



# National Transportation Safety Board Aviation Accident Final Report

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<b>Location:</b>	WASHINGTON, DC	<b>Accident Number:</b>	IAD97LA071
<b>Date &amp; Time:</b>	05/02/1997, 0125 EDT	<b>Registration:</b>	N1044P
<b>Aircraft:</b>	Piper PA-23	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	2 Minor

**Flight Conducted Under:** Part 91: General Aviation - Personal

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## Analysis

The pilot stated that while en route, the right engine lost power. The pilot alerted air traffic control and he was vectored to Dulles International Airport. The pilot stated that he had the airport in sight when the left engine lost power. The pilot notified air traffic control that he was not going to make the runway, and the airplane impacted trees about 1000 feet short of runway 1. The pilot reported that in the course of his flight planning he misread the fuel quantity for the airplane as 108 gallons, which is the quantity for the auxiliary tank configuration. The pilot stated that he failed to catch his mistake until after the accident had occurred.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: total loss of power on both engines due to fuel exhaustion as a result of the pilot's improper fuel consumption calculations.

## Findings

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

### Findings

1. 2 ENGINES
2. (C) FUEL SYSTEM - EXHAUSTION
3. (C) FUEL CONSUMPTION CALCULATIONS - IMPROPER - PILOT IN COMMAND

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

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Occurrence #3: IN FLIGHT COLLISION WITH OBJECT  
Phase of Operation: EMERGENCY DESCENT/LANDING

### Findings

4. (F) TERRAIN CONDITION - NONE SUITABLE
5. OBJECT - TREE(S)

## Factual Information

On May 2, 1997, at about 0125 eastern daylight time, N1044P, a Piper PA-23, operated by the commercial pilot, sustained substantial damage after impacting trees about 1000 feet short of runway 010 while executing an emergency landing/approach to Washington Dulles International Airport, Washington, DC. The pilot stated that both engines failed. The pilot and one passenger his wife, sustained minor injuries. Visual Meteorological conditions existed and an Instrument flight rules (IFR) flight plan was filed. The flight was conducted under the provisions of Title 14 CFR Part 91. The flight originated from the Lake in the Hills Airport, Lake in the Hills, Illinois, at about 2030 EDT on May 1, 1997.

The pilot stated that while enroute to Washington's National Airport, the right engine quite. He contacted Air Traffic and they vectored him to Dulles International Airport. The pilot stated that he had Dulles insight when the left engine quit. The pilot notified Air Traffic that they were not going to make the runway and crashed into the tops of trees and came to rest nose down in the trees.

The pilot stated the in the course of his flight planning he mistakenly read the fuel quantity for the aircraft as 108 gallons, which is the quantity for the auxiliary tank configuration. The pilot stated that he failed to catch his mistake until after the accident had occurred.

## Pilot Information

<b>Certificate:</b>	Commercial	<b>Age:</b>	33, Male
<b>Airplane Rating(s):</b>	Multi-engine Land; Single-engine Land	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>	Helicopter	<b>Restraint Used:</b>	Seatbelt
<b>Instrument Rating(s):</b>	Airplane; Helicopter	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 1 Valid Medical--no waivers/lim.	<b>Last FAA Medical Exam:</b>	02/24/1997
<b>Occupational Pilot:</b>		<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	1363 hours (Total, all aircraft), 31 hours (Total, this make and model), 589 hours (Pilot In Command, all aircraft), 74 hours (Last 90 days, all aircraft), 24 hours (Last 30 days, all aircraft), 4 hours (Last 24 hours, all aircraft)		

## Aircraft and Owner/Operator Information

Aircraft Make:	Piper	Registration:	N1044P
Model/Series:	PA-23 PA-23	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	23-46
Landing Gear Type:	Retractable - Tricycle	Seats:	4
Date/Type of Last Inspection:	04/26/1997, Annual	Certified Max Gross Wt.:	3500 lbs
Time Since Last Inspection:	8 Hours	Engines:	2 Reciprocating
Airframe Total Time:	3843 Hours	Engine Manufacturer:	Lycoming
ELT:	Installed, activated, aided in locating accident	Engine Model/Series:	O-320-A3B
Registered Owner:	BELVIDERE AVIATION INC	Rated Power:	150 hp
Operator:	BELVIDERE AVIATION INC	Operating Certificate(s) Held:	None

## Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Night/Bright
Observation Facility, Elevation:	IAD, 313 ft msl	Distance from Accident Site:	1 Nautical Miles
Observation Time:	0151 EDT	Direction from Accident Site:	1°
Lowest Cloud Condition:	Clear / 0 ft agl	Visibility	10 Miles
Lowest Ceiling:	Broken / 5000 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	8 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	320°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	12°C / 1°C
Precipitation and Obscuration:			
Departure Point:	LAKE HILLS, IL (3CK)	Type of Flight Plan Filed:	IFR
Destination:	, DC (DCA)	Type of Clearance:	IFR
Departure Time:	2045 CST	Type of Airspace:	Class B

## Airport Information

Airport:	DULLES INTERNATIONAL (IAD)	Runway Surface Type:	Concrete
Airport Elevation:	313 ft	Runway Surface Condition:	Dry
Runway Used:	1	IFR Approach:	None
Runway Length/Width:	11500 ft / 150 ft	VFR Approach/Landing:	Forced Landing

## Wreckage and Impact Information

Crew Injuries:	1 Minor	Aircraft Damage:	Substantial
Passenger Injuries:	1 Minor	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 Minor	Latitude, Longitude:	

## Administrative Information

Investigator In Charge (IIC):	BUTCH WILSON	Report Date:	04/24/1998
Additional Participating Persons:	NORMAN L SCHWANKE		
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 <a href="mailto:pubinq@ntsb.gov">pubinq@ntsb.gov</a> , or at 800-877-6799. Dockets released after this date are available at <a href="http://dms.nts.gov/pubdms/">http://dms.nts.gov/pubdms/</a> .		

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The Independent Safety Board Act, as codified at 49 U.S.C. Section 1154(b), precludes the admission into evidence or use of any part of an NTSB report related to an incident or accident in a civil action for damages resulting from a matter mentioned in the report. A factual report that may be admissible under 49 U.S.C. § 1154(b) is available [here](#).