Aviation Investigation Final Report

Location:	Brunswick, Georgia	**Accident Number:**	ATL03LA084
Date & Time:	April 27, 2003, 12:10 Local	**Registration:**	N1483L
Aircraft:	Beech A23	**Aircraft Damage:**	Substantial
Defining Event:		**Injuries:**	2 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

According to the pilot, the engine lost power and the airplane was not able to maintain altitude. When efforts by the pilot to maintain altitude failed, the pilot selected an emergency landing area. The airplane was damaged during a forced landing in a wooded area two miles short of the runway. Examination of the wreckage revealed that the fuel line fitting was loose. The fuel line was observed to be loose but still attached. No fuel was present in the right fuel tank, and fuel was recovered from the left fuel tank. No fuel was found in the gascolator. However, fuel was found leaking from the engine compartment after the accident.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: Maintenance personnel's failure to secure the fitting on a fuel line, which resulted in a loss of engine power.

Findings

Occurrence #1: LOSS OF ENGINE POWER
Phase of Operation: APPROACH

Findings
1. (C) FUEL SYSTEM,LINE FITTING - LOOSE PART/BOLT/NUT/CLAMP/ETC
2. (C) MAINTENANCE,INSTALLATION - IMPROPER - OTHER MAINTENANCE PERSONNEL
3. FLUID,FUEL - STARVATION

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

Occurrence #3: IN FLIGHT COLLISION WITH OBJECT
Phase of Operation: EMERGENCY DESCENT/LANDING

Findings
4. OBJECT - TREE(S)

Factual Information

On April 27, 2003, at 1210 eastern daylight time, a Beech A23, N1483L, registered to and operated by a private pilot, collided with the ground during an emergency landing in a wooded area two miles south west of Glynco Jetport in Brunswick, Georgia. The personal flight was operated under the provisions of Title 14 CFR Part 91 with no flight plan filed. Visual weather conditions prevailed at the time of the accident. The pilot and passenger were not injured. The airplane was substantially damaged. The flight departed Eagle Neck Airport in Brunswick, Georgia, at 1130 on April 27, 2003.

According to the pilot, while flying at 1000 feet and approximately 7 miles southwest of Glynco Jetport, the engine lost power, and the airplane was not able to maintain altitude. The pilot stated he switched fuel tanks and turned on the fuel boost pump but the engine RPM remained at idle. When efforts by the pilot to maintain altitude failed, the pilot selected an emergency landing area. The airplane was damaged during an emergency landing in a wooded area two miles short of runway 7.

Examination of the wreckage site revealed that the wreckage debris of the downed airplane was scattered in the immeadiate vicinity of the wreckage. Examination of the wreckage revealed that the left wing was separated from the airframe at the attachment points. The left wing had leading edge damage. The engine mounts were broken. The starter was separated from the engine. The right wing had leading edge damage. The propeller was bent aft and no leading edge damage was observed. Fuel was found leaking from the engine compartment.

The mixture was found in the full rich position and the throttle was in the idle position. The fuel selector was in the left tank position. Both wing fuel tanks were not breached and showed no signs of leaking. No fuel was present in the right fuel tank, and 8 gallons of fuel was recovered from the left fuel tank. No fuel was found in the gascolator. No fuel was found in the fuel pressure line going to the pressure gage.

No fuel was observed at the fuel manifold. The fitting at the fuel distributor comming from the fuel control unit was loose.The fuel supply line to the manifold was loose but still attached. According to the Airframe and Powerplant Mechanics General Handbook "Screws, nuts, and bolts that hold units together should be evenly tightened or torqued to prevent leakage past the gasket or seal.

A review of the airplane logbooks revealed that a 100-hour inspection was performed on the engine July 8, 2002. During the 100-hour inspection the fuel metering system was removed and replaced with the fuel metering system from Continental IO-346, Serial number 1003485-A. At the time of the 100-hour inspection the airplane's total time in service was 1979.0. At the time of the accident the total time of the airplane was 1986.7.

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):	None	**Second Pilot Present:**	No
Instructor Rating(s):	None	**Toxicology Performed:**	No
Medical Certification:	Class 3 Without waivers/limitations	**Last FAA Medical Exam:**	February 28, 2003
Occupational Pilot:	No	**Last Flight Review or Equivalent:**	
Flight Time:	245 hours (Total, all aircraft), 60 hours (Total, this make and model), 14 hours (Last 90 days, all aircraft), 5 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Beech	**Registration:**	N1483L
Model/Series:	A23	**Aircraft Category:**	Airplane
Year of Manufacture:		**Amateur Built:**	
Airworthiness Certificate:	Normal	**Serial Number:**	M-883
Landing Gear Type:	Tricycle	**Seats:**	4
Date/Type of Last Inspection:	Annual	**Certified Max Gross Wt.:**	2300 lbs
Time Since Last Inspection:		**Engines:**	1 Reciprocating
Airframe Total Time:		**Engine Manufacturer:**	Continental
ELT:	Installed, activated, did not aid in locating accident	**Engine Model/Series:**	IO-346
Registered Owner:	On file	**Rated Power:**	165 Horsepower
Operator:	On file	**Operating Certificate(s) Held:**	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	**Condition of Light:**	Day
Observation Facility, Elevation:	SAV,51 ft msl	**Distance from Accident Site:**	70 Nautical Miles
Observation Time:	11:53 Local	**Direction from Accident Site:**	20°
Lowest Cloud Condition:	Clear	**Visibility**	10 miles
Lowest Ceiling:		**Visibility (RVR):**	
Wind Speed/Gusts:	11 knots /	**Turbulence Type Forecast/Actual:**	/
Wind Direction:	70°	**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:	29.94 inches Hg	**Temperature/Dew Point:**	22°C / 16°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Brunswick, GA (1GA0)	**Type of Flight Plan Filed:**	None
Destination:	Brunswick, GA (1GA0)	**Type of Clearance:**	None
Departure Time:	11:20 Local	**Type of Airspace:**	Class G

Airport Information

Airport:	Brunswick Glynco Jetport BQK	**Runway Surface Type:**	Asphalt
Airport Elevation:	26 ft msl	**Runway Surface Condition:**	Dry
Runway Used:	7	**IFR Approach:**	None
Runway Length/Width:	8001 ft / 150 ft	**VFR Approach/Landing:**	Forced landing

Wreckage and Impact Information

Crew Injuries:	1 None	**Aircraft Damage:**	Substantial
Passenger Injuries:	1 None	**Aircraft Fire:**	None
Ground Injuries:	N/A	**Aircraft Explosion:**	None
Total Injuries:	2 None	**Latitude, Longitude:**	31.258888,-81.46611

Administrative Information

Investigator In Charge (IIC):	Powell, Phillip
Additional Participating Persons:	Andrew Turner; Atlanta FSDO
Original Publish Date:	June 28, 2006
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=56920