



# Aviation Investigation Final Report

<b>Location:</b>	AVOCA, Pennsylvania	<b>Accident Number:</b>	NYC95LA171
<b>Date &amp; Time:</b>	July 23, 1995, 13:25 Local	<b>Registration:</b>	N1613P
<b>Aircraft:</b>	PIPER PA-22-150	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	1 None
<b>Flight Conducted Under:</b>	Part 91: General aviation - Personal		

## Analysis

APPROACH CONTROL ASKED THE PILOT HOW MUCH FUEL REMAINED, AND THE PILOT REPLIED THAT THERE WAS NO RESERVE FUEL. THE CONTROLLER ADVISED THE PILOT OF AN ALTERNATE AIRPORT CLOSER THAN THE PLANNED DESTINATION. THE PILOT ELECTED TO PROCEED TO THE PLANNED DESTINATION. DURING THE APPROACH, ABOUT TWO MILES FROM THE DESTINATION AIRPORT, THE ENGINE LOST TOTAL POWER AND THE PILOT PERFORMED A FORCED LANDING IN A STONE QUARRY. THE FAA INSPECTOR REPORTED THAT THE FUEL TANKS WERE INSPECTED AND ABOUT ONE QUART OF FUEL WAS FOUND. THE PILOT STATED THAT THERE WERE NO MECHANICAL MALFUNCTIONS, AND 'FORCED LANDING RESULTED FROM WEATHER RELATED FUEL EXHAUSTION AT END OF CROSS COUNTRY TRIP. CLOSER ATTENTION TO HEAD WINDS AND ALTERNATE AIRPORTS COULD HAVE PREVENTED THE ACCIDENT.'

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: the pilot's poor inflight decision and improper fuel management resulting in fuel exhaustion and a subsequent forced landing over rocky terrain.

## Findings

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

Findings

1. FLUID,FUEL - EXHAUSTION
2. (C) IN-FLIGHT PLANNING/DECISION - POOR - PILOT IN COMMAND
3. (C) FUEL MANAGEMENT - IMPROPER - PILOT IN COMMAND

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Occurrence #2: FORCED LANDING

Phase of Operation: DESCENT - EMERGENCY

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Occurrence #3: ON GROUND/WATER ENCOUNTER WITH TERRAIN/WATER

Phase of Operation: EMERGENCY LANDING

Findings

4. TERRAIN CONDITION - ROCK(S)/BOULDER(S)

## Factual Information

On July 23, 1995, at 1325 eastern daylight time, a Piper PA- 22-150, N1613P, was substantially damaged when the engine lost total power and a forced landing was performed in Avoca, Pennsylvania. The private pilot was not injured. The flight originated at Plattsburg, New York, at 0925, destined for Wilkes-Barre/Scranton International Airport, Wilkes-Barre, Pennsylvania. Visual meteorological conditions prevailed and there was an instrument flight plan for the personal flight conducted under 14 CFR Part 91.

In the NTSB 6120.1/2, the pilot stated:

...Altitude was 7000 feet....During this interval, I was asked by approach for my exact fuel situation....Approach was so advised, with emphasis that there really was no further reserve fuel. I was offered an alternate airport as an option (Seamans, 9N3)....I did not accept the alternate. It was a closer airport and would have taken a shorter time, however, I was much more familiar with the terrain around the approach to Wilkes-Barre and was already planning my direction of flight should an emergency develop....I elected inbound to [Wilkes-Barre] and asked for a gradual decent from 7000 feet. The controller...said that he would keep me up high for as long as possible....I got to 2500 feet and 2 miles from touchdown....During final clearance to minimum decent altitude the engine lost all power....

Additionally, the pilot stated that there were no mechanical malfunctions, and "[the] forced landing resulted from weather related fuel exhaustion at [the] end of [the] cross country trip. Closer attention to head winds and alternate airports could have prevented the accident."

The Federal Aviation Administration Inspector stated:

...The pilot reported he ran out of fuel short of the runway. He made an emergency landing in a stone quarry doing damage to the [left] wing, [left] gear leg, nose gear, and propeller. The fuel tanks were inspected for fuel...by a mechanic...at the accident scene. The mechanic reported about one quart of fuel was found....

## Pilot Information

<b>Certificate:</b>	Private	<b>Age:</b>	57, Male
<b>Airplane Rating(s):</b>	Single-engine land; Single-engine sea; Multi-engine land	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	
<b>Instrument Rating(s):</b>	Airplane	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 2 Valid Medical-w/ waivers/lim	<b>Last FAA Medical Exam:</b>	June 2, 1994
<b>Occupational Pilot:</b>	No	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	904 hours (Total, all aircraft), 55 hours (Total, this make and model), 786 hours (Pilot In Command, all aircraft), 30 hours (Last 90 days, all aircraft), 11 hours (Last 30 days, all aircraft), 4 hours (Last 24 hours, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	PIPER	<b>Registration:</b>	N1613P
<b>Model/Series:</b>	PA-22-150 PA-22-150	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	22-2427
<b>Landing Gear Type:</b>	Tricycle	<b>Seats:</b>	4
<b>Date/Type of Last Inspection:</b>	May 5, 1995 Annual	<b>Certified Max Gross Wt.:</b>	2000 lbs
<b>Time Since Last Inspection:</b>	30 Hrs	<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	3025 Hrs	<b>Engine Manufacturer:</b>	LYCOMING
<b>ELT:</b>	Installed	<b>Engine Model/Series:</b>	O-320-A1A
<b>Registered Owner:</b>	IMPROCET, INC.	<b>Rated Power:</b>	150 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>		<b>Direction from Accident Site:</b>	
<b>Lowest Cloud Condition:</b>	Unknown	<b>Visibility</b>	3 miles
<b>Lowest Ceiling:</b>	Broken / 2800 ft AGL	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	/	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	0°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>	28 inches Hg	<b>Temperature/Dew Point:</b>	27°C / 18°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	PLATTSBURG , NY (PLB )	<b>Type of Flight Plan Filed:</b>	IFR
<b>Destination:</b>	(AVP )	<b>Type of Clearance:</b>	IFR
<b>Departure Time:</b>	09:25 Local	<b>Type of Airspace:</b>	Class D;TRSA

## Airport Information

<b>Airport:</b>	WILKES-BARRE/SCRANTON INT AVP	<b>Runway Surface Type:</b>	
<b>Airport Elevation:</b>	963 ft msl	<b>Runway Surface Condition:</b>	
<b>Runway Used:</b>	0	<b>IFR Approach:</b>	
<b>Runway Length/Width:</b>		<b>VFR Approach/Landing:</b>	Forced landing

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 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>	1 None	<b>Latitude, Longitude:</b>	41.340747;-75.719894(est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Leonard, Charles
<b>Additional Participating Persons:</b>	RAYMOND L KUBA; ALLENTOWN , PA
<b>Original Publish Date:</b>	January 29, 1996
<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=39012">https://data.nts.gov/Docket?ProjectID=39012</a>

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