



# Aviation Investigation Final Report

<b>Location:</b>	WORCESTER, Massachusetts	<b>Accident Number:</b>	NYC85LA193
<b>Date &amp; Time:</b>	July 24, 1985, 19:31 Local	<b>Registration:</b>	N999RH
<b>Aircraft:</b>	PIPER PA-30	<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

THE INSTRUCTOR (CFI) & STUDENT WERE PRACTICING TOUCH-&GO LANDINGS. ON THE 4TH LANDING, THE APCH & TOUCHDOWN WERE MADE WITH FULL FLAPS EXTENDED. THE CFI BEGAN TO RETRACT THE FLAPS WHILE THE STUDENT APPLIED FULL POWER FOR TAKEOFF. THE ACFT BECAME AIRBORNE & BEGAN TO YAW TO THE LEFT. THE CFI TOOK CONTROL OF THE ACFT WHEN THE STUDENT COULD NO LONGER MAINTAIN DIRECTIONAL CONTROL. THE CFI THEN REDUCED POWER ON BOTH ENGS IN AN EFFORT TO LAND. THE ACFT COLLIDED WITH THE GROUND & BEGAN BURNING. THE CFI THOUGHT THAT THEY HAD EXPERIENCED A SPLIT FLAP CONDITION. HOWEVER, A VISUAL EXAM OF THE ACFT REVEALED THAT BOTH FLAPS WERE IN THE NEARLY FULL DOWN POSITION.

## Probable Cause and Findings

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

### Findings

Occurrence #1: LOSS OF CONTROL - IN FLIGHT  
Phase of Operation: TAKEOFF

#### Findings

1. TOUCH-AND-GO - INITIATED - DUAL STUDENT
2. (C) LIFT-OFF - IMPROPER - DUAL STUDENT

3. (C) DIRECTIONAL CONTROL - NOT MAINTAINED - DUAL STUDENT
4. (C) AIRCRAFT HANDLING - NOT MAINTAINED - DUAL STUDENT
5. (C) SUPERVISION - INADEQUATE - PILOT IN COMMAND(CFI)
6. (C) REMEDIAL ACTION - DELAYED - PILOT IN COMMAND(CFI)

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Occurrence #2: IN FLIGHT COLLISION WITH TERRAIN/WATER  
Phase of Operation: TAKEOFF

Findings

7. ABORTED TAKEOFF - PERFORMED - PILOT IN COMMAND(CFI)
8. FLARE - NOT POSSIBLE

## Factual Information

### Pilot Information

<b>Certificate:</b>	Commercial; Flight instructor	<b>Age:</b>	49, Male
<b>Airplane Rating(s):</b>	Single-engine land; Multi-engine land	<b>Seat Occupied:</b>	Right
<b>Other Aircraft Rating(s):</b>		<b>Restraint Used:</b>	
<b>Instrument Rating(s):</b>	Airplane	<b>Second Pilot Present:</b>	Yes
<b>Instructor Rating(s):</b>		<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 2 Valid Medical--w/ waivers/lim	<b>Last FAA Medical Exam:</b>	January 2, 1985
<b>Occupational Pilot:</b>	Yes	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	4734 hours (Total, all aircraft), 80 hours (Total, this make and model), 4571 hours (Pilot In Command, all aircraft), 203 hours (Last 90 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	PIPER	<b>Registration:</b>	N999RH
<b>Model/Series:</b>	PA-30 PA-30	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	30-421
<b>Landing Gear Type:</b>	Retractable - Tricycle	<b>Seats:</b>	4
<b>Date/Type of Last Inspection:</b>	August 24, 1984 Annual	<b>Certified Max Gross Wt.:</b>	3600 lbs
<b>Time Since Last Inspection:</b>	70 Hrs	<b>Engines:</b>	2 Reciprocating
<b>Airframe Total Time:</b>	3460 Hrs	<b>Engine Manufacturer:</b>	LYCOMING
<b>ELT:</b>	Installed, activated, did not aid in locating accident	<b>Engine Model/Series:</b>	IO-320-B1A
<b>Registered Owner:</b>	JAMES HERTZELL	<b>Rated Power:</b>	160 Horsepower
<b>Operator:</b>		<b>Operating Certificate(s) Held:</b>	None
<b>Operator Does Business As:</b>	AMITY INSTITUTE OF AEROTECH	<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>	ORH ,1008 ft msl	<b>Distance from Accident Site:</b>	
<b>Observation Time:</b>	18:31 Local	<b>Direction from Accident Site:</b>	
<b>Lowest Cloud Condition:</b>	Clear	<b>Visibility</b>	40 miles
<b>Lowest Ceiling:</b>	None	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	7 knots /	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	200°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>	30 inches Hg	<b>Temperature/Dew Point:</b>	22°C / 9°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>	None
<b>Departure Time:</b>	18:40 Local	<b>Type of Airspace:</b>	Class D

## Airport Information

<b>Airport:</b>	WORCESTER MUNI ORH	<b>Runway Surface Type:</b>	Asphalt
<b>Airport Elevation:</b>	1008 ft msl	<b>Runway Surface Condition:</b>	Dry
<b>Runway Used:</b>	29	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>	6999 ft / 150 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>	On-ground
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	3 None	<b>Latitude, Longitude:</b>	

## Administrative Information

**Investigator In Charge (IIC):** Taylor, Vernon

**Additional Participating Persons:**

**Original Publish Date:**

**Last Revision Date:**

**Investigation Class:** [Class](#)

**Note:**

**Investigation Docket:** <https://data.ntsb.gov/Docket?ProjectID=35930>

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