

Air Safety Investigations Aircraft Incident/Accident Technical Report

Aircraft Incident/ Accident Information	Year: 1973	Make: Cessna	Model: A188B
	Serial number: 18801153		Registration: N5850G
Location: Bolivar, TN		Date: 08-27-14	Time: 0850 CDT
Aircraft Owner		Aircraft Operator	
James E. Taylor [REDACTED] Somerville, TN 38068-7211		Same as Aircraft Owner	
Report Information			
Senior Air Safety Investigator: Jan R. Smith		Report #: ASI-14-CJ	Report date: 02-05-15

Airframe

Impact Sequence and Airframe Structure

The debris path began beneath a damaged/repaired overhead power line, below which was found the right hand outboard wing segment outboard of approximately wing station 136.00 with the aileron and flap. All major components of the aircraft were observed along the debris path which ended with the engine and propeller.

Airframe Systems

Flight Control System Information		
Control lock: Undetermined		
Flight Control Cable Continuity		
Ailerons: See below	Elevators: See below	Rudder: See below
Aileron tab: Not applicable	Elevator tab:	Rudder tab: Not applicable
Flap and Trim Positions		
Flap actuator: Retracted	Flap indicator: Retracted	Flap handle: Retracted
Elevator trim:	Actuator: See below	Indicator: See below
Rudder trim:	Actuator: Undetermined	Indicator: Undetermined

Remarks:

Control cable continuity was established for the elevators and rudder, and for the ailerons through multiple overload type separations. The flap handle was in the retracted position. The elevator trim indicator was near full nose up.

Airframe Fuel System Condition, Controls, and Read Outs			
Fuel strainer screen: Clean		Fuel strainer bowl: Clean	
Fuselage fuel tank gauge: N/A			
Main fuel tank gauge:	Left: Undt		Right: Undt
Fuel selector handle: On	Fuel selector valve: On		Fuel boost pump: Undetermined

Remarks:

The fuel tank was compromised and contained blue fuel that tested negative for water contamination.

Landing Gear System Condition and Controls					
Gear position:	Nose: Fixed		Left: Fixed		Right: Fixed
Actuator position:	Nose: Not applicable		Left: Not applicable		Right: Not applicable
Landing gear selector: Not applicable					
Environmental System Controls and Read Outs					
Cabin heater: N/A		Cabin vent: N/A		Defrost: Undt	
Air conditioner: N/A		Oxygen system: Not applicable		Oxygen quantity: Not applicable	
Icing System Information and Switches					
Certified into known icing? No			De-icing boots installed? No		
Pitot heat: Undetermined			Stall heat: Not applicable		
Anti-ice:	Surface: Not applicable		Propeller: Not applicable		Windshield: Not applicable
ELT Information					
Installed? No	Manufacturer: Not applicable		Model: Not applicable		Type: Not applicable
Serial number: N/A		Battery due date: Not applicable		Armed: Not applicable	Activated: Not applicable

Remarks:

The landing gear remained attached to structure.

Cabin and Equipment/Furnishings

Restraint System Information						
Seat	Occupied	Restraint type	Restraint used	Condition	Manufacturer	2nd seat stop
1	Yes	3-Point	Yes	Worn	Cessna	Yes

Seat Condition Information					
Seat	Orientation	Feet intact	Back intact	Base intact	Rail intact
1	Forward facing	Yes	Yes	Yes	Yes

Remarks:

The seat tracks had been replaced. The pilot's seat adjustment pin was engaged in the 2nd hole from the forward end of the left seat track. The Cessna seat restraint remained attached to structure and was cut by first responders.

Instrument Panel

Navigation Instruments							
Analog primary instruments					Autopilot type: None		
Suction gage: None			Magnetic compass: Observed		Clock: Not observed		
	Left side	Right side		Left side	Right side		
Airspeed:	Observed	N/A	Turn coordinator (airplane):	Observed	N/A		
Attitude (pitch):	Not observed	N/A	Turn coordinator (ball):	Observed	N/A		
Attitude (roll):	Not observed	N/A	Heading indicator:	Not observed	N/A		
Altimeter:	Observed	N/A	Heading "bug":	Not observed	N/A		
Altimeter setting:	Observed	N/A	Vertical speed indicator:	Not observed	N/A		
Communication and Navigation Radios							
Radio	Control	Active frequency	Stand-by frequency	Radio	Control	Active frequency	Stand-by frequency
Com 1:				Com 2:			
Nav 1:				Nav 2:			
Obs 1:				Obs 2:			
Transponder:	Mode:	Active code:		Stand-by code:			
Electrical Switch Positions							
Master battery: Undetermined			Master alternator: Undetermined		Avionics 1: Undetermined		
Stand-by battery: Not applicable			Alternator 2: Not applicable		Avionics 2: Not applicable		
Lighting Switch Positions							
Navigation: Undetermined			Rotating Beacon: Undetermined		Landing: Undetermined		
Taxi: Undetermined			Strobe: Undetermined		Instrument: Undetermined		
Ignition Switch Position							
Key: Undetermined							

Remarks:

None.

Powerplant Description

Engine Instruments							
Hour meter:	N/A	Tach RPM:	0	Tach hours:	843.8	Manifold press:	Undt
Oil press:	0	Oil temp:	Undt	EGT:	Undt	CHT:	Undt
Fuel press:	Undt	Fuel flow:	Undt	Ammeter:	Undt	Voltmeter:	12
Engine Control Positions							
	Cockpit	Engine		Cockpit	Engine		
Throttle:	Full	Undt	Cowl flaps:	Undt	Undt		
Mixture:	Out ~1"	Undt	Alternate air:	Undt	Undt		
Propeller:	Forward	Undt	Primer:	N/A			
Engine Condition							
Engine attached to airframe:	No	Propeller attached to engine:	Yes				
Engine compression:	Undetermined	Valve train continuity:	Yes				
Vacuum pump drive shaft:	Undetermined						
Engine Fuel System Condition							
Fuel pump drive shaft:	Undetermined	Carburetor inlet screen:	Undetermined				
Fuel distribution valve screen:	Undetermined	Fuel injectors:	Undetermined				
Magneto Condition							
Left magneto attached:	Yes	Right magneto attached:	Yes				
Left magneto spark:	Undetermined	Right magneto spark:	Undetermined				
Spark Plug Condition (per Champion Check-A-Plug Card)							
	1	2	3	4	5	6	
Top	Worn	Worn	Worn	Worn	Worn	Worn	
Bottom	Undetermined	Undetermined	Undetermined	Undetermined	Undetermined	Undetermined	

Remarks:

None.

Propeller

The propeller exhibited signs of high power production including blade bending, twisting, and polishing.

Research & Testing

The FAA-IIC and the NTSB-IIC do not plan to conduct additional research or testing.