

Air Safety Investigations Aircraft Incident/Accident Technical Report

Aircraft Incident/ Accident Information	Year: 1978	Make: Cessna	Model: P210N
	Serial number: P21000018		Registration: N210PF
Location: Crete, NE		Date: 09-01-18	Time: 1400 CDT
Aircraft Owner		Aircraft Operator	
K & A Holdings, LLC [REDACTED] Ashland, NE 68003		Same as Aircraft Owner	
Report Information			
Senior Air Safety Investigator: Ricardo J. Asensio		Report #: ASI-18-CZ-T	Report date: 02-09-19

Airframe

Impact Sequence and Airframe Structure

The aircraft came to rest upright on a 330° MH. Damage to the forward fuselage was observed as well as damage to the right wing. All flight control surfaces were observed attached to the aircraft.

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: 10°	Flap handle: up	Flap actuator: 10°
Elevator trim:	Indicator: Between neutral and full nose up	Actuator: 5 up
Rudder trim:	Indicator: Unknown due to damage	Actuator: N/A

Remarks:

None

Airframe Fuel System Condition, Controls, and Read Outs		
Fuel strainer screen: Clean		Fuel strainer bowl: Clean
Main fuel tank gauge:	Left: Undt	Right: Undt
Fuel selector handle: Undetermined	Fuel selector valve: See below	Fuel boost pump: Off
Firewall fuel shutoff: Not applicable		

Remarks:

The fuel selector valve was found between off and right tank. According to FAA photographs, the fuel selector valve handle was in the left tank position at the time of the accident.

Landing Gear System Condition and Controls			
Gear position:	Nose: Retracted	Left: Retracted	Right: Retracted
Actuator position:	Nose: Retracted	Left: Retracted	Right: Retracted
Landing gear selector: Retracted		Emer gear handle: Stowed and locked	
Environmental System Controls and Read Outs			
Cabin heater: Off	Cabin vent: Off	Defrost: Undt	
Air conditioner: N/A	Oxygen system: Off	Oxygen quantity: Undt	
Pressurization System Controls and Read Outs			
Cabin pressurization: De-pressurize		Cabin VSI: Undt	
Differential pressure: Undt		Cabin altitude: Undt	
Cabin altitude selector: Undt		Cabin dump control: Open (out)	
Icing System Information and Switches			
Certified into known icing? No		De-icing boots installed? Yes	
Pitot heat: Off		Stall heat: Not applicable	
De-ice:	Surface: Off	Propeller: Off	Windshield: Not applicable
Anti-ice:	Surface: Not applicable	Propeller: Not applicable	Windshield: Not applicable
ELT Information			
Installed? Yes	Manufacturer: Artex	Model: ELT 345	Type: AF
Serial number: 267-01035	Battery due date: 6-22	Armed: Yes	Activated: Yes

Remarks:

None

Cabin and Equipment/Furnishings

Restraint System Information						
Seat	Occupied	Restraint type	Restraint used	Condition	Manufacturer	2nd seat stop
1	Yes	See below	Yes	Intact	Non-OEM	Yes
2	Yes	See below	Yes	Intact	Non-OEM	No
3	Yes	3-Point	Partial	Intact	Non-OEM	Not applicable
4	Yes	3-Point	See below	Intact	Non-OEM	Not applicable
5	No	2-Point	N/A	Intact	Non-OEM	Not applicable
6	No	2-Point	N/A	intact	Non-OEM	Not applicable

Seat Condition Information					
Seat	Orientation	Feet intact	Back intact	Base intact	Rail intact
1	Forward facing	Yes	Yes	Yes	No
2	Forward facing	Yes	Yes	Yes	No
3	Forward facing	Yes	Yes	Yes	Yes
4	Forward facing	Yes	Yes	Yes	Yes
5	Forward facing	Yes	Yes	Yes	Yes
6	Forward facing	Yes	Yes	Yes	Yes

Remarks:

A car seat was used in position 4 for one of the minor occupant. Both forward positions had a three-point four belt safety restraint installed.

Instrument Panel

Navigation Instruments							
Analog primary instruments				Autopilot type: Nav-O-Matic			
Suction gage: Undt		Magnetic compass: 330			Clock: Undetermined		
	Left side				Left side		
Airspeed:	0			Turn coordinator (airplane):	level		
Attitude (pitch):	10 up			Turn coordinator (ball):	left		
Attitude (roll):	45 right			Heading indicator:	undt		
Altimeter:	140			Heading "bug":	undt		
Altimeter setting:	29.75 inHg			Vertical speed indicator:	0		
Stand-by:	Airspeed: Undt		Attitude (pitch): 10 up		Attitude (roll): 10 left		
	Altimeter: 140		Altimeter Setting: 29.75 inHg				
Communication and Navigation Radios							
Radio	Control	Active frequency	Stand-by frequency	Radio	Control	Active frequency	Stand-by frequency
Com 1:	On	122.80	124.00	Com 2:	On	125.30	122.75
Nav 1:	On	110.60	111.50	Nav 2:	On	110.90	114.50
Obs 1:	Undt			Obs 2:	Undt		
Transponder:	Mode: Alt		Active code: 1200		Stand-by code: 1200		
Electrical Switch Positions							
Master battery: Off			Master alternator: Off			Avionics 1: Off	
Lighting Switch Positions							
Navigation: Off			Rotating Beacon: Off			Landing: Off	
Taxi: Off			Strobe: Off			Instrument: Undetermined	
Wing Ice: Off							
Ignition Switch Position							
Key: Off							

Remarks:

None

Powerplant Description

Engine Instruments						
Hour meter: 2059.2		Tach RPM: 0		Tach hours: 3859.3		
Manifold press: Undt		Oil temp: Undt		EGT: Undt		
Oil press: Undt		Fuel flow: Undt		CHT: Undt		
Fuel press: Undt		Ammeter: Undt		Voltmeter: Undt		
Engine Control Positions						
	Cockpit	Engine		Cockpit	Engine	
Throttle:	3/4 full	Undetermined	Cowl flaps:	open	Undetermined	
Mixture:	Full	Undetermined	Alternate air:	Undetermined	Undetermined	
Propeller:	3/4 full	Undetermined	Primer:	N/A		
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: See below			Fuel control inlet screen: See below			
Fuel distribution valve screen: See below			Fuel injectors: See below			
Magnetos 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	Not examined	Not examined	Not examined	Not examined	Not examined	Not examined
Bottom	Normal	Normal	Normal	Normal	Normal	Normal

Remarks:

The Vitatone Aviation STC installed engine remained attached to the firewall. A visual examination did not reveal any damage to the case. The engine was removed and sent to Continental Motors for a detailed examination. At the time this report was written, no engine exam has been scheduled.

Propeller

The propeller remained attached to the engine. Two of the three blades were bent aft and loose at the hub. No spinner damage was observed. No blade leading edge damage was observed.

Research & Testing

No pre-impact abnormalities on the airframe were noted during the examination.