

## Air Safety Investigations Aircraft Incident/Accident Technical Report

<b>Aircraft Incident/ Accident Information</b>	Year: 1959	Make: Cessna	Model: 175
	Serial number: 55884		Registration: N7584M
Location: Reserve, NM		Date: 10-15-21	Time: 1100 MDT
<b>Aircraft Owner</b>		<b>Aircraft Operator</b>	
Harry A. Pecotte [REDACTED] Silver City, NM 88061-6646		Same as Aircraft Owner	
<b>Report Information</b>			
Senior Air Safety Investigator: Peter J. Basile		Report #: ASI-21-CW-T	Report date: 01-03-22

### Airframe

#### Impact Sequence and Airframe Structure

The wreckage path from the initial tree strike to the fuselage was about 100' long on an approximately 090° heading. The leading edge of the left and right wing sustained tree impact damage. The aircraft came to rest on the left side of the fuselage with the partially separated left wing bent backwards and sticking up in the air. The fuselage sustained minimal fragmentation and appeared to impact the trees and terrain at a slow airspeed.



On-site, ASI-21-CW-012

## Airframe Systems

Flight Control System Information		
Control lock: Found loose in aircraft		
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: Not applicable	Flap handle: 20° extended	Flap actuator: Not applicable
Elevator trim: Indicator: Between neutral and full nose down    Actuator: 1.4" = ~5° tab up		

### Remarks:

Flight control cable continuity was established for all flight controls. The manual flap handle was found in the 20° extended position. The elevator trim tab actuator indicated the tab was about 5° tab up.

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

### Remarks:

None.



On-site, ASI-21-CW-093

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: On	Defrost: Not applicable	
Air conditioner: Not applicable	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: Not applicable		Stall heat: Not applicable	
Anti-ice:	Surface: Not applicable	Propeller: Not applicable	Windshield: Not applicable
ELT Information			
Installed? Yes	Manufacturer: Leigh Systems Inc.	Model: 7B-1-123	Type: AP
Serial number: 9116	Battery due date: 05-23	Armed: Undetermined	Activated: Undetermined

**Remarks:**

The landing gear remained attached to the aircraft and sustained minimal damage.



## Cabin and Equipment/Furnishings

Restraint System Information						
Seat	Occupied	Restraint type	Restraint used	Condition	Manufacturer	
1	Yes	2-Point	Undt	Normal	Non-OEM	
2	Yes	2-Point	Undt	Normal	Non-OEM	
3	Undt	2-Point	Undt	Normal	Undetermined	
4	Undt	2-Point	Undt	Normal	Undetermined	

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:

The seats remained attached to the floor assembly. Passenger seating positions were undetermined. The aircraft was equipped with lap belts; all lap belts were found unbuckled.



On-site, ASI-21-CW-026

## Instrument Panel

Navigation Instruments							
Analog primary instruments				Autopilot type: None			
Suction gage: Undt		Magnetic compass: 205°			Clock: Undt		
	Left side				Left side		
Airspeed:	0		Turn coordinator (airplane):	Left			
Attitude (pitch):	10° Up		Turn coordinator (ball):	Full Left			
Attitude (roll):	>90° Left		Heading indicator:	070°			
Altimeter:	7,760'		Heading "bug":	N/A			
Altimeter setting:	30.05		Vertical speed indicator:	~700' Up			
Communication and Navigation Radios							
Radio	Control	Active frequency	Stand-by frequency	Radio	Control	Active frequency	Stand-by frequency
Com 1:	On	Digi	Digi	Com 2:	On	122.80	126.72
Nav 1:	On	Digi	Digi	Nav 2:	On	110.80	108.60
Obs 1:	325			Obs 2:	020		
Transponder:	Mode: Undt		Active code: 1200		Stand-by code: Undt		
Electrical Switch Positions							
Master battery: On		Master alternator: Undetermined			Avionics 1: Undetermined		
Lighting Switch Positions							
Navigation: Off		Rotating Beacon: Off			Landing: Off		
Taxi: Not applicable		Strobe: Not applicable			Instrument: Off		
Ignition Switch Position							
Key: Both							

### Remarks:

The Narco 890 DME was set to 110.80.

The Narco 841 ADF was ON.

## Powerplant Description

Engine Instruments					
Hour meter: 0037.1		Tach RPM: 0		Tach hours: 2,131.1	
Manifold press: ~23"		Oil press: 0		Oil temp: 0	
EGT: ~1,300F		CHT: N/A		Fuel press: 0	
Fuel flow: N/A		Ammeter: 0		Voltmeter: 0	
Engine Control Positions					
	Cockpit	Engine		Cockpit	Engine
Throttle:	Full	Full	Cowl flaps:	Not applicable	Not applicable
Mixture:	Lean	Lean	Carburetor heat:	Slightly ON	Slightly ON
Propeller:	Low RPM	Low RPM	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: See below			Carburetor 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	
Top	See below	See below	See below	See below	
Bottom	See below	See below	See below	See below	

### Remarks:

A Lycoming O-360-A1A engine had been installed in accordance with an STC. The engine appeared to have been recently overhauled by Western Skyways. Visual examination did not reveal any pre-impact abnormalities. The engine had not been examined at the time this report was written.

### Propeller




The propeller remained attached to the engine. One propeller blade was twisted and bent forward. It exhibited chordwise scratches, leading edge gouges, and a small span-wise section of the tip was separated. The other propeller blade was curled aft near the tip with chordwise scratches and leading edge gouges. Several pine tree limbs that appeared to be cut by the propeller were observed near the initial impact area.

## Research & Testing

A Garmin GPSmap496 was found in the cabin. It was retained by the NTSB-IIC for analysis. Data had not been provided at the time this report was written.



On-site, ASI-21-CW-038

POWER OFF		<i>Stalling Speeds</i>				MPH TIAS	
<i>Gross Weight</i> 2350 lbs.		ANGLE OF BANK					
CONDITION		0°	20°	40°	60°		
Flaps Up		62	64	70	87		
Flaps 20°		54	56	62	77		
Flaps 40°		53	55	60	74		