



National Transportation Safety Board Aviation Accident Final Report

Location:	HOMESTEAD, FL	Accident Number:	ATL98LA089
Date & Time:	07/01/1998, 1130 EDT	Registration:	N4331M
Aircraft:	Piper PA-28-161	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 None

Flight Conducted Under: Part 91: General Aviation - Instructional

Analysis

According to the pilot, he entered a left downwind for runway 36. He touched down hard on the first landing, and the airplane bounced into the air. The pilot then pulled back on the controls, and the airplane sank, collided with the runway, and bounced a second time. The nose gear collapsed, and the propeller struck the ground on the second bounce. The airplane touched down for a third time and veered off the left side of the runway. According to the FAA, the airplane had wing damage and cracked engine mounts. The inspector stated the airplane made too steep of an approach which led him to begin bouncing down the runway. The pilot had 37 hours of total flying time.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's improper flare that resulted in a hard landing and porpoise, and his improper recovery from the bounced landing.

Findings

Occurrence #1: HARD LANDING

Phase of Operation: LANDING

Findings

1. (C) FLARE - IMPROPER - PILOT IN COMMAND

Occurrence #2: LOSS OF CONTROL - ON GROUND/WATER

Phase of Operation: LANDING

Findings

2. (C) PORPOISE/PILOT-INDUCED OSCILLATION - ENCOUNTERED - PILOT IN COMMAND

3. (C) RECOVERY FROM BOUNCED LANDING - IMPROPER - PILOT IN COMMAND

Factual Information

On July 1, 1998, at 1130 eastern daylight time, a Piper PA-28-161, N4331M, executed a hard landing at Homestead General Aviation Airport, Homestead, Florida. The solo, instructional flight was operated by the student pilot under the provisions of Title 14 CFR Part 91 and visual flight rules. Visual meteorological conditions prevailed at the time of the accident. There was no flight plan filed. The airplane was substantially damaged, and the pilot was not injured. The flight departed Kendall-Tamiami Airport, Miami, Florida at 1115.

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According to the FAA, the airplane has wing damage and cracked engine mounts. The inspector stated the airplane made too steep of an approach which led him to begin bouncing down the runway. He also stated the pilot had only 37 hours of total time.

Pilot Information

Certificate:	Student	Age:	32, Male
Airplane Rating(s):	None	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	01/12/1998
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	37 hours (Total, all aircraft), 37 hours (Total, this make and model), 31 hours (Last 90 days, all aircraft), 2 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Piper	Registration:	N4331M
Model/Series:	PA-28-161 PA-28-161	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	28-8416028
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:	04/18/1998, 100 Hour	Certified Max Gross Wt.:	2325 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	6637 Hours	Engine Manufacturer:	Lycoming
ELT:	Installed, not activated	Engine Model/Series:	O-320-D36
Registered Owner:	INTERNATIONAL FLIGHT CENTER	Rated Power:	160 hp
Operator:	INTERNATIONAL FLIGHT CENTER	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	MIA, 11 ft msl	Distance from Accident Site:	20 Nautical Miles
Observation Time:	1156 EDT	Direction from Accident Site:	20°
Lowest Cloud Condition:	Scattered / 18000 ft agl	Visibility	10 Miles
Lowest Ceiling:	Broken / 25000 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	5 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	150°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	33°C / 24°C
Precipitation and Obscuration:			
Departure Point:	TAMIAMI, FL (TMB)	Type of Flight Plan Filed:	None
Destination:	(X51)	Type of Clearance:	VFR
Departure Time:	1100 EDT	Type of Airspace:	Class G

Airport Information

Airport:	HOMESTEAD GENERAL AV. (X51)	Runway Surface Type:	Asphalt
Airport Elevation:	9 ft	Runway Surface Condition:	Dry
Runway Used:	36	IFR Approach:	None
Runway Length/Width:	4909 ft / 100 ft	VFR Approach/Landing:	Traffic Pattern

Wreckage and Impact Information

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

Administrative Information

Investigator In Charge (IIC):	PRESTON E HICKS	Report Date:	12/08/1998
Additional Participating Persons:	LOU THOMPSON REGAN H CAMPBELL		
Publish Date:			
Investigation Docket:	NTSB accident and incident dockets serve as permanent archival information for the NTSB's investigations. Dockets released prior to June 1, 2009 are publicly available from the NTSB's Record Management Division at pubinq@ntsb.gov , or at 800-877-6799. Dockets released after this date are available at http://dms.nts.gov/pubdms/ .		

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