



# National Transportation Safety Board Aviation Accident Data Summary

<b>Location:</b>	SANDSTON, VA	<b>Accident Number:</b>	BFO92FA011
<b>Date &amp; Time:</b>	12/01/1991, 1834 EST	<b>Registration:</b>	N5174P
<b>Aircraft:</b>	PIPER PA-24-180	<b>Injuries:</b>	2 Serious
<b>Flight Conducted Under:</b>	Part 91: General Aviation - Personal		

## Analysis

THE PILOTS DEPARTED WITH FULL FUEL TANKS FOR THEIR FIVE HOUR FLIGHT. THEY WERE GIVEN SEVERAL ALTITUDE CHANGES WHICH AT TIMES, PUT THEM INTO GREATER THAN EXPECTED HEAD WINDS. THEY ALSO WERE GIVEN ONE SIGNIFICANT OFF COURSE VECTOR. LATER IN THE FLIGHT, THEY ELECTED TO STOP SHORT OF THEIR DESTINATION FOR FUEL. DURING THEIR ILS APPROACH IN IMC CONDITIONS. THE AIRCRAFT RAN OUT OF FUEL AND THEY CRASHED INTO A PARTIALLY WOODED AREA.

## Probable Cause

The National Transportation Safety Board determines the probable cause(s) of this accident to be: THE LOSS OF ENGINE POWER DUE TO FUEL EXHAUSTION AND THE PILOTS SELECTION OF UNSUITABLE TERRAIN FOR THE FORCE LANDING. A FACTOR WAS THE PILOT'S IMPROPER INFLIGHT DECISION.

## Findings

Occurrence #1: LOSS OF ENGINE POWER(TOTAL) - NONMECHANICAL  
Phase of Operation: APPROACH - IAF TO FAF/OUTER MARKER (IFR)

### Findings

1. (F) FUEL - EXHAUSTION
2. (F) PLANNING/DECISION - IMPROPER - PILOT IN COMMAND
3. (C) REFUELING - NOT PERFORMED - PILOT IN COMMAND

Occurrence #2: FORCED LANDING

Phase of Operation: DESCENT - EMERGENCY

Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER

Phase of Operation: LANDING - FLARE/TOUCHDOWN

### Findings

4. (C) UNSUITABLE TERRAIN OR TAKEOFF/LANDING/TAXI AREA - SELECTED - PILOT IN COMMAND

## Pilot Information

<b>Certificate:</b>	Airline Transport; Flight Instructor	<b>Age:</b>	60
<b>Airplane Rating(s):</b>	Multi-engine Land; Single-engine Land	<b>Instrument Rating(s):</b>	Airplane
<b>Other Aircraft Rating(s):</b>		<b>Instructor Rating(s):</b>	Airplane Multi-engine; Airplane Single-engine; Instrument Airplane
<b>Flight Time:</b>	4807 hours (Total, all aircraft), 56 hours (Total, this make and model), 4550 hours (Pilot In Command, all aircraft), 74 hours (Last 90 days, all aircraft), 30 hours (Last 30 days, all aircraft), 8 hours (Last 24 hours, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	PIPER	<b>Registration:</b>	N5174P
<b>Model/Series:</b>	PA-24-180 PA-24-180	<b>Engines:</b>	1 Reciprocating
<b>Operator:</b>	MICHAEL KROLL	<b>Engine Manufacturer:</b>	LYCOMING
<b>Operating Certificate(s) Held:</b>	None	<b>Engine Model/Series:</b>	O-360-A1A
<b>Flight Conducted Under:</b>	Part 91: General Aviation - Personal		

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Instrument Conditions	<b>Condition of Light:</b>	Night/Dark
<b>Observation Facility, Elevation:</b>	RIC, 168 ft msl	<b>Weather Information Source:</b>	Weather Observation Facility
<b>Lowest Ceiling:</b>	Overcast / 1700 ft agl	<b>Wind Speed/Gusts, Direction:</b>	6 knots / , 80°
<b>Temperature:</b>	15° C	<b>Visibility</b>	5 Miles
<b>Precipitation and Obscuration:</b>			
<b>Departure Point:</b>	MIDDLEBURY, UT (6B0)	<b>Destination:</b>	JACKSONVILLE, NC (0AJ)

## Airport Information

<b>Airport:</b>	RICHMOND INT. (RIC)	<b>Runway Surface Type:</b>	
<b>Runway Used:</b>	0	<b>Runway Surface Condition:</b>	
<b>Runway Length/Width:</b>			

## Wreckage and Impact Information

<b>Crew Injuries:</b>	2 Serious	<b>Aircraft Damage:</b>	Destroyed
<b>Passenger Injuries:</b>	N/A	<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Latitude, Longitude:</b>			

## Administrative Information

Investigator In Charge (IIC): ALBERT G REITAN

Adopted Date: 03/24/1993

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 [pubinq@ntsb.gov](mailto:pubinq@ntsb.gov), or at 800-877-6799. Dockets released after this date are available at <http://dms.nts.gov/pubdms/>.

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