



# Aviation Investigation Final Report

<b>Location:</b>	MELBOURNE, Florida	<b>Accident Number:</b>	MIA88LA038
<b>Date &amp; Time:</b>	November 16, 1987, 16:30 Local	<b>Registration:</b>	N539FT
<b>Aircraft:</b>	PIPER PA-28RT-201	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	3 None
<b>Flight Conducted Under:</b>	Part 91: General aviation - Instructional		

## Analysis

DURING AN INSTRUCTIONAL FLT WHILE PRACTICING ACCURACY TOUCH-AND-GO LANDINGS, THE STUDENT PLT FLARED THE ACFT FOR LANDING AT LOW ALTITUDE, APRX 45-60 FEET FROM THE APCH END OF THE RWY. THE ACFT LANDED HARD SHORT OF THE RUNWAY. AS A RESULT THE LANDING GEAR SEPARATED FROM THE ACFT.

## Probable Cause and Findings

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

### Findings

Occurrence #1: UNDERSHOOT  
Phase of Operation: APPROACH - VFR PATTERN - FINAL APPROACH

- Findings
1. (C) PROPER GLIDEPATH - NOT MAINTAINED - DUAL STUDENT
  2. PROPER TOUCHDOWN POINT - NOT ATTAINED
  3. (C) SUPERVISION - INADEQUATE - PILOT IN COMMAND(CFI)
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Occurrence #2: HARD LANDING  
Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings

4. (C) FLARE - IMPROPER - DUAL STUDENT

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Occurrence #3: COMPLETE GEAR COLLAPSED

Phase of Operation: LANDING - FLARE/TOUCHDOWN

## Factual Information

### Pilot Information

<b>Certificate:</b>	Commercial; Flight instructor	<b>Age:</b>	22, Male
<b>Airplane Rating(s):</b>	Single-engine land; Multi-engine land	<b>Seat Occupied:</b>	Right
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	
<b>Instrument Rating(s):</b>	Airplane	<b>Second Pilot Present:</b>	Yes
<b>Instructor Rating(s):</b>	Airplane single-engine; Instrument airplane	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 1 Valid Medical-w/ waivers/lim	<b>Last FAA Medical Exam:</b>	December 30, 1986
<b>Occupational Pilot:</b>	Yes	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	1380 hours (Total, all aircraft), 200 hours (Total, this make and model), 1236 hours (Pilot In Command, all aircraft), 194 hours (Last 90 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	PIPER	<b>Registration:</b>	N539FT
<b>Model/Series:</b>	PA-28RT-201 PA-28RT-20	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	28R8218023
<b>Landing Gear Type:</b>	Retractable - Tricycle	<b>Seats:</b>	4
<b>Date/Type of Last Inspection:</b>	November 6, 1987 Annual	<b>Certified Max Gross Wt.:</b>	2400 lbs
<b>Time Since Last Inspection:</b>	34 Hrs	<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	3234 Hrs	<b>Engine Manufacturer:</b>	LYCOMING
<b>ELT:</b>	Installed, not activated	<b>Engine Model/Series:</b>	IO-360-C1C6
<b>Registered Owner:</b>	FLORIDA INST. OF TECH.	<b>Rated Power:</b>	200 Horsepower
<b>Operator:</b>	FLA. INSTITUTE OF TECHNOLOGY	<b>Operating Certificate(s) Held:</b>	None
<b>Operator Does Business As:</b>		<b>Operator Designator Code:</b>	

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual (VMC)	<b>Condition of Light:</b>	Day
<b>Observation Facility, Elevation:</b>	MLB ,33 ft msl	<b>Distance from Accident Site:</b>	
<b>Observation Time:</b>	16:34 Local	<b>Direction from Accident Site:</b>	
<b>Lowest Cloud Condition:</b>	Scattered / 25000 ft AGL	<b>Visibility</b>	7 miles
<b>Lowest Ceiling:</b>	None	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	15 knots /	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	120°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>	30 inches Hg	<b>Temperature/Dew Point:</b>	26°C / 22°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>		<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>		<b>Type of Clearance:</b>	VFR
<b>Departure Time:</b>	16:26 Local	<b>Type of Airspace:</b>	Class D;Class E

## Airport Information

<b>Airport:</b>	MELBOURNE MLB	<b>Runway Surface Type:</b>	Asphalt
<b>Airport Elevation:</b>	33 ft msl	<b>Runway Surface Condition:</b>	Dry
<b>Runway Used:</b>	9L	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>	6000 ft / 100 ft	<b>VFR Approach/Landing:</b>	Touch and go;Traffic pattern

## Wreckage and Impact Information

<b>Crew Injuries:</b>	2 None	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>	1 None	<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	3 None	<b>Latitude, Longitude:</b>	28.079145,-80.600364(est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Monville, Timothy
<b>Additional Participating Persons:</b>	PATRICK J BARTLETT; MIAMI , FL
<b>Original Publish Date:</b>	February 24, 1989
<b>Last Revision Date:</b>	
<b>Investigation Class:</b>	<a href="#">Class</a>
<b>Note:</b>	
<b>Investigation Docket:</b>	<a href="https://data.nts.gov/Docket?ProjectID=32092">https://data.nts.gov/Docket?ProjectID=32092</a>

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