

Air Safety Investigations Aircraft Incident/Accident Technical Report

Aircraft Incident/ Accident Information	Year: 1968	Make: Cessna	Model: TU206C
	Serial number: U206-1177		Registration: N29225
Location: Skiatook, OK		Date: 08-13-16	Time: 1100 CDT
Aircraft Owner		Aircraft Operator	
[REDACTED]		[REDACTED]	
[REDACTED]		[REDACTED]	
[REDACTED]		[REDACTED]	
Report Information			
Senior Air Safety Investigator: [REDACTED]		Report #: [REDACTED]	Report date: 11-30-16

Airframe

Impact Sequence and Airframe Structure

The aircraft was observed in photographs taken on-site by the FAA-IIC sitting in an open field on the left main gear and lower cowling listing to the right. The nose landing gear was observed separated from the firewall during the event. The right main landing gear strut separated approximately 2/3 of the way out from the fuselage. The aft fuselage, aft of the baggage compartment, was observed displaced to the right. There was no fire damage to the aircraft. The cabin area remained largely intact with little deformation to the occupiable cabin space.

Airframe Systems

Flight Control System Information		
Control lock: Undetermined		
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: Down	Flap actuator: See below
Elevator trim:	Indicator: Takeoff range	Actuator: 1.6" ~5° tab up
Rudder trim:	Indicator: Unknown due to damage	Actuator: N/A

Remarks:

Flight control cable continuity was established from the cockpit to all control surfaces. The recovery personal indicated they disconnected all but two flight control cables. They cut one flight control cable in the aft fuselage and one cable in the right wing during the recovery due to lack of access to disconnect. The flap actuator was not observed during the investigation; however, the flaps were observed in the up position. The FAA on site photographs show the flaps in a slightly extended position.

Airframe Fuel System Condition, Controls, and Read Outs		
Fuel strainer screen: Debris observed	Fuel strainer bowl: Light corrosion	
Main fuel tank gauge:	Left: Empty	Right: Empty
Fuel selector handle: See below	Fuel selector valve: Undetermined	Fuel boost pump: Off

Remarks:

The recovery personnel indicated they drained approximately five gallons of fuel from the right wing and that there was a large area of dead vegetation in the area of the right wing vent. The fuel selector valve was observed between the right tank and off position. The valve was placed in the right tank position and air was passed from the wing tank outlet to the fuel boost pump. The valve was placed in the off position and no air passed through the valve. The fuel strainer was removed and a small amount of fuel was observed. It was tested with water finding paste and the results were negative for water. There was a significant amount of debris observed in the fuel strainer and the strainer bowl. The debris was similar to caulking along with some rust particles. The aircraft was equipped with Monarch Air fuel caps.

Landing Gear System Condition and Controls			
Gear position:	Nose: Fixed	Left: Fixed	Right: Fixed
Environmental System Controls and Read Outs			
Cabin heater: Off	Cabin vent: Open	Defrost: Off	
Air conditioner: N/A	Oxygen system: Not applicable	Oxygen quantity: N/A	
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: Amer-King Corp	Model: AK-450	Type: AF AP
Serial number: 469742	Battery due date: 12-2024	Armed: Undetermined	Activated: Undetermined

Remarks:

The right main landing gear strut was observed separated approximately 2/3 of the way from the fuselage to the main gear.

Cabin and Equipment/Furnishings

Restraint System Information						
Seat	Occupied	Restraint type	Restraint used	Condition	Manufacturer	2nd seat stop
1	Yes	4-Point	Yes	Good	Non-OEM	Yes
2	S/B	See below	Undt	Good	Non-OEM	No
3	S/B	See below	Undt	Good	Non-OEM	Not applicable
4	S/B	See below	Undt	Good	Non-OEM	Not applicable
5	S/B	See below	Undt	Good	Non-OEM	Not applicable
6	S/B	See below	Undt	Good	Non-OEM	Not applicable
7	S/B	See below	Undt	Good	Non-OEM	Not applicable

Seat Condition Information					
Seat	Orientation	Feet intact	Back intact	Base intact	Rail intact
1	Forward facing	No	Yes	Partially	Yes
2	See below	Not applicable	Not applicable	Not applicable	Yes
3	See below	Not applicable	Not applicable	Not applicable	Yes
4	See below	Not applicable	Not applicable	Not applicable	Yes
5	See below	Not applicable	Not applicable	Not applicable	Yes
6	See below	Not applicable	Not applicable	Not applicable	Yes
7	See below	Not applicable	Not applicable	Not applicable	Yes

Remarks:

There were no seats in the rear of the aircraft. All of the occupants were on a pad in the rear of the aircraft; there were no seats in the rear of the aircraft. The restraint system was a homemade belt, which attached into the aircraft restraint system at the floor attachment location and had a, USR-145-AR, USR Aluminum Double Lock Snap Hook on the loose end.

Instrument Panel

Navigation Instruments							
Analog primary instruments					Autopilot type: None		
Suction gage: 0			Magnetic compass: Undt		Clock: 11:45		
	Left side			Left side			
Airspeed:	0		Turn coordinator (airplane):	Right bank			
Attitude (pitch):	Level		Turn coordinator (ball):	Right			
Attitude (roll):	Right low		Heading indicator:	095			
Altimeter:	350'		Heading "bug":	N/A			
Altimeter setting:	29.95		Vertical speed indicator:	0			
Communication and Navigation Radios							
Radio	Control	Active frequency	Stand-by frequency	Radio	Control	Active frequency	Stand-by frequency
Com 1:	Digital	Undt	Undt	Com 2:	On	118.30	N/A
Nav 1:	Digital	Undt	Undt	Nav 2:	On	116.50	N/A
Obs 1:	180			Obs 2:	310		
Transponder:	Mode: Alt		Active code: 0350		Stand-by code: N/A		
Electrical Switch Positions							
Master battery: Off			Master alternator: Off		Avionics 1: Off		
Lighting Switch Positions							
Navigation: Off			Rotating Beacon: On		Landing: Off		
Taxi: Off			Strobe: Not applicable		Instrument: Undetermined		
Ignition Switch Position							
Key: Off							

Remarks:

None

Powerplant Description

Engine Instruments						
Hour meter: None		Tach RPM: 0		Tach hours: 1601.45		
Oil press: Low		Oil temp: Cold		EGT: 0		
Fuel press: 0		Fuel flow: 40		Ammeter: 0		
				Manifold press: 29"		
				CHT: Digital		
				Voltmeter: 0		
Engine Control Positions						
	Cockpit	Engine		Cockpit	Engine	
Throttle:	Out	Connected	Cowl flaps:	Open	Open	
Mixture:	Out	Connected	Alternate air:	N/A	N/A	
Propeller:	In	Connected	Primer:	In		
Engine Condition						
Engine attached to airframe: Yes			Propeller attached to engine: Yes			
Engine compression: Yes			Valve train continuity: Yes			
Vacuum pump drive shaft: Intact						
Engine Fuel System Condition						
Fuel pump drive shaft: Intact			Fuel control inlet screen: Debris observed			
Fuel distribution valve screen: Undetermined			Fuel injectors: Undetermined			
Magnetos Condition						
Left magneto attached: Yes			Right magneto attached: Yes			
Left magneto spark: Some leads			Right magneto spark: Some leads			
Spark Plug Condition (per Champion Check-A-Plug Card)						
	1	2	3	4	5	6
Top	Normal	Normal	Normal	Normal	Normal	Normal
Bottom	Not examined	Not examined	Not examined	Not examined	Not examined	Not examined

Remarks:

The crankshaft was rotated by hand and air was expelled from all cylinders. Both magnetos produced sparks on the top spark plugs. A "B-Nut" was observed loose on the right side upper deck pressure line. The engine was shipped to Continental Motors for evaluation and that evaluation had not occurred at the time of this writing.

Propeller

The propeller remained attached to the engine and no damage was observed to the spinner. Propeller blade #1 appeared undamaged. Propeller blade #2 exhibited a bend towards the flat side of the blade approximately 5 inches in from the tip. Propeller blade #3 was observed bent towards the flat side of the blade and was curled into the lower area of the cowl.

Research & Testing

None

