



# **Aviation Investigation Final Report**

Location: PAWLING, New York Accident Number: NYC89LA030

Date & Time: November 14, 1988, 18:30 Local Registration: N54394

Aircraft: PIPER PA-28-140 Aircraft Damage: Substantial

**Defining Event:** 1 Minor

Flight Conducted Under: Part 91: General aviation - Personal

#### **Analysis**

THE AIRCRAFT EXPERIENCED A POWER LOSS AND MADE AN OFF AIRPORT LANDING. DURING THE INVESTIGATION THE ENGINE WAS TORN DOWN AND FOUR INTAKE LOBES AND ONE EXHAUST LOBE ON THE CAMSHAFT WITH THEIR CORRESPONDING TAPPET BODY FACES WERE SEVERELY SPALLED. METAL WAS FOUND THROUGHOUT THE ENGINE.

#### **Probable Cause and Findings**

The National Transportation Safety Board determines the probable cause(s) of this accident to be: OFF AIRPORT LANDING IN UNSUITALBE TERRAIN FOLLOWING A POWER LOSS CAUSED BY LOSS OF LUBRICATION DUE TO SPALLING ON THE CAMSHAFT AND CORRESPONDING TAPPET BODY FACES.

#### **Findings**

Occurrence #1: LOSS OF ENGINE POWER(PARTIAL) - MECH FAILURE/MALF

Phase of Operation: DESCENT - NORMAL

**Findings** 

1. (C) ENGINE ASSEMBLY, CAMSHAFT - WORN

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Occurrence #2: FORCED LANDING

Phase of Operation: DESCENT - EMERGENCY

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Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER Phase of Operation: LANDING - FLARE/TOUCHDOWN

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## **Factual Information**

#### **Pilot Information**

Certificate:	Private	Age:	46,Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 Valid Medicalw/ waivers/lim	Last FAA Medical Exam:	July 1, 1987
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:	421 hours (Total, all aircraft), 369 hours (Total, this make and model), 378 hours (Pilot In Command, all aircraft), 83 hours (Last 90 days, all aircraft), 17 hours (Last 30 days, all aircraft)		

### **Aircraft and Owner/Operator Information**

Aircraft Make:	PIPER	Registration:	N54394
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Model/Series:	PA-28-140 PA-28-140	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	28-7425119
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:	December 12, 1987 Annual	Certified Max Gross Wt.:	2150 lbs
Time Since Last Inspection:	164 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	2682 Hrs	Engine Manufacturer:	LYCOMING
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	O-320-E3D
Registered Owner:	ROBERT ST. GEORGE	Rated Power:	150 Horsepower
Operator:		Operating Certificate(s) Held:	None
Operator Does Business As:		Operator Designator Code:	

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### **Meteorological Information and Flight Plan**

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Night/dark
Observation Facility, Elevation:		Distance from Accident Site:	
Observation Time:		Direction from Accident Site:	
<b>Lowest Cloud Condition:</b>	Clear	Visibility	20 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	15 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	0°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	6°C / -18°C
Precipitation and Obscuration:	No Obscuration; No Precipita	ation	
Departure Point:	SHIRLEY (HWN)	Type of Flight Plan Filed:	None
Destination:	POUGHKEPSIE (POV)	Type of Clearance:	None
Departure Time:	17:15 Local	Type of Airspace:	Class G

### **Airport Information**

Airport:		Runway Surface Type:	
Airport Elevation:		<b>Runway Surface Condition:</b>	
Runway Used:	0	IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	Forced landing

### **Wreckage and Impact Information**

Crew Injuries:	1 Minor	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Minor	Latitude, Longitude:	41.560745,-73.589721(est)

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#### **Administrative Information**

Investigator In Charge (IIC): Hancock, Robert

Additional Participating ; TETERBORO , NJ Persons:

Original Publish Date: June 25, 1990

Investigation Class: Class

Note:

**Last Revision Date:** 

Investigation Docket: <a href="https://data.ntsb.gov/Docket?ProjectID=36335">https://data.ntsb.gov/Docket?ProjectID=36335</a>

The National Transportation Safety Board (NTSB) is an independent federal agency charged by Congress with investigating every civil aviation accident in the United States and significant events in other modes of transportation—railroad, transit, highway, marine, pipeline, and commercial space. We determine the probable causes of the accidents and events we investigate, and issue safety recommendations aimed at preventing future occurrences. In addition, we conduct transportation safety research studies and offer information and other assistance to family members and survivors for each accident or event we investigate. We also serve as the appellate authority for enforcement actions involving aviation and mariner certificates issued by the Federal Aviation Administration (FAA) and US Coast Guard, and we adjudicate appeals of civil penalty actions taken by the FAA.

The NTSB does not assign fault or blame for an accident or incident; rather, as specified by NTSB regulation, "accident/incident investigations are fact-finding proceedings with no formal issues and no adverse parties ... and are not conducted for the purpose of determining the rights or liabilities of any person" (Title 49 Code of Federal Regulations section 831.4). Assignment of fault or legal liability is not relevant to the NTSB's statutory mission to improve transportation safety by investigating accidents and incidents and issuing safety recommendations. In addition, statutory language prohibits the admission into evidence or use of any part of an NTSB report related to an accident in a civil action for damages resulting from a matter mentioned in the report (Title 49 United States Code section 1154(b)). A factual report that may be admissible under 49 United States Code section 1154(b) is available here.

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