



# Aviation Investigation Final Report

<b>Location:</b>	FESTUS, Missouri	<b>Accident Number:</b>	CHI93LA142
<b>Date &amp; Time:</b>	April 18, 1993, 11:15 Local	<b>Registration:</b>	N9298T
<b>Aircraft:</b>	PIPER PA-38-112	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	1 Minor
<b>Flight Conducted Under:</b>	Part 91: General aviation - Instructional		

## Analysis

THE PILOT WAS ON A ROUND-ROBIN SOLO CROSS-COUNTRY FLIGHT FROM ST. LOUIS TO POTOSI, BONNE TERRE, AND RETURN. DURING THE RETURN TRIP TO ST. LOUIS THE PILOT BECAME MOTION-SICK AND DIVERTED TO THE NEAREST AIRPORT - FESTUS - FOR A PRECAUTIONARY LANDING. THE AIRPLANE LANDED 250 FT SHORT OF THE RUNWAY, ABOUT 40 FT BELOW THE CREST OF THE HILL WHERE THE RUNWAY IS LOCATED. THE PILOT STATED THAT HE HAD TAKEN AN OVER-THE-COUNTER MOTION-SICKNESS TABLET (50 MG DIMENHYDRINATE) PRIOR TO HIS DEPARTURE FROM ST. LOUIS; AN ELAPSED FLIGHT TIME OF ABOUT 2.1 HRS. THE LABEL OF THE MEDICATION STATED IT COULD CAUSE MARKED DROWSINESS, AND BORE A CAUTION AGAINST DRIVING OR OPERATING MACHINERY.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: THE PILOT-IN-COMMAND'S FAILURE TO MAINTAIN A PROPER GLIDEPATH DURING APPROACH. FACTORS WHICH CONTRIBUTED TO THE ACCIDENT WERE: THE PILOT'S MOTION SICKNESS AND THE EFFECT OF THE OVER-THE-COUNTER MEDICATION ON HIS PILOTING PERFORMANCE.

## Findings

Occurrence #1: UNDERSHOOT  
Phase of Operation: APPROACH - VFR PATTERN - FINAL APPROACH

Findings

1. PRECAUTIONARY LANDING - PERFORMED - PILOT IN COMMAND
2. (C) PROPER GLIDEPATH - NOT MAINTAINED - PILOT IN COMMAND
3. (F) PHYSICAL IMPAIRMENT(MOTION SICKNESS) - PILOT IN COMMAND
4. (F) IMPAIRMENT(DRUGS) - PILOT IN COMMAND

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Occurrence #2: IN FLIGHT COLLISION WITH TERRAIN/WATER

Phase of Operation: APPROACH - VFR PATTERN - FINAL APPROACH

## Factual Information

### Pilot Information

<b>Certificate:</b>	Student	<b>Age:</b>	20, Male
<b>Airplane Rating(s):</b>	None	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	
<b>Instrument Rating(s):</b>	None	<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>	July 22, 1991
<b>Occupational Pilot:</b>	UNK	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	52 hours (Total, all aircraft), 52 hours (Total, this make and model)		

### Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	PIPER	<b>Registration:</b>	N9298T
<b>Model/Series:</b>	PA-38-112 PA-38-112	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal; Utility	<b>Serial Number:</b>	38-78A0337
<b>Landing Gear Type:</b>	Tricycle	<b>Seats:</b>	2
<b>Date/Type of Last Inspection:</b>	March 18, 1993 100 hour	<b>Certified Max Gross Wt.:</b>	1670 lbs
<b>Time Since Last Inspection:</b>	47 Hrs	<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	4041 Hrs	<b>Engine Manufacturer:</b>	LYCOMING
<b>ELT:</b>	Installed, activated, did not aid in locating accident	<b>Engine Model/Series:</b>	O-235-L2C
<b>Registered Owner:</b>	PHOENIX AVIATION	<b>Rated Power:</b>	112 Horsepower
<b>Operator:</b>	PHOENIX AVIATION	<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>	SUS ,463 ft msl	<b>Distance from Accident Site:</b>	35 Nautical Miles
<b>Observation Time:</b>	11:50 Local	<b>Direction from Accident Site:</b>	358°
<b>Lowest Cloud Condition:</b>	Scattered / 4000 ft AGL	<b>Visibility</b>	15 miles
<b>Lowest Ceiling:</b>	Broken / 5500 ft AGL	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	12 knots / 19 knots	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	200°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>	29 inches Hg	<b>Temperature/Dew Point:</b>	17°C / 8°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	SAINT LOUIS , MO (SUS)	<b>Type of Flight Plan Filed:</b>	VFR
<b>Destination:</b>		<b>Type of Clearance:</b>	
<b>Departure Time:</b>	10:45 Local	<b>Type of Airspace:</b>	

## Airport Information

<b>Airport:</b>	FESTUS MEMORIAL FES	<b>Runway Surface Type:</b>	Asphalt
<b>Airport Elevation:</b>	433 ft msl	<b>Runway Surface Condition:</b>	Dry
<b>Runway Used:</b>	18	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>	2200 ft / 49 ft	<b>VFR Approach/Landing:</b>	Traffic pattern

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 Minor	<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 Minor	<b>Latitude, Longitude:</b>	38.219448,-90.400108(est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Dinwiddie, Carl
<b>Additional Participating Persons:</b>	NEAL POWERS; ST. LOUIS , MO
<b>Original Publish Date:</b>	March 18, 1994
<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=15699">https://data.nts.gov/Docket?ProjectID=15699</a>

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