National Transportation Safety Board
Aviation Accident Final Report

Location:	BATESVILLE, MS	**Accident Number:**	ATL96LA078
Date & Time:	04/07/1996, 1155 CDT	**Registration:**	N310MA
Aircraft:	Mitsubishi MU-2B	**Aircraft Damage:**	Substantial
Defining Event:		**Injuries:**	2 None
Flight Conducted Under:	Part 91: General Aviation - Personal		

Analysis

The pilot reported that loss of power occurred in both engines after he entered the traffic pattern for a full stop landing. The airplane collided with trees during an emergency landing in a cotton field near the airport. Subsequent review of the aircraft maintenance logs disclosed that Mitsubishi MU-2 Service Bulletin (SB) 130A had not been accomplished on this airplane. According to the manufacturer, an inadvertent failure or the improper installation of a filler cap after refueling may cause an air pressure differential between the center and outboard portions of the main integral fuel tank. Air leakage from the filler cap may result in failure of the fuel transfer system to move fuel from the outboard tank section to the center tank section. To eliminate this possible malfunction, the operator was to remove vent check valves from the bulkhead between the tanks in accordance with SB 130A. The operator's maintenance policies required that, company jet and turbo propeller aircraft be maintained under a maintenance program in accordance with FAR Parts 135.415, 135.417, 135.423, 135.443, and a corporate flight management approved aircraft inspection program (AAIP). The maintenance inspection program also included compliance with manufacturers' service bulletins and service letters.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: an anomaly in the fuel system that allowed a pressure differential to occur between the center and outer portions of the main integral fuel tank, which in turn resulted in fuel starvation of both engines. A factor relating to the accident was: failure of company maintenance personnel to remove fuel system vent check valves as recommended by Mitsubishi MU-2 Service Bulletin 130A.

Findings

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

Findings
1. ALL ENGINES
2. (C) MAINTENANCE,AAIP/PROGRESSIVE PROGRAM - NOT FOLLOWED - COMPANY MAINTENANCE PERSONNEL
3. (C) FUEL SYSTEM - MALFUNCTION
4. (F) FUEL SYSTEM,VENT - OTHER
5. (F) MAINTENANCE,SERVICE BULLETIN/LETTER - NOT COMPLIED WITH - COMPANY MAINTENANCE PERSONNEL
6. (C) FLUID,FUEL - STARVATION

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

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

Findings
7. OBJECT - TREE(S)

Factual Information

On April 7, 1996, at 1155 central daylight time, a Mitsubishi MU-2B, N310MA, collided with a tree and the ground during an emergency landing near Panola County Airport, in Batesville, Mississippi. The personal flight operated under the provisions of Title 14 CFR Part 91, and the pilot had filed an instrument plan for this flight. Visual weather conditions prevailed at the time of the accident. The airplane sustained substantial damage, and the private pilot and passenger were not injured. The flight departed Montgomery, Alabama, at 1055 hours.

According to the pilot, both engines quit after he entered the traffic pattern for a full stop landing. The pilot confirmed that the fuel selectors were in the on position and feathered both propellers. He selected an open field, and made an emergency landing one mile south of the airport. The airplane collided with a tree during the emergency landing.

A review of the aircraft maintenance logs disclosed that Service Bulletin No. 130A had not been accomplished on this airplane. According to a manufacturer field report, an improperly installed filler cap after refueling, may cause an air pressure head between the center tank and outboard tanks. The air leakage from the filler cap resulted in a possible failure of the fuel transfer system to transfer fuel from the outboard tank to the center tank. To eliminate this possible malfunction, the operator is instructed to remove vent check valves from the bulkhead between the tanks.

A review of the company's maintenance policies, stated that the company jet and turbo propeller aircraft shall be maintained under a maintenance program in accordance with FAR Parts 135.415, 135.417, 135.423- 135.443, and corporate flight management approved aircraft inspection program (AAIP). The maintenance inspection program also included compliance with manufacturers service bulletins and service letters.

The wreckage examination revealed that enough fuel was in the fuel system to operate the engines. During the wreckage examination, the right engine assembly , still attached to the airframe, was started and ran for several minutes using fuel from the aircraft fuel supply (see attached inspector's report). Impact damage prevented the functional check of the left engine assembly. The visual and physical examination of the left engine assembly failed to disclose a mechanical problem.

Pilot Information

Certificate:	Private	**Age:**	38, Male
Airplane Rating(s):	Multi-engine Land; Single-engine Land	**Seat Occupied:**	Left
Other Aircraft Rating(s):	None	**Restraint Used:**	Seatbelt, Shoulder harness
Instrument Rating(s):	Airplane	**Second Pilot Present:**	No
Instructor Rating(s):	None	**Toxicology Performed:**	No
Medical Certification:	Class 3 Valid Medical--w/ waivers/lim.	**Last FAA Medical Exam:**	10/04/1994
Occupational Pilot:		**Last Flight Review or Equivalent:**	
Flight Time:	1400 hours (Total, all aircraft), 89 hours (Total, this make and model), 1400 hours (Pilot In Command, all aircraft), 50 hours (Last 90 days, all aircraft), 20 hours (Last 30 days, all aircraft), 6 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Mitsubishi	**Registration:**	N310MA
Model/Series:	MU-2B MU-2B	**Aircraft Category:**	Airplane
Year of Manufacture:		**Amateur Built:**	No
Airworthiness Certificate:	Normal	**Serial Number:**	167
Landing Gear Type:	Retractable - Tricycle	**Seats:**	5
Date/Type of Last Inspection:	10/17/1995, Annual	**Certified Max Gross Wt.:**	9920 lbs
Time Since Last Inspection:	90 Hours	**Engines:**	2 Turbo Prop
Airframe Total Time:	5400 Hours	**Engine Manufacturer:**	Garrett
ELT:	Installed, not activated	**Engine Model/Series:**	TPE-331-1151A
Registered Owner:	JACKSON TENN LEASING CO	**Rated Power:**	665 hp
Operator:	RONALD C. BINGHAM	**Operating Certificate(s) Held:**	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	**Condition of Light:**	Day
Observation Facility, Elevation:	MEM, 332 ft msl	**Distance from Accident Site:**	0 Nautical Miles
Observation Time:	1151 CDT	**Direction from Accident Site:**	0°
Lowest Cloud Condition:	Unknown / 0 ft agl	**Visibility**	15 Miles
Lowest Ceiling:	Broken / 18000 ft agl	**Visibility (RVR):**	0 ft
Wind Speed/Gusts:	7 knots /	**Turbulence Type Forecast/Actual:**	/
Wind Direction:	190°	**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:	30 inches Hg	**Temperature/Dew Point:**	12°C / 3°C
Precipitation and Obscuration:			
Departure Point:	MONTGOMERY, AL (MGM)	**Type of Flight Plan Filed:**	IFR
Destination:	(0M6)	**Type of Clearance:**	None
Departure Time:	1045 CDT	**Type of Airspace:**	Class G

Airport Information

Airport:	BATESVILLE (06M)	**Runway Surface Type:**	Asphalt
Airport Elevation:	219 ft	**Runway Surface Condition:**	Dry
Runway Used:	1	**IFR Approach:**	None
Runway Length/Width:	4800 ft / 75 ft	**VFR Approach/Landing:**	Forced Landing; Full Stop

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:**	

Administrative Information

Investigator In Charge (IIC):	PHILLIP POWELL	**Report Date:**	09/30/1997
Additional Participating Persons:	ALLEN M DAVIS; JACKSON, MA		
Publish Date:			
Investigation Docket:	NTSB accident and incident dockets serve as permanent archival information for the NTSB's investigations. Dockets released prior to June 1, 2009 are publicly available from the NTSB's Record Management Division at pubinq@ntsb.gov, or at 800-877-6799. Dockets released after this date are available at http://dms.ntsb.gov/pubdms/.		