

# **Aviation Investigation Final Report**

Location:	BROOKSVILLE, Flo	orida	Accident Number:	MIA83LA005
Date & Time:	October 5, 1982, 1	0:20 Local	<b>Registration:</b>	N2447F
Aircraft:	PIPER	PA-38-112	Aircraft Damage:	Substantial
Defining Event:			Injuries:	1 None
Flight Conducted Under:	Part 91: General aviation - Instructional			

# Analysis

THE STUDENT PILOT WAS PRACTICING TOUCH-AND-GO LANDINGS. ACCORDING TO HIM, THE NOSE GEAR COLLAPSED AS HE LOWERED THE NOSE ON HIS THIRD LANDING. THE PROPELLER STRUCK THE RUNWAY SURFACE AND THE PLANE VEERED TO THE LEFT. AFTER DEPARTING THE LEFT SIDE OF THE RUNWAY, THE PLANE NOSED OVER. AN EXAMINATION OF THE NOSE GEAR REVEALED NO EVIDENCE OF FATIGUE, CORROSION OR PREVIOUS CRACKS. THE ENGINE MOUNT AND UPPER LANDING GEAR STRUCTURE WERE FOUND TO BE BUCKLED AND SHOWED EVIDENCE OF VERTICAL DECELERATION.

# **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. TOUCH-AND-GO - PERFORMED - PILOT IN COMMAND

2. (C) LEVEL OFF - IMPROPER - PILOT IN COMMAND

3. LACK OF TOTAL EXPERIENCE - PILOT IN COMMAND

Page 1 of 5

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

Findings 4. LANDING GEAR, NOSE GEAR - OVERLOAD

Occurrence #3: LOSS OF CONTROL - ON GROUND/WATER Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings 5. DIRECTIONAL CONTROL - NOT POSSIBLE - PILOT IN COMMAND 6. GROUND LOOP/SWERVE - UNCONTROLLED - PILOT IN COMMAND

Occurrence #4: NOSE OVER Phase of Operation: LANDING - ROLL

# **Factual Information**

#### **Pilot Information**

Certificate:	Student	Age:	36,Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Unknown
Other Aircraft Rating(s):		Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 Valid Medicalno waivers/lim.	Last FAA Medical Exam:	August 24, 1982
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:	16 hours (Total, all aircraft), 16 hours (Total, this make and model), 7 hours (Pilot In Command, all aircraft), 16 hours (Last 90 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

### Aircraft and Owner/Operator Information

Aircraft Make:	PIPER	Registration:	N2447F
		-	
Model/Series:	PA-38-112 PA-38-112	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:		Serial Number:	38-79A0454
Landing Gear Type:	Tricycle	Seats:	2
Date/Type of Last Inspection:	Unknown	Certified Max Gross Wt.:	1670 lbs
Time Since Last Inspection:	20 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	1852 Hrs	Engine Manufacturer:	LYCOMING
ELT:	Installed	Engine Model/Series:	0-235-L2C
Registered Owner:	AMERICAN AVIATION, INC.	Rated Power:	112 Horsepower
Operator:	AMERICAN AVIATION, INC.	Operating Certificate(s) Held:	
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:		Direction from Accident Site:	
Lowest Cloud Condition:	Clear	Visibility	8 miles
Lowest Ceiling:	Unknown	Visibility (RVR):	
Wind Speed/Gusts:	5 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	90°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	80°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	BROOKSVILLE , FL (BKV )	Type of Flight Plan Filed:	None
Destination:	BROOKSVILLE , FL (BKV )	Type of Clearance:	None
Departure Time:	10:05 Local	Type of Airspace:	

# **Airport Information**

Airport:	HERNANDO COUNTY BKV	Runway Surface Type:	Concrete
Airport Elevation:	0 ft msl	Runway Surface Condition:	Dry
Runway Used:	20	IFR Approach:	None
Runway Length/Width:	5000 ft / 150 ft	VFR Approach/Landing:	None

# 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:	

#### Administrative Information

Investigator In Charge (IIC):	
Additional Participating Persons:	
Original Publish Date:	October 5, 1983
Last Revision Date:	
Investigation Class:	<u>Class</u>
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=70042

The National Transportation Safety Board (NTSB) is an independent federal agency charged by Congress with investigating every civil aviation accident in the United States and significant events in other modes of transportation—railroad, transit, highway, marine, pipeline, and commercial space. We determine the probable causes of the accidents and events we investigate, and issue safety recommendations aimed at preventing future occurrences. In addition, we conduct transportation safety research studies and offer information and other assistance to family members and survivors for each accident or event we investigate. We also serve as the appellate authority for enforcement actions involving aviation and mariner certificates issued by the Federal Aviation Administration (FAA) and US Coast Guard, and we adjudicate appeals of civil penalty actions taken by the FAA.

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.