Aviation Investigation Final Report

Location:	Raymond, Mississippi	**Accident Number:**	MIA03LA131
Date & Time:	June 23, 2003, 19:50 Local	**Registration:**	N929TP
Aircraft:	Beech Be-35-33	**Aircraft Damage:**	Substantial
Defining Event:		**Injuries:**	1 Serious, 1 Minor
Flight Conducted Under:	Part 91: General aviation - Instructional		

Analysis

The pilot stated that both the auxiliary and main fuel tanks were full of fuel, and that he checked the sumps, then took off about 18:15, with the fuel selector valve set to the left main fuel tank position. He said that he and his flight instructor then flew to the practice area and performed several maneuvers. They then went to Hawkins Field and performed two ILS approaches to runway 16, and estimated that by that time he had about 1/2 the fuel in the left main tank. He said they then changed the fuel selector to the "auxiliary tanks position." They then flew across a reservoir to view some land in Rankin County, and after looking at the land, flew back to the Raymond Airport, and entered a left downwind for landing on runway 12. While on the downwind he said he placed the fuel selector to the right main fuel tank position, and flew the approach, performing a touch-and-go landing on runway 12. He said they then flew a left pattern to perform practice slips to a landing. They performed another touch and go landing, and about 1945, after having just taken off and while at an altitude of 200 feet during the climb, the airplane's engine ceased operating. He said that the flight instructor took over control of the airplane, and they both worked together to perform emergency procedures in an attempt to restart the engine. He stated that as part of the emergency procedures, they ensured that the fuel selector was set to the right main fuel tank, and that the fuel gauge showed that there was fuel onboard. As they were descending and approaching the trees, the pilot said that the flight instructor told him to activate the auxiliary pump, and when he did so the airplane engine began operating again. He said the engine operated sufficiently to clear the trees, and then ceased operating again. While over the trees, the pilot said the airplane stalled, and it descended, impacting the ground. Post crash examination of the aircraft was performed by an FAA licensed mechanic with an inspection authorization rating. The mechanic stated that he found the fuel system to be intact and that there was no evidence of fuel leakage. He further stated that he found about 1/3 to 1/2 of a tank of fuel in the auxiliary tanks, about 2/3 a tank of fuel in the left main tank, and the right main fuel tank was full. During recovery of the airplane, the mechanic said that the airplane was placed on the flat-bed truck, with the landing gear retracted. He said that while on the flat-bed, the airplane was in a slightly nose high

attitude, and he noted that the auxiliary fuel tank's fuel supply opening which supplies fuel from the auxiliary fuel tank to the engine was uncovered, with the fuel in the auxiliary tanks being below the opening. The mechanic also stated that under the supervision of an FAA inspector, he verified the integrity of all pertinent airplane systems. He stated that he checked the integrity of the fuel system and verified delivery of fuel to the engine. He then rigged the engine to a test stand, and tested it throughout the full operating range, and the engine operated normally.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The loss of engine power for undetermined reasons and the pilot's failure to maintain airspeed resulting in a stall.

Findings

Occurrence #1: LOSS OF ENGINE POWER
Phase of Operation: TAKEOFF - INITIAL CLIMB

Findings
1. (C) REASON FOR OCCURRENCE UNDETERMINED

Occurrence #2: FORCED LANDING
Phase of Operation: DESCENT - EMERGENCY

Occurrence #3: LOSS OF CONTROL - IN FLIGHT
Phase of Operation: DESCENT - EMERGENCY

Findings
2. OBJECT - TREE(S)
3. MANEUVER TO AVOID OBSTRUCTIONS - ATTEMPTED - FLIGHTCREW
4. (C) AIRSPEED - NOT MAINTAINED - FLIGHTCREW
5. STALL/SPIN - INADVERTENT - FLIGHTCREW

Occurrence #4: IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation: DESCENT - UNCONTROLLED

Findings
6. TERRAIN CONDITION - GROUND

Factual Information

On June 23, 2003, about 1950 central daylight time, a Beech BE-35-33, N929TP, registered to and operated by a private individual as a Title 14 CFR Part 91 instructional flight, crashed shortly after takeoff from Raymond, Mississippi. Visual meteorological conditions prevailed, and no flight plan was filed. The private-rated pilot received minor injuries, and the commercial-rated flight instructor received serious injuries. The airplane incurred substantial damage. The flight was originating at the time of the accident.

The pilot stated that prior to departing on his flight, he visually ensured that the both auxiliary fuel tanks were full of fuel, and then he and his flight instructor topped off the main fuel tanks. After waiting several minutes, the pilot said that he checked the fuel sumps, and took off about 1815. He said that the fuel selector valve was set to the left main fuel tank position, and they flew to the practice area and performed several maneuvers. They then proceeded to Hawkins Field and performed two ILS approaches to runway 16. By that time he said that they had burned about 1/2 the fuel in the left main tank and they changed the fuel selector to the "auxiliary tanks position." They then flew across the reservoir to view some land in Rankin County, and after looking at the land, flew back to the Raymond Airport, and entered a left downwind for landing on runway 12. He also specifically said that he on the downwind he placed the fuel selector to the right main fuel tank position. He said they flew the approach and performed a touch-and-go landing on runway 12, and then flew a left pattern and practiced slips to a landing. He said they practiced slips "both ways" to a landing on runway 12, and performed another touch-and-go landing. About 1945, and the pilot said he was taking off after a touch-and-go landing, and when he reached an altitude of 200 feet during the climb, the airplane's engine ceased operating. He said that the flight instructor took over control of the airplane, and they both worked together to perform emergency procedures in an attempt to restart the engine. He stated that as part of the emergency procedures, they ensured that the fuel selector was set to the right main fuel tank, and that the fuel gauge showed that there was fuel onboard. As they were descending and approaching the trees, the pilot said that the flight instructor told him to activate the auxiliary pump, and when he did so the airplane engine began operating again. He said the engine operated sufficiently to clear the trees, and then ceased operating again. While over the trees, the pilot said the airplane stalled, and it descended, impacting the ground. The flight instructor did not provide a statement to the NTSB.

Postcrash examination of the aircraft was performed by an FAA licensed mechanic with an inspection authorization rating. The mechanic stated that the fuel system was intact and that there was no evidence of fuel leakage. He further stated that he found about 1/3 to 1/2 of a tank of fuel in the auxiliary tanks, about 2/3 a tank of fuel in the left main tank, and the right main fuel tank was full. During recovery of the airplane, the mechanic said that the airplane was placed on the flat-bed truck, with the landing gear retracted. He said that while on the flat-

bed, the airplane was in a slightly nose high attitude, and he noted that the auxiliary fuel tank's fuel supply opening which supplies fuel from the auxiliary fuel tank to the engine was uncovered, with the fuel in the auxiliary tanks being below the opening. The mechanic also stated that under the supervision of an FAA inspector, he verified the integrity of all pertinent airplane systems. He stated that he verified delivery of fuel to the engine. He said he installed the battery, grounded the airplane, and operated the fuel pump and checked fuel flow from all tank positions. He also said he checked fuel tank vents for obstructions, checked fuel screens, and removed and examined the fuel pump. He then reinstalled the fuel pump, and rigged the engine to a test stand, testing it throughout the full operating range, and it operated normally.

Pilot Information

Certificate:	Private	**Age:**	44,Male
Airplane Rating(s):	Single-engine land	**Seat Occupied:**	Left
Other Aircraft Rating(s):	None	**Restraint Used:**	
Instrument Rating(s):	Airplane	**Second Pilot Present:**	Yes
Instructor Rating(s):	None	**Toxicology Performed:**	No
Medical Certification:	Class 3 Valid Medical--no waivers/lim.	**Last FAA Medical Exam:**	November 20, 2002
Occupational Pilot:	UNK	**Last Flight Review or Equivalent:**	
Flight Time:	254 hours (Total, all aircraft), 22 hours (Total, this make and model), 149 hours (Pilot In Command, all aircraft), 22 hours (Last 90 days, all aircraft), 8 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

Flight instructor Information

Certificate:	Airline transport; Commercial; Flight instructor	**Age:**	Male
Airplane Rating(s):	Single-engine land; Multi-engine land	**Seat Occupied:**	Right
Other Aircraft Rating(s):		**Restraint Used:**	
Instrument Rating(s):	Airplane	**Second Pilot Present:**	Yes
Instructor Rating(s):	Airplane single-engine	**Toxicology Performed:**	No
Medical Certification:		**Last FAA Medical Exam:**	
Occupational Pilot:	Yes	**Last Flight Review or Equivalent:**	
Flight Time:			

Aircraft and Owner/Operator Information

Aircraft Make:	Beech	**Registration:**	N929TP
Model/Series:	Be-35-33	**Aircraft Category:**	Airplane
Year of Manufacture:		**Amateur Built:**	
Airworthiness Certificate:	Normal	**Serial Number:**	CD-143
Landing Gear Type:	Retractable - Tricycle	**Seats:**	4
Date/Type of Last Inspection:	February 3, 2003 Annual	**Certified Max Gross Wt.:**	2900 lbs
Time Since Last Inspection:	48 Hrs	**Engines:**	1 Reciprocating
Airframe Total Time:	5248 Hrs at time of accident	**Engine Manufacturer:**	Teledyne Continental
ELT:	Installed, activated, did not aid in locating accident	**Engine Model/Series:**	IO-470-J
Registered Owner:	Ernest L. Coward Jr.	**Rated Power:**	225 Horsepower
Operator:		**Operating Certificate(s) Held:**	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	**Condition of Light:**	Dusk
Observation Facility, Elevation:	JAN,346 ft msl	**Distance from Accident Site:**	
Observation Time:	19:53 Local	**Direction from Accident Site:**	
Lowest Cloud Condition:	Clear	**Visibility**	10 miles
Lowest Ceiling:	None	**Visibility (RVR):**	
Wind Speed/Gusts:	5 knots /	**Turbulence Type Forecast/Actual:**	/
Wind Direction:	70°	**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:	29.93 inches Hg	**Temperature/Dew Point:**	29°C / 19°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Raymond, MS (M16)	**Type of Flight Plan Filed:**	None
Destination:	(M16)	**Type of Clearance:**	None
Departure Time:		**Type of Airspace:**	Class E

Airport Information

Airport:	John Bell Williams M16	**Runway Surface Type:**	Asphalt
Airport Elevation:	246 ft msl	**Runway Surface Condition:**	Dry
Runway Used:	12	**IFR Approach:**	None
Runway Length/Width:	3992 ft / 75 ft	**VFR Approach/Landing:**	Forced landing

Wreckage and Impact Information

Crew Injuries:	1 Serious, 1 Minor	**Aircraft Damage:**	Substantial
Passenger Injuries:		**Aircraft Fire:**	None
Ground Injuries:	N/A	**Aircraft Explosion:**	None
Total Injuries:	1 Serious, 1 Minor	**Latitude, Longitude:**	32.305557,-90.413887

Administrative Information

Investigator In Charge (IIC):	Lovell, John
Additional Participating Persons:	Michael E Jones; FAA FSDO; Jackson, MS
Original Publish Date:	June 30, 2004
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=57348