



# Aviation Investigation Final Report

<b>Location:</b>	NEWPORT NEWS, Virginia	<b>Accident Number:</b>	BF090LA060
<b>Date &amp; Time:</b>	June 22, 1990, 13:00 Local	<b>Registration:</b>	N8337P
<b>Aircraft:</b>	PIPER PA-24-250	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	2 None
<b>Flight Conducted Under:</b>	Part 91: General aviation - Instructional		

## Analysis

THE PLT AND CFI WERE ON A TRAINING FLIGHT WHEN THE ENGINE LOST POWER THREE TIMES DURING THE FLIGHT. AFTER THE FIRST TWO TIMES THAT POWER LOSS OCCURRED, THE PLT WAS ABLE TO RESTORE POWER TO THE ENGINE AFTER HE SWITCHED FUEL TANKS. THE PLT TRIED UNSUCCESSFULLY TO RESTART THE ENGINE AFTER THE ENGINE LOST POWER THE THIRD TIME. THE PLT AND CFI STATED THAT THE FUEL GAGES INDICATED ADEQUATE FUEL IN THE TANKS. THE PLT VISUALLY CHECKED THE FUEL BEFORE TAKEOFF, AND HE ESTIMATED THERE WAS ABOUT 30 GALLONS OF FUEL IN THE TANKS. THE FLIGHT DURATION WAS ABOUT 45 MINUTES. POST-CRASH EXAMINATION OF THE ACFT REVEALED THE FUEL TANKS WERE EMPTY.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: FUEL EXHAUSTION CAUSED BY PILOT MISJUDGING THE FUEL SUPPLY. CONTRIBUTING TO THE ACCIDENT WAS INACCURATE FUEL GAGES.

## Findings

Occurrence #1: LOSS OF ENGINE POWER(TOTAL) - NONMECHANICAL  
Phase of Operation: CRUISE

### Findings

1. (C) FLUID,FUEL - EXHAUSTION

2. (C) FUEL SUPPLY - MISJUDGED - PILOT IN COMMAND
3. (F) ENGINE INSTRUMENTS,FUEL QUANTITY GAGE - FALSE INDICATION
4. (F) AIRCRAFT PREFLIGHT - INADEQUATE - PILOT IN COMMAND

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Occurrence #2: FORCED LANDING  
Phase of Operation: DESCENT - EMERGENCY

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Occurrence #3: NOSE GEAR COLLAPSED  
Phase of Operation: LANDING

#### Findings

5. (F) LANDING GEAR,NOSE GEAR - OVERLOAD
6. (F) TERRAIN CONDITION - ROUGH/UNEVEN

## Factual Information

### Pilot Information

<b>Certificate:</b>	Private	<b>Age:</b>	42, Male
<b>Airplane Rating(s):</b>	Single-engine land	<b>Seat Occupied:</b>	Unknown
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	
<b>Instrument Rating(s):</b>	None	<b>Second Pilot Present:</b>	Yes
<b>Instructor Rating(s):</b>		<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 2 Valid Medical--no waivers/lim.	<b>Last FAA Medical Exam:</b>	March 30, 1989
<b>Occupational Pilot:</b>	UNK	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	333 hours (Total, all aircraft), 146 hours (Total, this make and model), 1 hours (Last 90 days, all aircraft), 1 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

### Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	PIPER	<b>Registration:</b>	N8337P
<b>Model/Series:</b>	PA-24-250 PA-24-250	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	243592
<b>Landing Gear Type:</b>		<b>Seats:</b>	4
<b>Date/Type of Last Inspection:</b>	Unknown	<b>Certified Max Gross Wt.:</b>	2900 lbs
<b>Time Since Last Inspection:</b>	0 Hrs	<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>		<b>Engine Manufacturer:</b>	LYCOMING
<b>ELT:</b>	Installed	<b>Engine Model/Series:</b>	O-540-A1A5
<b>Registered Owner:</b>	GARY C. COLE	<b>Rated Power:</b>	250 Horsepower
<b>Operator:</b>		<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>		<b>Distance from Accident Site:</b>	
<b>Observation Time:</b>	13:00 Local	<b>Direction from Accident Site:</b>	
<b>Lowest Cloud Condition:</b>	Clear	<b>Visibility</b>	5 miles
<b>Lowest Ceiling:</b>	None	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	6 knots /	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	240°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>	29 inches Hg	<b>Temperature/Dew Point:</b>	34°C / 24°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>	(PHF )	<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	12:15 Local	<b>Type of Airspace:</b>	

## Airport Information

<b>Airport:</b>	PATRICK HENRY INTL PHF	<b>Runway Surface Type:</b>	Grass/turf
<b>Airport Elevation:</b>	0 ft msl	<b>Runway Surface Condition:</b>	Dry
<b>Runway Used:</b>	0	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>	0 ft / 0 ft	<b>VFR Approach/Landing:</b>	Forced landing

## Wreckage and Impact Information

<b>Crew Injuries:</b>	2 None	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>		<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	2 None	<b>Latitude, Longitude:</b>	37.109546,-76.519348(est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Jones, Dennis
<b>Additional Participating Persons:</b>	JOHN WAGER; SANDSTON , VA
<b>Original Publish Date:</b>	November 9, 1992
<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=11603">https://data.nts.gov/Docket?ProjectID=11603</a>

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