



# **Aviation Investigation Final Report**

Location: FOLEY, Alabama Accident Number: ATL94LA105

Date & Time: May 24, 1994, 08:30 Local Registration: N5512P

Aircraft: PIPER PA-24-250 Aircraft Damage: Substantial

**Defining Event:** 1 Minor

Flight Conducted Under: Part 91: General aviation - Personal

## **Analysis**

THE PRIVATE PILOT REPORTED THAT HE TOOK OFF WITH BOTH FUEL TANKS SHOWING HALF FULL ON THE GAUGES, BUT HE DID NOT VISUALLY INSPECT THE FUEL TANKS FOR FUEL PRIOR TO THE FLIGHT. DURING THE DESCENT FOR LANDING, THE ENGINE LOST POWER. HE SET UP FOR A FORCED LANDING IN A COTTON FIELD. WHILE TRYING TO ALIGN THE AIRCRAFT WITH THE PLOWED ROWS, IT STALLED ABOUT 10 FEET AGL, AND COLLIDED WITH THE GROUND. AN INSPECTION OF THE AIRCRAFT REVEALED THAT THE RIGHT FUEL TANK WAS EMPTY, THE RIGHT FUEL TANK WAS SELECTED IN THE COCKPIT, AND THE FUEL SUMP WAS EMPTY.

## **Probable Cause and Findings**

The National Transportation Safety Board determines the probable cause(s) of this accident to be: THE PILOT'S FAILURE TO MAINTAIN AIRSPEED DURING THE FORCED LANDING, RESULTING IN AN INADVERTENT STALL AND COLLISION WITH THE GROUND. THE PILOT'S INADEQUATE PREFLIGHT AND RESULTANT IMPROPER POSITIONING OF THE FUEL SELECTOR WERE FACTORS.

### **Findings**

Occurrence #1: LOSS OF ENGINE POWER(TOTAL) - NONMECHANICAL

Phase of Operation: DESCENT - NORMAL

**Findings** 

1. FLUID, FUEL - STARVATION

2. (F) FUEL TANK SELECTOR POSITION - IMPROPER - PILOT IN COMMAND

3. (F) AIRCRAFT PREFLIGHT - IMPROPER - PILOT IN COMMAND

------

Occurrence #2: LOSS OF CONTROL - IN FLIGHT Phase of Operation: DESCENT - EMERGENCY

### **Findings**

4. (C) AIRSPEED - NOT MAINTAINED - PILOT IN COMMAND

5. STALL - INADVERTENT - PILOT IN COMMAND

-----

Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER

Phase of Operation: DESCENT - UNCONTROLLED

Page 2 of 6 ATL94LA105

### **Factual Information**

On May 24, 1994, at 0830 central daylight time, a Piper PA- 24-250, N5512P, collided with terrain following an engine power loss near Foley, Alabama. The private pilot had minor injuries. The aircraft was substantially damaged. The aircraft was operated under 14 CFR Part 91 by the pilot. Visual meteorological conditions existed at the time, and no flight plan was on file for the personal flight to Foley. The flight originated at the Jack Edwards Airport in Gulf Shores, Alabama, at 0825.

The pilot reported that he landed the day before the accident with the left fuel tank selected, which was the fullest tank. At the time, the left tank indicated half full. On the morning of the accident flight, he preflighted the airplane, and both tanks indicated half full on the gauges. He did not perform a visual inspection of either tank prior to the accident flight. During the five minute flight to Foley, he retarded the throttle for the descent. When he added power, there was no response to throttle inputs. He set up for a forced landing in a cotton field. During the approach to the cotton field, he turned to align the airplane with the parallel rows of cotton. The aircraft stalled about 10 feet above the ground, and "nosed in."

An inspector with the Federal Aviation Administration visited the accident site and inspected the wreckage. He reported that the aircraft came to rest in a flat, open field. The area around the aircraft was absent of any ground scars, and there was evidence that the aircraft had impacted the ground in a steep, nose low attitude. The right wing fuel tank was empty of fuel, as was the fuel sump. The fuel tank selector valve was found in the right tank position.

#### **Pilot Information**

Certificate:	Private	Age:	45,Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	Airplane single-engine; None	Toxicology Performed:	No
Medical Certification:	Class 3 Valid Medicalw/ waivers/lim	Last FAA Medical Exam:	May 2, 1994
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:	1015 hours (Total, all aircraft), 420 hours (Total, this make and model), 8 hours (Last 90 days, all aircraft), 8 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

Page 3 of 6 ATL94LA105

Aircraft and Owner/Operator Information

Aircraft Make:	PIPER	Registration:	N5512P
Model/Series:	PA-24-250 PA-24-250	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	24575
Landing Gear Type:	Retractable - Tricycle	Seats:	4
Date/Type of Last Inspection:	Annual	Certified Max Gross Wt.:	2800 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	LYCOMING
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	O-540-A1A5
Registered Owner:	LOWDERMILK, STEPHEN M.	Rated Power:	250 Horsepower
Operator:	LOWDERMILK, STEPHEN M.	Operating Certificate(s) Held:	None
Operator Does Business As:		Operator Designator Code:	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	BFM ,26 ft msl	Distance from Accident Site:	18 Nautical Miles
Observation Time:	08:51 Local	Direction from Accident Site:	300°
<b>Lowest Cloud Condition:</b>	Clear	Visibility	7 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	8 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	360°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	21°C / 16°C
Precipitation and Obscuration:	No Obscuration; No Precipit	ation	
Departure Point:	GULF SHORES , AL (AL15)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	08:25 Local	Type of Airspace:	Class G

Page 4 of 6 ATL94LA105

# **Airport Information**

Airport:		Runway Surface Type:	
Airport Elevation:		<b>Runway Surface Condition:</b>	
Runway Used:	0	IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	Forced landing

# Wreckage and Impact Information

Crew Injuries:	1 Minor	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Minor	Latitude, Longitude:	30.399728,-87.679435(est)

Page 5 of 6 ATL94LA105

#### **Administrative Information**

Investigator In Charge (IIC):	Hicks, Ralph	
Additional Participating Persons:	RODGER L HOLMSTROM; BIRMINGHAM , AL	
Original Publish Date:	December 19, 1994	
Last Revision Date:		
Investigation Class:	<u>Class</u>	
Note:		
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=3389	

The National Transportation Safety Board (NTSB) is an independent federal agency charged by Congress with investigating every civil aviation accident in the United States and significant events in other modes of transportation—railroad, transit, highway, marine, pipeline, and commercial space. We determine the probable causes of the accidents and events we investigate, and issue safety recommendations aimed at preventing future occurrences. In addition, we conduct transportation safety research studies and offer information and other assistance to family members and survivors for each accident or event we investigate. We also serve as the appellate authority for enforcement actions involving aviation and mariner certificates issued by the Federal Aviation Administration (FAA) and US Coast Guard, and we adjudicate appeals of civil penalty actions taken by the FAA.

The NTSB does not assign fault or blame for an accident or incident; rather, as specified by NTSB regulation, "accident/incident investigations are fact-finding proceedings with no formal issues and no adverse parties ... and are not conducted for the purpose of determining the rights or liabilities of any person" (Title 49 Code of Federal Regulations section 831.4). Assignment of fault or legal liability is not relevant to the NTSB's statutory mission to improve transportation safety by investigating accidents and incidents and issuing safety recommendations. In addition, statutory language prohibits the admission into evidence or use of any part of an NTSB report related to an accident in a civil action for damages resulting from a matter mentioned in the report (Title 49 United States Code section 1154(b)). A factual report that may be admissible under 49 United States Code section 1154(b) is available here.

Page 6 of 6 ATL94LA105