Aviation Investigation Final Report

Location:	DAHLONEGA, Georgia	**Accident Number:**	ATL05CA087
Date & Time:	May 23, 2005, 13:55 Local	**Registration:**	N17836
Aircraft:	Beech BE-36	**Aircraft Damage:**	Substantial
Defining Event:		**Injuries:**	1 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

According to the pilot, he prepared his airplane for a short cross-country flight. After the preflight he departed the Gainesville Airport and climbed to 3000 feet. Upon arrival at his destination airport he turned downwind and then base to set up for his final approach for landing. As the pilot adjusted the power setting the manifold pressure began to drop. The pilot switched the fuel selector from the right fuel tank to the left fuel tank, and the manifold pressure continued to drop and the engine lost power. The pilot made an off field forced landing on a road. During the landing roll out the right wing struck a tree. Post accident examination of the airplane revealed the outboard section of the right wing was broken off of the airframe. The nose of the airplane was buckled downward and aft, and the nose gear was separated from the airframe. The left wing assembly was buckled. Examination of the right fuel tank revealed that it had less than a quart of fuel. The left fuel tank had approximately 12 gallons of fuel. According to the pilot, "a possible miscalculation of remaining fuel in the right tank, and more attention to fuel management may have prevented the emergency landing". Review of the pilot operating handbook: Before Landing checklist item #2 states: Fuel Selector Valve-SELECT FULLER TANK (feel for detent).

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's mismanagment of the fuel supply which resulted in fuel starvation and subsequent loss of engine power.

Findings

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

Findings
1. (C) FUEL SYSTEM - STARVATION
2. (C) FUEL TANK SELECTOR POSITION - IMPROPER - PILOT IN COMMAND

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

Occurrence #3: ON GROUND/WATER COLLISION WITH OBJECT
Phase of Operation: LANDING - ROLL

Findings
3. OBJECT - TREE(S)

Factual Information

On May 24, 2005, at 1355 Eastern Standard Time, a Beech 36, N17836, registered to and operated by a private pilot, collided with a tree during a forced landing near Dahlonega, Georgia. The personal flight was operated under the provisions of Title 14 CFR Part 91 with no flight plan filed. Visual meteorological conditions prevailed at the time of the accident. The airplane was substantially damaged and the private pilot was uninjured. The flight departed Gainesville, Georgia on May 24, 2005 at 1330.

According to the pilot, he prepared his airplane for a short cross-country flight. After the pre-flight he departed the Gainesville Airport and climbed to 3000 feet. Upon arrival at his destination the pilot flew over the airport and entered the traffic pattern for runway 33. The pilot then turned downwind and base to set up for his final approach to landing. As the pilot adjusted the power setting the manifold pressure began to drop. When the pilot advanced the throttle and the engine did not respond. The pilot switched fuel selector from the right fuel tank to the left fuel tank. The manifold pressure continued to drop and the engine lost power. The pilot selected a nearby road, and made an off field forced landing. During the landing roll the right wing struck a tree, and the airplane spun into a ditch.

The post-accident examination of the airplane revealed the outboard section of the right wing was broken off of the airframe. The nose section of the airplane was buckled downward and aft, and the nose gear was separated from the airframe. The left wing assembly was buckled. Examination of the right fuel tank revealed that it had less than a quart of fuel. The left fuel tank had approximately 12 gallons of fuel. According to the pilot, "a possible miscalculation of remaining fuel in the right tank, and more attention to fuel management may have prevented the emergency landing". Review of the pilot operating handbook: Before Landing checklist item #2 states: Fuel Selector Valve-SELECT FULLER TANK (feel for detent).

Pilot Information

Certificate:	Private	**Age:**	36,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):	None	**Toxicology Performed:**	No
Medical Certification:	Class 3 With waivers/limitations	**Last FAA Medical Exam:**	March 1, 2005
Occupational Pilot:	No	**Last Flight Review or Equivalent:**	June 1, 2004
Flight Time:	758 hours (Total, all aircraft), 76 hours (Total, this make and model), 700 hours (Pilot In Command, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Beech	**Registration:**	N17836
Model/Series:	BE-36	**Aircraft Category:**	Airplane
Year of Manufacture:		**Amateur Built:**	
Airworthiness Certificate:	Normal	**Serial Number:**	E-1041
Landing Gear Type:	Retractable - Tricycle	**Seats:**	6
Date/Type of Last Inspection:	January 1, 2005 Annual	**Certified Max Gross Wt.:**	3600 lbs
Time Since Last Inspection:	1158 Hrs	**Engines:**	1 Reciprocating
Airframe Total Time:	3074 Hrs	**Engine Manufacturer:**	Continental
ELT:	Installed, not activated	**Engine Model/Series:**	IO 520 BA12
Registered Owner:	Jack Freeman	**Rated Power:**	300 Horsepower
Operator:	F & W AVIATION LLC	**Operating Certificate(s) Held:**	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	**Condition of Light:**	Day
Observation Facility, Elevation:	GVL,1275 ft msl	**Distance from Accident Site:**	20 Nautical Miles
Observation Time:	13:53 Local	**Direction from Accident Site:**	170°
Lowest Cloud Condition:	Few / 4800 ft AGL	**Visibility**	8 miles
Lowest Ceiling:	None	**Visibility (RVR):**	
Wind Speed/Gusts:	16 knots / 20 knots	**Turbulence Type Forecast/Actual:**	/
Wind Direction:	280°	**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:	29.78 inches Hg	**Temperature/Dew Point:**	27°C / 16°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	GAINESVILLE, GA (GVL)	**Type of Flight Plan Filed:**	None
Destination:	DAHLONEGA, GA (9A0)	**Type of Clearance:**	VFR
Departure Time:	13:30 Local	**Type of Airspace:**	

Airport Information

Airport:	LUMPKIN COUNTY-WIMPYS 9A0	**Runway Surface Type:**	
Airport Elevation:	1311 ft msl	**Runway Surface Condition:**	
Runway Used:		**IFR Approach:**	Unknown
Runway Length/Width:		**VFR Approach/Landing:**	Forced landing

Wreckage and Impact Information

Crew Injuries:	1 None	**Aircraft Damage:**	Substantial
Passenger Injuries:		**Aircraft Fire:**	None
Ground Injuries:	N/A	**Aircraft Explosion:**	None
Total Injuries:	1 None	**Latitude, Longitude:**	34.579166,-84.020278

Administrative Information

Investigator In Charge (IIC):	Alleyne, Eric
Additional Participating Persons:	Jose Gueits; Atlanta FSDO; Atlanta , GA
Original Publish Date:	June 28, 2006
Last Revision Date:	
Investigation Class:	Class
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=61691