



# Aviation Investigation Final Report

<b>Location:</b>	PINEHURST, North Carolina	<b>Accident Number:</b>	MIA99LA190
<b>Date &amp; Time:</b>	June 27, 1999, 17:15 Local	<b>Registration:</b>	N1455L
<b>Aircraft:</b>	Beech A23	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	2 None
<b>Flight Conducted Under:</b>	Part 91: General aviation - Instructional		

## Analysis

The CFI and private-rated student were conducting their fifth touch and go landing approach and as power was being applied to correct a low-on-final condition, there was no engine response. The CFI took control and attempted a forced landing to a vacant field that ended up in the trees. Post crash examination of the wreckage revealed the fuel tank selected was empty.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The flight crew's improper fuel management resulting in engine loss of power due to fuel starvation and damage to the airplane due to collision with trees in the subsequent forced landing.

### Findings

Occurrence #1: LOSS OF ENGINE POWER(TOTAL) - NONMECHANICAL  
Phase of Operation: APPROACH

#### Findings

1. (C) FUEL MANAGEMENT - IMPROPER - PILOT IN COMMAND(CFI)
2. FLUID,FUEL - STARVATION

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Occurrence #2: ON GROUND/WATER COLLISION WITH OBJECT

Phase of Operation: EMERGENCY LANDING

Findings

3. OBJECT - TREE(S)

## Factual Information

On June 27, 1999, about 1715 eastern daylight time, a Beech Sundowner A-23, N1455L, registered to a private individual, operating as a Title 14 CFR Part 91 instructional flight, crashed on approach to Moore County Airport, Southern Pines, North Carolina. Visual meteorological conditions prevailed and no flight plan was filed. The aircraft sustained substantial damage and the commercial-rated flight instructor (CFI) and private pilot were not injured. The flight originated from Carthage, North Carolina, about 1 hour before the accident.

According to the CFI/airplane owner, he was giving dual instruction to the buyer of his airplane. They had made two normal approaches and landings, and they were on their third simulated engine failure approach to Moore County Airport's runway 05 when the accident happened. This particular approach had ended up being low and final, and as power was being applied to reach the runway, the engine failed to respond, and the pilot flying/ buyer relinquished airplane control to the CFI. The CFI decided their only option was an emergency landing to a field south of the runway, and the airplane collided with small trees, shedding the outer wing panels. Although the CFI/airplane owner called the event an "engine failure" in his written statement, he admits he ran the right tank dry in subsequent follow-up phone conversation, and stated that a more accurate statement would have been, "engine stoppage due to fuel starvation."

According to the FAA inspector, the CFI stated the fuel selector was on the right wing tank when the engine failed to respond. Neither pilot could remember using the checklist to confirm that the fuel selector was on the fullest tank before commencing the landing approach. Postcrash examination of the fuel system revealed that the right tank was empty and the left tank was about 1/2 full.

## Pilot Information

<b>Certificate:</b>	Commercial; Flight instructor	<b>Age:</b>	41, Male
<b>Airplane Rating(s):</b>	Single-engine land; Multi-engine land	<b>Seat Occupied:</b>	Right
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	
<b>Instrument Rating(s):</b>	Airplane	<b>Second Pilot Present:</b>	Yes
<b>Instructor Rating(s):</b>	Airplane multi-engine; Airplane single-engine; Instrument airplane	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 2 Valid Medical-w/ waivers/lim	<b>Last FAA Medical Exam:</b>	December 10, 1998
<b>Occupational Pilot:</b>	No	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	1565 hours (Total, all aircraft), 194 hours (Total, this make and model), 1378 hours (Pilot In Command, all aircraft), 38 hours (Last 90 days, all aircraft), 16 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Beech	<b>Registration:</b>	N1455L
<b>Model/Series:</b>	A23 A23	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal; Utility	<b>Serial Number:</b>	M-841`
<b>Landing Gear Type:</b>	Tricycle	<b>Seats:</b>	4
<b>Date/Type of Last Inspection:</b>	June 10, 1999 Annual	<b>Certified Max Gross Wt.:</b>	2355 lbs
<b>Time Since Last Inspection:</b>	4 Hrs	<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	1845 Hrs	<b>Engine Manufacturer:</b>	Lycoming
<b>ELT:</b>	Installed, not activated	<b>Engine Model/Series:</b>	IO-346-A
<b>Registered Owner:</b>	SAMUEL R. EVETT	<b>Rated Power:</b>	165 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>	SOP ,456 ft msl	<b>Distance from Accident Site:</b>	1 Nautical Miles
<b>Observation Time:</b>	16:55 Local	<b>Direction from Accident Site:</b>	50°
<b>Lowest Cloud Condition:</b>	Scattered / 1700 ft AGL	<b>Visibility</b>	10 miles
<b>Lowest Ceiling:</b>	Broken / 2700 ft AGL	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	6 knots /	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	290°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>	29 inches Hg	<b>Temperature/Dew Point:</b>	28°C / 23°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	CARTHAGE , NC	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>	PINEHURST , NC (SOP )	<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	16:15 Local	<b>Type of Airspace:</b>	Class E

## Airport Information

<b>Airport:</b>	SOUTHERN PINES SOP	<b>Runway Surface Type:</b>	Asphalt
<b>Airport Elevation:</b>	456 ft msl	<b>Runway Surface Condition:</b>	Dry
<b>Runway Used:</b>	5	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>	5503 ft / 150 ft	<b>VFR Approach/Landing:</b>	Simulated forced landing;Touch and go

## Wreckage and Impact Information

<b>Crew Injuries:</b>	2 None	<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>	2 None	<b>Latitude, Longitude:</b>	35.179283,-79.459365(est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Stone, Alan
<b>Additional Participating Persons:</b>	JAMES ALLEN; WINSTON-SALEM , NC
<b>Original Publish Date:</b>	December 4, 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.nts.gov/Docket?ProjectID=46643">https://data.nts.gov/Docket?ProjectID=46643</a>

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