



# National Transportation Safety Board Aviation Accident Data Summary

<b>Location:</b>	WISE, VA	<b>Accident Number:</b>	BFO91LA027
<b>Date &amp; Time:</b>	02/02/1991, 1050 EST	<b>Registration:</b>	N7816D
<b>Aircraft:</b>	PIPER PA-22-150	<b>Injuries:</b>	2 None
<b>Flight Conducted Under:</b>	Part 91: General Aviation - Personal		

## Analysis

THE PILOT HAD JUST DEPARTED THE AIRPORT ON AN IFR FLIGHT AND WAS CLIMBING THROUGH 5,500 FEET WHEN THE AIRCRAFT SUDDENLY LOST SIGNIFICANT POWER. HE IMMEDIATELY PERFORMED THE EMERGENCY PROCEDURES FOR LOSS OF POWER BUT COULD NOT CORRECT THE SITUATION. WITH INSUFFICIENT POWER TO RETURN TO HIS DEPARTURE FIELD, HE ELECTED TO LAND ON A RECLAIMED STRIP MINE. ON TOUCHDOWN, THE NOSE LANDING GEAR BROKE AWAY AND THE AIRCRAFT TIPPED ON ITS NOSE AND CAME TO REST INVERTED CAUSING SUBSTANTIAL DAMAGE. SUBSEQUENT INSPECTION OF THE ENGINE REVEALED DAMAGE IN THE NUMBER THREE CYLINDER CAUSED BY A BROKEN EXHAUST VALVE.

## Probable Cause

The National Transportation Safety Board determines the probable cause(s) of this accident to be: THE LOSS OF ENGINE POWER BROUGHT ON BY A FAILURE OF THE NUMBER THREE CLYINDER EXHAUST VALVE. CONTRIBUTING TO THE ACCIDENT WAS UNSUITABLE TERRAIN ON THE EMERGENCY LANDING FIELD.

## Findings

Occurrence #1: LOSS OF ENGINE POWER(TOTAL) - MECH FAILURE/MALF  
Phase of Operation: CLIMB - TO CRUISE

### Findings

1. (C) ENGINE ASSEMBLY, VALVE, EXHAUST - FAILURE, TOTAL  
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Occurrence #2: FORCED LANDING  
Phase of Operation: DESCENT - EMERGENCY  
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Occurrence #3: NOSE OVER  
Phase of Operation: LANDING - ROLL

### Findings

2. (C) TERRAIN CONDITION - ROUGH/UNEVEN

## Pilot Information

<b>Certificate:</b>	Private	<b>Age:</b>	
<b>Airplane Rating(s):</b>	Single-engine Land	<b>Instrument Rating(s):</b>	Airplane
<b>Other Aircraft Rating(s):</b>	None	<b>Instructor Rating(s):</b>	None
<b>Flight Time:</b>	347 hours (Total, all aircraft), 200 hours (Total, this make and model), 284 hours (Pilot In Command, all aircraft), 13 hours (Last 90 days, all aircraft), 3 hours (Last 30 days, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	PIPER	<b>Registration:</b>	N7816D
<b>Model/Series:</b>	PA-22-150 PA-22-150	<b>Engines:</b>	1 Reciprocating
<b>Operator:</b>	ROBERT J SPERA	<b>Engine Manufacturer:</b>	LYCOMING
<b>Operating Certificate(s) Held:</b>	None	<b>Engine Model/Series:</b>	O-320
<b>Flight Conducted Under:</b>	Part 91: General Aviation - Personal		

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual Conditions	<b>Condition of Light:</b>	Day
<b>Observation Facility, Elevation:</b>	, 0 ft msl	<b>Weather Information Source:</b>	Witness
<b>Lowest Ceiling:</b>	None / 0 ft agl	<b>Wind Speed/Gusts, Direction:</b>	Calm / ,
<b>Temperature:</b>	2°C	<b>Visibility</b>	20 Miles
<b>Precipitation and Obscuration:</b>			
<b>Departure Point:</b>		<b>Destination:</b>	KNOXVILLE, TN (DKX)

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 None	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>	1 None	<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Latitude, Longitude:</b>			

## Administrative Information

<b>Investigator In Charge (IIC):</b>	ALBERT G REITAN	<b>Adopted Date:</b>	12/14/1992
<b>Investigation Docket:</b>	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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