

Air Safety Investigations Aircraft Incident/Accident Technical Report

Aircraft Incident/ Accident Information	Year: 2015	Make: Textron Aviation	Model: 525C
	Serial number: 525C0196		Registration: N525PZ
Location: Howell, MI		Date: 01-16-17	Time: 1156 EST
Aircraft Owner		Aircraft Operator	
Zeliff Aviation, LLC 4559 W. Saile Dr. Batavia, NY 14020			
Report Information			
Air Safety Investigator: Andrew L. Hall		Report #: ASI-17-AH-T	Report date: 05-31-17

Airframe

Impact Sequence and Airframe Structure

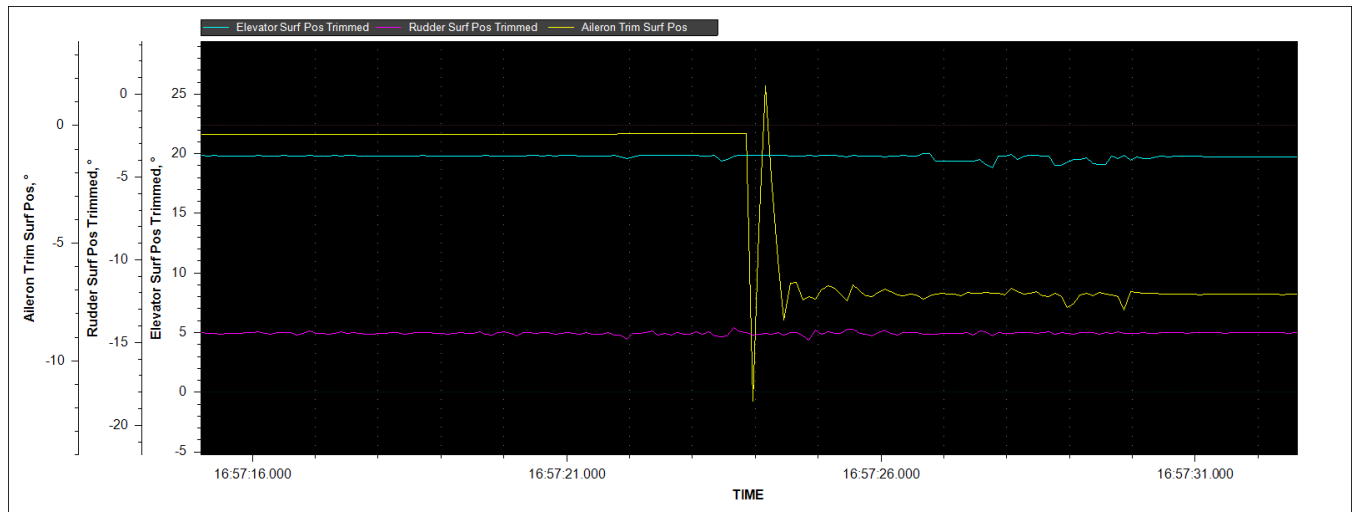
The wings were observed separated from the fuselage and had post-impact fire damage. The right flap and inboard section aileron remained attached to the wing. The left flap and inboard section of the aileron remained attached to the left wing. Both wing outboard sections were observed separated from their respective wings. The fuselage was observed inverted on a flat beat trailer with the empennage attached. The outboard approximately 1/3 of the left elevator was observed separated from the empennage.

Airframe Systems

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

Remarks:

None



Inside the cockpit, the speed brake handle was observed in the 0% position, throttles were in takeoff, and the flaps were retracted.

Airframe Fuel System Condition, Controls, and Read Outs			
Fuel filter screen:	Left: Undetermined	Right: Undetermined	
Main fuel tank gauge:	Left: Undetermined	Right: Undetermined	
Crossfeed: See below	Fuel boost pump:	Left: Undetermined	Right: Undetermined

Remarks:

The fuel caps were noted in place on the wings. The fuel transfer switch was observed between the "OFF" and "RIGHT TANK" position.

Landing Gear System Condition and Controls			
Gear position:	Nose: Extended	Left: Extended	Right: Extended
Actuator position:	Nose: Extended	Left: Extended	Right: Extended
Landing gear selector:	Extended	Anti-skid: Undetermined	
Aux gear control:	Stowed	Blow-down bottle quantity: Undetermined	
Environmental System Controls and Read Outs			
Cabin heater:	Undetermined	Cabin vent: Undetermined	Defrost: Undetermined
Air conditioner:	Undetermined	Oxygen system: Normal	Oxygen quantity: Undt
Pressurization System Controls and Read Outs			
Cabin VSI:	Undetermined	Cabin altitude: Undetermined	
Differential pressure:	Undetermined	Source selector knob: Near the "Fresh Air" position.	
Icing System Information and Switches			
Certified into known icing?	Yes	De-icing boots installed? See below	
Pitot heat:	Undetermined	Stall heat: Undetermined	
De-ice:	Surface: Undetermined	Windshield: Undetermined	
Anti-ice:	Surface: Undetermined	Windshield: Undetermined	
ELT Information			
Installed? Yes	Manufacturer: Artex	Model: CN406	Type: AF
Serial number: 16148	Battery due date: Undt	Armed: Yes	Activated: Yes

Remarks:

De-icing boots were installed on the horizontal stabilizers.

Cabin and Equipment/Furnishings

Restraint System Information						
Seat	Occupied	Restraint type	Restraint used	Condition	Manufacturer	2nd seat stop
1	Yes	5-Point	Yes	Good	Cessna	Not applicable
2	No	5-Point	No	Good	Cessna	Not applicable
3	No	3-Point	No	Good	Cessna	Not applicable
4	No	3-Point	No	Good	Cessna	Not applicable
5	No	3-Point	No	Good	Cessna	Not applicable
6	No	3-Point	No	Good	Cessna	Not applicable
7	No	3-Point	No	Good	Cessna	Not applicable
8	No	3-Point	No	Good	Cessna	Not applicable
9	No	3-Point	No	Good	Cessna	Not applicable

Seat Condition Information					
Seat	Orientation	Feet intact	Back intact	Base intact	Rail intact
1	Forward facing	Yes	Yes	No	Yes
2	Forward facing	Yes	Yes	Yes	Yes
3	Rear facing	Yes	Yes	Yes	Yes
4	Rear facing	Yes	Yes	Yes	Yes
5	Forward facing	Yes	Yes	Yes	Yes
6	Forward facing	Yes	Yes	Yes	Yes
7	Forward facing	Yes	Yes	Yes	Yes
8	Forward facing	Yes	Yes	Yes	Yes
9	Side facing	Yes	Yes	Yes	Not applicable

Remarks:

The feet on the pilot's seat remained attached to the seat track and were observed separated from the seat base just above the foot.

Instrument Panel

Navigation Instruments							
Analog primary instruments				AOA indicator: Undetermined			
Suction gage: Undetermined			Magnetic compass: Undetermined			Clock: Undetermined	
	Left side	Right side		Left side	Right side		
Airspeed:	Undt	Undt	Turn coordinator (airplane):	Undt	Undt		
Attitude (pitch):	Undt	Undt	Turn coordinator (ball):	Undt	Undt		
Attitude (roll):	Undt	Undt	Heading indicator:	Undt	Undt		
Altimeter:	Undt	Undt	Heading "bug":	Undt	Undt		
Altimeter setting:	Undt	Undt	Vertical speed indicator:	Undt	Undt		
Stand-by:	Airspeed: Undt		Attitude (pitch): Undt		Attitude (roll): Undt		
	Altimeter: Undt		Altimeter setting: Undt				
Communication and Navigation Radios							
Radio	Control	Active frequency	Stand-by frequency	Radio	Control	Active frequency	Stand-by frequency
Com 1:	Undt	Undetermined	Undetermined	Com 2:	Undt	Undetermined	Undetermined
Nav 1:	Undt	Undetermined	Undetermined	Nav 2:	Undt	Undetermined	Undetermined
Obs 1:	Undetermined			Obs 2:	Undetermined		
Transponder:	Mode: Undetermined		Active code: Undetermined		Stand-by code: Undetermined		
Electrical Switch Positions							
Master battery: Off				Stand-by battery: Undetermined			
Left alternator: Off				Right alternator: Off			
Avionics 1: Off				Avionics 2: Undetermined			
Inverter 1: Undetermined				Inverter 2: Undetermined			
Lighting Switch Positions							
Navigation: Undetermined			Rotating beacon: Undetermined			Landing: Undetermined	
Taxi: Undetermined			Strobe: Undetermined			Instrument: Undetermined	
Wing ice: Undetermined							
Ignition Switch Positions							
Left engine: Undetermined				Right engine: Undetermined			

Remarks:

None

Powerplant Description

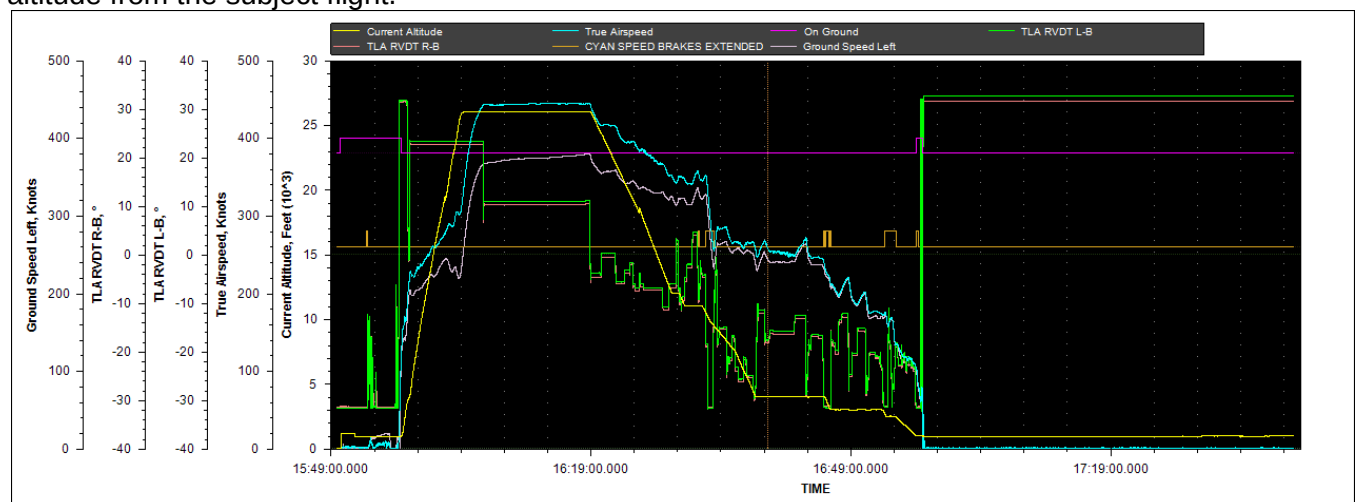
Engine Instruments					
Hour meter: 314.5					
	Left Engine	Right Engine		Left Engine	Right Engine
N1 RPM:	Undt	Undt	Oil temp:	Undt	Undt
N2 RPM:	Undt	Undt	Oil press:	Undt	Undt
ITT:	Undt	Undt	Ammeter:	Undt	Undt
Fuel flow:	Undt	Undt	Voltmeter:	Undt	Undt
Engine Control Positions					
Left engine:	Cockpit	Engine	Right engine:	Cockpit	Engine
Power lever:	Undetermined	Undetermined	Power lever:	Undetermined	Undetermined
Thrust reverser:	Undetermined	Undetermined	Thrust reverser:	Undetermined	Undetermined
Ground idle: Undetermined			Engine sync: Undetermined		
Fire Protection and Thrust Reverser Switch Positions					
	Left engine			Right engine	
Emergency stow:	Undetermined			Undetermined	
Covered fire switch:	Undetermined			Undetermined	
Engine Condition					
	Left engine			Right engine	
Engine attached to airframe:	Undetermined			Undetermined	

Remarks:

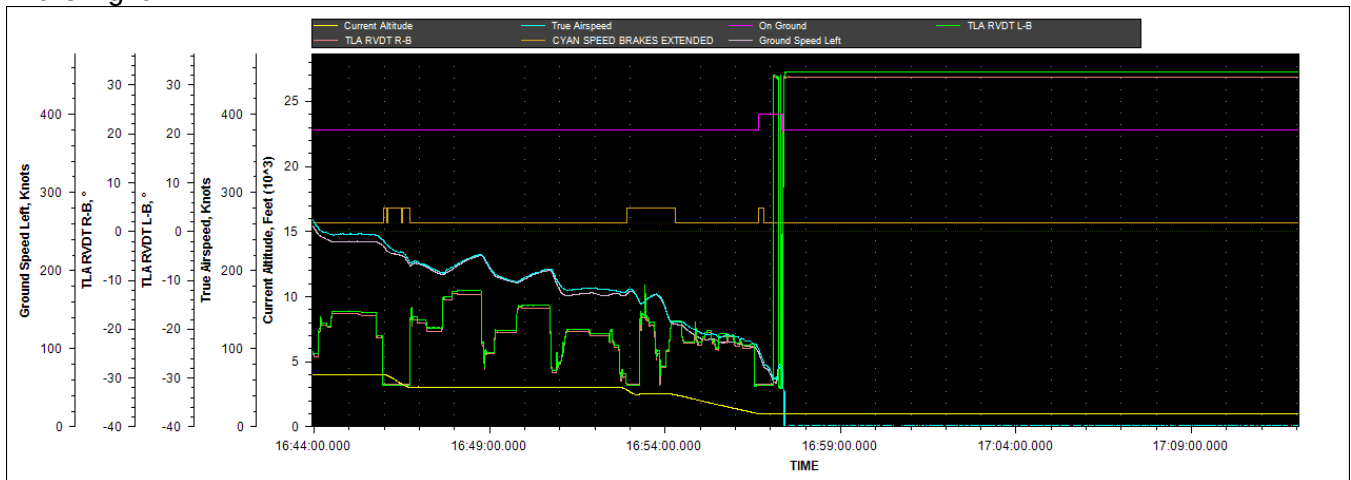
None

Research & Testing

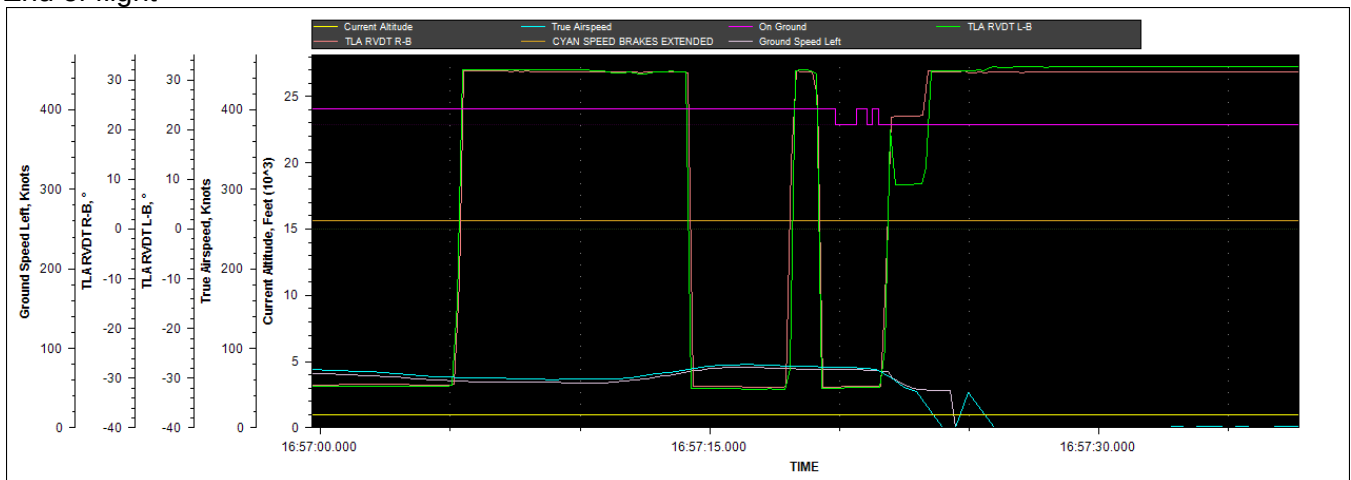
ARes data for ground speed, throttle lever angle, true airspeed, speed brakes, weight on wheels and altitude from the subject flight.



Entire flight



End of flight



Last 30 seconds' flight