



# Aviation Investigation Final Report

<b>Location:</b>	BOWLING GREEN, Kentucky	<b>Accident Number:</b>	BF092FA088
<b>Date &amp; Time:</b>	July 6, 1992, 08:20 Local	<b>Registration:</b>	N188AL
<b>Aircraft:</b>	PIPER PA-34-200T	<b>Aircraft Damage:</b>	Destroyed
<b>Defining Event:</b>		<b>Injuries:</b>	3 Fatal
<b>Flight Conducted Under:</b>	Part 91: General aviation - Personal		

## Analysis

SHORTLY AFTER TAKEOFF, THE AIRPLANE CRASHED ABOUT .8 MILES EAST FROM THE DEPARTED RUNWAY 21. THE PILOT REPORTED A CLOUD BASE OF 800 FEET AGL TO THE FAA FLIGHT SERVICE STATION 1 MINUTE AFTER TAKEOFF. SHORTLY THEREAFTER, WITNESSES STATED THAT THEY HEARD THE AIRPLANE'S ENGINE 'SCREAMING' AND THE AIRPLANE CAME OUT OF THE CLOUDS TOWARDS THE GROUND. WITNESSES STATED THAT THEY SAW THE NOSE OF THE AIRPLANE RISE JUST PRIOR TO IMPACTING THE TREES. THE ON SCENE INVESTIGATION DID NOT REVEAL ANY AIRPLANE ANOMALIES. AN ENGINE EXAMINATION WAS ACCOMPLISHED AND NO ANOMALIES WERE NOTED. THE INSTRUMENT PANEL AND AUTO PILOT CONTROLS WERE DESTROYED BY IMPACT FORCES. THREE GYROS WERE RECOVERED FROM THE WRECKAGE AND EXAMINED. TWO OF THE THREE GYRO CASINGS EXHIBITED ROTATIONAL SCORING. THE PILOT HAD LOGGED ABOUT 354 HOURS TOTAL FLIGHT TIME. HE EARNED HIS INSTRUMENT RATING ON MAY 31, 1992. INSTRUMENT METEOROLOGICAL CONDITIONS PREVAILED AT THE TIME OF THE ACCIDENT.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: THE LOSS OF CONTROL IN FLIGHT DUE TO SPATIAL DISORIENTATION/VERTIGO.

## Findings

Occurrence #1: LOSS OF CONTROL - IN FLIGHT  
Phase of Operation: CLIMB - TO CRUISE

Findings

1. (C) SPATIAL DISORIENTATION - PILOT IN COMMAND

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Occurrence #2: IN FLIGHT COLLISION WITH TERRAIN/WATER

Phase of Operation: DESCENT - UNCONTROLLED

## Factual Information

### Pilot Information

<b>Certificate:</b>	Private	<b>Age:</b>	44, Male
<b>Airplane Rating(s):</b>	Single-engine land; 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>	Yes
<b>Medical Certification:</b>	Class 3 Valid Medical--w/ waivers/lim	<b>Last FAA Medical Exam:</b>	April 1, 1991
<b>Occupational Pilot:</b>	UNK	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	354 hours (Total, all aircraft), 51 hours (Last 90 days, all aircraft), 11 hours (Last 30 days, all aircraft)		

### Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	PIPER	<b>Registration:</b>	N188AL
<b>Model/Series:</b>	PA-34-200T PA-34-200T	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	34-7970121
<b>Landing Gear Type:</b>	Retractable - Tricycle	<b>Seats:</b>	7
<b>Date/Type of Last Inspection:</b>	May 6, 1992 Annual	<b>Certified Max Gross Wt.:</b>	4570 lbs
<b>Time Since Last Inspection:</b>		<b>Engines:</b>	2 Reciprocating
<b>Airframe Total Time:</b>		<b>Engine Manufacturer:</b>	CONTINENTAL
<b>ELT:</b>	Installed	<b>Engine Model/Series:</b>	TSIO-360-EB
<b>Registered Owner:</b>	ALEXANDRIA AVIATION INC.	<b>Rated Power:</b>	200 Horsepower
<b>Operator:</b>	ALEXANDRIA AVIATION INC.	<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>	Instrument (IMC)	<b>Condition of Light:</b>	Day
<b>Observation Facility, Elevation:</b>	BWG ,547 ft msl	<b>Distance from Accident Site:</b>	1 Nautical Miles
<b>Observation Time:</b>	08:20 Local	<b>Direction from Accident Site:</b>	90°
<b>Lowest Cloud Condition:</b>	Unknown	<b>Visibility</b>	6 miles
<b>Lowest Ceiling:</b>	Overcast / 500 ft AGL	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	5 knots /	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	360°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>	29 inches Hg	<b>Temperature/Dew Point:</b>	22°C / 18°C
<b>Precipitation and Obscuration:</b>	N/A - None - Fog		
<b>Departure Point:</b>	(BWG )	<b>Type of Flight Plan Filed:</b>	IFR
<b>Destination:</b>	CEDAR RAPIDS , IA (CID )	<b>Type of Clearance:</b>	IFR
<b>Departure Time:</b>	13:14 Local	<b>Type of Airspace:</b>	

## Airport Information

<b>Airport:</b>	WARREN COUNTY AIRPORT BWG	<b>Runway Surface Type:</b>	Asphalt
<b>Airport Elevation:</b>	547 ft msl	<b>Runway Surface Condition:</b>	Dry
<b>Runway Used:</b>	21	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>	6500 ft / 150 ft	<b>VFR Approach/Landing:</b>	None

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 Fatal	<b>Aircraft Damage:</b>	Destroyed
<b>Passenger Injuries:</b>	2 Fatal	<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	3 Fatal	<b>Latitude, Longitude:</b>	37.000598,-86.420608(est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Napolitan, Margaret
<b>Additional Participating Persons:</b>	DOUG HEUER; LOUISVILLE , KY
<b>Original Publish Date:</b>	June 21, 1993
<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=11727">https://data.nts.gov/Docket?ProjectID=11727</a>

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