

**Beechcraft**

BY TEXTRON AVIATION

Air Safety Investigations Aircraft Incident/Accident Technical Report

Aircraft Incident/ Accident Information	Year: 1967	Make: Cessna	Model: 182K
	Serial number: 18258248		Registration: N2548R
Location: North Las Vegas, NV		Date: 03-18-21	Time: 1545 PDT
Aircraft Owner		Aircraft Operator	
[REDACTED]		[REDACTED]	
Report Information			
Chief Air Safety Investigator: Andrew L. Hall		Report #: ASI-21-BM-T	Report date: 09-01-21

Airframe

Impact Sequence and Airframe Structure

The aircraft remained intact, the upper and lower cowling had been removed prior to the arrival of this investigator. Damage was noted to the firewall, the center pedestal and forward cabin floorboard area. The nose landing gear was observed displaced slightly forward and upward, however the nose landing gear wheel pant was not damaged.

Airframe Systems

Flight Control System Information		
Control lock: Not installed		
Flight Control Cable Continuity		
Ailerons: Established	Elevators: Established	Rudder: Established
Aileron tab: Not applicable	Elevator tab: Established	Rudder tab: Not applicable
Flap and Trim Positions		
Flap indicator: Up	Flap handle: Up	Flap actuator: Undt
Elevator trim: Indicator: Neutral	Actuator: Not observed	
Rudder trim: Indicator: Neutral	Actuator: N/A	

Remarks:

The rudder pedals were actuated, and the rudder was observed to actuate. The control yoke was rotated, and the ailerons were observed moving up and down. There was slack in the elevator cables from the displacement of the firewall, however the control cables remained attached to the control column and the elevator. The elevator control cables were pulled near mid-cabin and the elevator was observed to actuate. The flaps were observed in the retracted position and no actuation of the flap system was accomplished.

Airframe Fuel System Condition, Controls, and Read Outs		
Fuel strainer screen: Clean	Fuel strainer bowl: Clean	
Main fuel tank gauge:	Left: Empty	Right: Empty
Fuel selector handle: Off	Fuel selector valve: Off	

Remarks:

The fuel strainer bowl was observed with the line from the bottom of the bowl to outside the engine cowling missing. Both fuel tanks were observed with no fuel. The forward cabin floor access panels were removed, and the left and right fuel lines were observed undamaged and connected to the fuel selector valve. The center pedestal was removed. The access panels underneath the center pedestal were removed exposing the fuel line from the selector valve to the firewall. The fuel valve was placed in the BOTH position and four gallons of fuel were placed in the right fuel tank. No fuel was observed leaking from any of the fuel line connection locations. The fuel strainer was actuated, and a small amount of fuel was drained. After this actuation a small amount of fuel was observed dripping from the drain mast. After the engine run the fuel strainer bowl was removed and the bowl and screen were clean. A small amount of fuel was observed dripping from the fuel inlet standpipe of the fuel strainer. Both the left and right fuel caps were observed to be vented fuel caps.

Landing Gear System Condition and Controls			
Gear position:	Nose: Fixed	Left: Fixed	Right: Fixed
Environmental System Controls and Read Outs			
Cabin heater: Closed	Cabin vent: Partially open	Defrost: cold	
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: Off		Stall heat: Not applicable	
Anti-ice:	Surface: Not applicable	Propeller: Not applicable	Windshield: Not applicable
ELT Information			
Installed? Yes	Manufacturer: Dorne & Margolin	Model: DM ELT 8.1	Type: AF
Serial number: 5563	Battery due date: 10-2009	Armed: Yes	Activated: Undetermined

Remarks:

None

Cabin and Equipment/Furnishings

Restraint System Information						
Seat	Occupied	Restraint type	Restraint used	Condition	Manufacturer	2nd seat stop
1	Yes	2-Point	Undt	Good	Undetermined	No
2	No	2-Point	No	Good	Undetermined	No
3	No	2-Point	No	Good	Undetermined	Not applicable
4	No	2-Point	No	Good	Undetermined	Not applicable

Seat Condition Information					
Seat	Orientation	Feet intact	Back intact	Base intact	Rail intact
1	Forward facing	Yes	Yes	Yes	Yes
2	Forward facing	Yes	Yes	Yes	Yes
3	Forward facing	Yes	Yes	Yes	Not applicable
4	Forward facing	Yes	Yes	Yes	Not applicable

Remarks:

None

Instrument Panel

Navigation Instruments							
Analog primary instruments				Autopilot type: None			
Suction gage: 0		Magnetic compass: Undt			Clock: 0637		
	Left side				Left side		
Airspeed:	0		Turn coordinator (airplane):	Level			
Attitude (pitch):	Level		Turn coordinator (ball):	Centered			
Attitude (roll):	Level		Heading indicator:	071			
Altimeter:	2,500'		Heading "bug":	N/A			
Altimeter setting:	30.03		Vertical speed indicator:	0			
Communication and Navigation Radios							
Radio	Control	Active frequency	Stand-by frequency	Radio	Control	Active frequency	Stand-by frequency
Com 1:	Undt	Undt	Undt	Com 2:	Undt	Undt	Undt
Nav 1:	Undt	Undt	Undt	Nav 2:	Undt	Undt	Undt
Obs 1:	Undt			Obs 2:	Undt		
Transponder:	Mode: Undt	Active code: Undt		Stand-by code: Undt			
Electrical Switch Positions							
Master battery: Off		Master alternator: Off			Avionics 1: On		
Lighting Switch Positions							
Navigation: Off		Rotating Beacon: Off			Landing: Off		
Taxi: Off		Strobe: Off			Instrument: Off		
Ignition Switch Position							
Key: Off							

Remarks:

All of the switches were observed in the off position except for the Avionic Master.

Powerplant Description

Engine Instruments						
Hour meter:	993.5	Tach RPM:	0	Tach hours:	2783.58	
Oil press:	0	Oil temp:	Cold	EGT:	0	
Fuel press:	N/A	Fuel flow:	N/A	Ammeter:	0	
Manifold press: 26						
CHT: N/A						
Voltmeter: 0						
Engine Control Positions						
	Cockpit	Engine		Cockpit	Engine	
Throttle:	out	Closed	Cowl flaps:	Open	Removed	
Mixture:	Cutoff	Cutoff	Carburetor heat:	Cold	Cold	
Propeller:	In	In	Primer:	In & Locked		
Engine Condition						
Engine attached to airframe: Yes			Propeller attached to engine: Yes			
Engine compression: See below			Valve train continuity: See below			
Vacuum pump drive shaft: See below						
Engine Fuel System Condition						
Fuel pump drive shaft: Not applicable			Carburetor inlet screen: Undetermined			
Magneto Condition						
Left magneto attached: Yes			Right magneto attached: Yes			
Left magneto spark: See below			Right magneto spark: See below			
Spark Plug Condition (per Champion Check-A-Plug Card)						
	1	2	3	4	5	6
Top	Worn	Worn	Worn	Worn	Worn	Worn
Bottom	Not examined	Not examined	Not examined	Not examined	Not examined	Not examined

Remarks:

The top spark plugs were removed and examined prior to the engine run and all were worn per the Champion Check-A-Plug chart and all were clean. After fuel was add to the right fuel tank and the battery charged the engine was test run. After priming, the engine was turned over and started, after a short warm up, the engine RPM was advanced to 1,700 and a magneto check was accomplished with norm type drops.

Propeller

One blade of the propeller was observed to be straight and one blade exhibited a slight displacement towards the flat side of the blade approximately 8" in from the tip.

Research & Testing

None