircraft), 128 hours (Last 90 days, all aircraft), 34 hours (Last 30 days, all aircraft), 3 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	PIPER	Registration:	N7866Y
Model/Series:	PA-30-160R PA-30-160R	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	30-949
Landing Gear Type:	Retractable - Tricycle	Seats:	4
Date/Type of Last Inspection:	October 20, 1987 Annual	Certified Max Gross Wt.:	3600 lbs
Time Since Last Inspection:	35 Hrs	Engines:	2 Reciprocating
Airframe Total Time:	3342 Hrs	Engine Manufacturer:	LYCOMING
ELT:	Installed	Engine Model/Series:	IO-320-B
Registered Owner:	LAMBERT J. BROWN	Rated Power:	160 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	Distance from Accident Site:	
Observation Time:		Direction from Accident Site:	
Lowest Cloud Condition:	Unknown	Visibility	15 miles
Lowest Ceiling:	Broken / 3000 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	6 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	170°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	31°C / 22°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	FRONT ROYAL , VA (FRR)	Type of Flight Plan Filed:	None
Destination:	(IAD)	Type of Clearance:	None
Departure Time:	10:00 Local	Type of Airspace:	Class D

Airport Information

Airport:	DULLES IAD	Runway Surface Type:	Asphalt
Airport Elevation:	313 ft msl	Runway Surface Condition:	Dry
Runway Used:	12	IFR Approach:	None
Runway Length/Width:	10001 ft / 150 ft	VFR Approach/Landing:	Full stop

Wreckage and Impact Information

Crew Injuries:	2 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 None	Latitude, Longitude:	

Administrative Information

Investigator In Charge (IIC):	Jones, Dennis
Additional Participating Persons:	EARL BORDEN; WASHINGTON , DC
Original Publish Date:	October 2, 1989
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=11429

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