



# Aviation Investigation Final Report

<b>Location:</b>	EVERGLADES CITY, Florida	<b>Accident Number:</b>	MIA99LA089
<b>Date &amp; Time:</b>	February 21, 1999, 12:40 Local	<b>Registration:</b>	N8309P
<b>Aircraft:</b>	Piper PA-24-250	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	4 None
<b>Flight Conducted Under:</b>	Part 91: General aviation - Personal		

## Analysis

The pilot stated his engine run-up, power application, and rotation on takeoff appeared normal until the airplane settled back onto the runway and would not respond to further pitch control inputs. He had no sensory perception of power loss, but the airplane would not fly and he lost directional control off the right side of the runway into trees. Subsequent examination of the airplane by FAA Inspectors revealed that the fuel selector valve was in the 'off' position and no fuel was in the fuel lines to the carburetor or primer.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The failure of the PIC to maintain directional control on takeoff roll following a loss of power brought about by fuel starvation due to the PIC's failure to verify the proper setting of the fuel selector valve, and the subsequent collision with trees during the attempt to abort the takeoff.

## Findings

Occurrence #1: LOSS OF ENGINE POWER(TOTAL) - NONMECHANICAL  
Phase of Operation: TAKEOFF - ROLL/RUN

### Findings

1. FLUID,FUEL - STARVATION
2. FUEL TANK SELECTOR POSITION - NOT VERIFIED - PILOT IN COMMAND

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Occurrence #2: LOSS OF CONTROL - ON GROUND/WATER  
Phase of Operation: TAKEOFF - ROLL/RUN

Findings

3. (C) DIRECTIONAL CONTROL - NOT MAINTAINED - PILOT IN COMMAND

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Occurrence #3: ON GROUND/WATER COLLISION WITH OBJECT  
Phase of Operation: TAKEOFF - ABORTED

Findings

4. OBJECT - TREE(S)

## Factual Information

On February 21, 1999, about 1240 eastern standard time, a Piper PA-24-250, N8309P, registered to a private individual, operating as a Title 14 CFR Part 91 personal flight, crashed on takeoff from Everglades Airpark, Everglades City, Florida. Visual meteorological conditions prevailed and no flight plan was filed. The aircraft sustained substantial damage, the private-rated pilot, the private-rated right seat passenger/owner and two passengers were uninjured. The flight was originating at the time of the accident.

According to the pilot-in-command (PIC), the plan was that the pilot/owner and a companion would fly into Everglades City from nearby Naples and pick up the PIC and his wife for a pleasure flight to Key West. Although the PIC had flown the airplane from the right seat previously, it was not planned that he would perform the duties of PIC on this flight, until just before boarding. He stated that the pilot/owner was reading the checklists and he, as PIC, was responding, except for the "fuel selector" item on the before-takeoff checklist. The PIC's response to that item was to ask the pilot/owner to select the fullest tank since he would have had most recent knowledge as to fuel loading. Engine run-up was normal, as was the application of full power on commencing his no flap takeoff roll using runway 15. When he rotated the pitch attitude to the takeoff attitude at 85 mph, the airplane initially responded normally with a slight liftoff, but then settled back on the runway and would not fly or respond to his control movements. He made a second attempt at rotation with the same effect. He stated the pilot/owner characterized the occurrence as "having an anchor thrown out". He further stated that his attempt to stop the airplane became ineffective once he exited the right runway edge into the sod, and the airplane collided with mangrove growth. He stated that he had no sensation of power loss, either audibly or visually. The PIC stated, in subsequent telephone follow-up to the investigation, that his wife is certain she saw the pilot/owner move the fuel selector valve during the reading of the before-takeoff checklist.

According to the pilot/owner, "At 85 mph Bob rotated but said the plane didn't want to fly. He lowered the nose for a few more seconds and rotated again. The aircraft did not take off but went into the trees to the right." The pilot/owner stated that throughout the takeoff roll, "the engine and prop sounded smooth and strong". In subsequent telephone follow-up, he further stated that the reason the FAA inspector found the fuel selector in the "off" position, was because fire department personnel asked that he, (pilot/owner) put it there immediately after the accident.

Examination of the airplane and accident site by FAA inspectors revealed the airplane departed the right side of runway 15 about 1,600 feet down the 2,400-foot asphalt runway, skidded in the grass, and impacted mangrove trees about 100 feet laterally and parallel to the runway, sustaining substantial damage. One propeller blade was bent rearward, and the other was undamaged. The fuel selector was found in the "off" position, and both the primer and the

carburetor lines were empty. Exercising the primer thumb knob produced an empty "whoosh" sound and feel. When the inspectors selected "left main" on the fuel selector, the primer fuel line filled and the primer thumb knob action felt normal. The inspectors stated fuel flowed into the carburetor and hand cycling of the throttle linkage produced a spray within the carburetor throat.

At the time of the accident, the nearest weather reporting facility, Naples, reported the wind direction and speed as, 260 degrees at 6 knots. The PIC reported winds at Everglades City at the time of the accident were calm, and the airport manager confirmed that the wind sock indicated little wind.

### Pilot Information

<b>Certificate:</b>	Private	<b>Age:</b>	63, Male
<b>Airplane Rating(s):</b>	Single-engine land	<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>	
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 3 Valid Medical-w/ waivers/lim	<b>Last FAA Medical Exam:</b>	February 17, 1999
<b>Occupational Pilot:</b>	No	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	636 hours (Total, all aircraft), 176 hours (Total, this make and model), 582 hours (Pilot In Command, all aircraft), 17 hours (Last 90 days, all aircraft), 14 hours (Last 30 days, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Piper	<b>Registration:</b>	N8309P
<b>Model/Series:</b>	PA-24-250 PA-24-250	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	24-3559
<b>Landing Gear Type:</b>	Retractable - Tricycle	<b>Seats:</b>	4
<b>Date/Type of Last Inspection:</b>	October 9, 1998 Annual	<b>Certified Max Gross Wt.:</b>	2900 lbs
<b>Time Since Last Inspection:</b>	95 Hrs	<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	4959 Hrs	<b>Engine Manufacturer:</b>	Lycoming
<b>ELT:</b>	Installed, not activated	<b>Engine Model/Series:</b>	O-540-A1D5
<b>Registered Owner:</b>	ROBERT MUNN	<b>Rated Power:</b>	250 Horsepower
<b>Operator:</b>		<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>	APF ,9 ft msl	<b>Distance from Accident Site:</b>	32 Nautical Miles
<b>Observation Time:</b>	12:55 Local	<b>Direction from Accident Site:</b>	315°
<b>Lowest Cloud Condition:</b>	Clear	<b>Visibility</b>	10 miles
<b>Lowest Ceiling:</b>	Unknown	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	6 knots /	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	260°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>	29 inches Hg	<b>Temperature/Dew Point:</b>	22°C / 8°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	(X01 )	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>	KEY WEST , FL (EYW )	<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	12:40 Local	<b>Type of Airspace:</b>	Class G

## Airport Information

<b>Airport:</b>	EVERGLADES AIRPARK XO1	<b>Runway Surface Type:</b>	Asphalt
<b>Airport Elevation:</b>	5 ft msl	<b>Runway Surface Condition:</b>	Dry
<b>Runway Used:</b>	15	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>	2400 ft / 50 ft	<b>VFR Approach/Landing:</b>	None

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 None	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>	3 None	<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	4 None	<b>Latitude, Longitude:</b>	25.830478,-81.400436(est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Stone, Alan
<b>Additional Participating Persons:</b>	LUIS THOMPSON; MIAMI , FL
<b>Original Publish Date:</b>	March 31, 2000
<b>Last Revision Date:</b>	
<b>Investigation Class:</b>	<a href="#">Class</a>
<b>Note:</b>	
<b>Investigation Docket:</b>	<a href="https://data.ntsb.gov/Docket?ProjectID=45782">https://data.ntsb.gov/Docket?ProjectID=45782</a>

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](#).