

Air Safety Investigations Aircraft Incident/Accident Technical Report

Aircraft Incident/ Accident Information	Year: 1966	Make: Beechcraft	Model: V35
	Serial number: D-8277		Registration: N7997M
Location: La Verne, CA		Date: 10-01-18	Time: 1148 PDT
Aircraft Owner		Aircraft Operator	
Curtis Hedlund Corporation [REDACTED]		Curtis Scott Hedlund [REDACTED]	
Report Information			
Air Safety Investigator: Jennifer D. Barclay		Report #: ASI-18-DC	Report date: 02-01-19

Airframe

Impact Sequence and Airframe Structure

The aircraft struck a tree approximately 50' in height about 900' from the approach end of runway 8R, and about 185' left of the runway centerline. According to witnesses, the aircraft was in a left bank and nose low attitude prior to impact. The inboard wings and forward fuselage were consumed by a post impact fire.

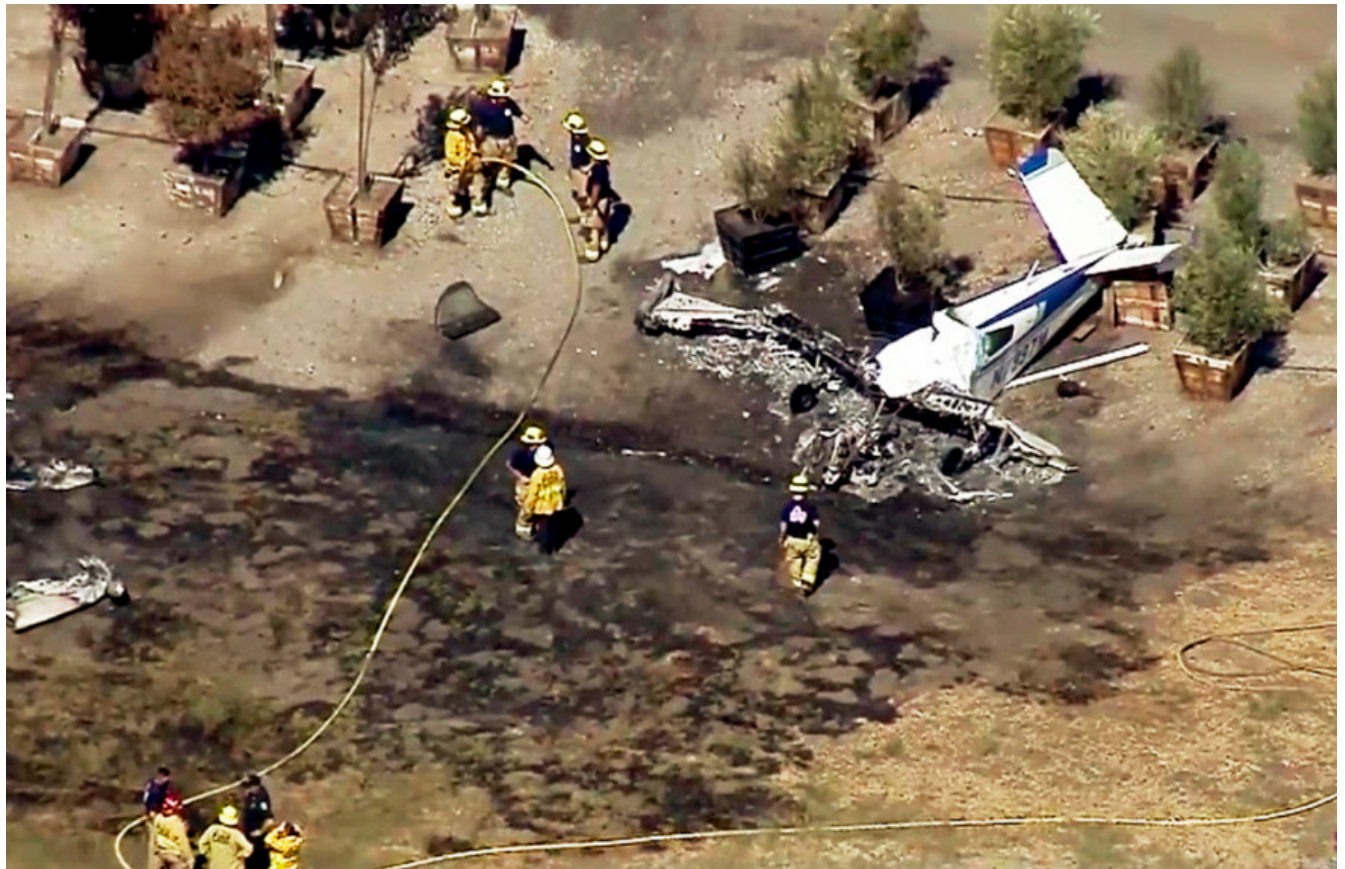


Photo by dailybulletin.com

Airframe Systems

Flight Control System Information		
Control lock: Undetermined		
Flight Control Cable Continuity		
Ailerons: See below	Elevators: See below	Rudder: See below
Aileron tab: Not applicable	Elevator tab: See below	Rudder tab: Not applicable
Flap and Trim Positions		
Flaps:	Indicator: Undt	Handle: Undt
	Left actuator: 3", approximately 10°	Right actuator: Undt
Elevator trim:	Indicator: Undetermined	
	Actuator: 0.65", 20° nose down	

Remarks:

Aileron control cable continuity was established from the bellcranks to the wing root where the cables were cut by recovery personnel. Ruddervator control cable continuity was established from the control surface to the aft spar. The area forward of the aft spar, including the cockpit was destroyed by the post impact fire. The right flap actuator was not located in the wreckage. The left flap actuator indicated flap deployment to approximately ten degrees.



Aft Wing Spar, ASI-18-DC-042 Wreckage Exam

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

Remarks:

The fuel selector mounting bracket fractured on impact. The fuel selector valve was thermally damaged and all 'B' nuts were secure. The fuel selector valve was found in the OFF position. The valve was tested in each position by blowing air through the outlet port. No fuel remained in the strainer and soot was found in the screen.



Fuel Selector Valve, ASI-18-DC-053 Wreckage Exam

Landing Gear System Condition and Controls			
Gear position:	Nose: See below	Left: See below	Right: See below
Actuator position:	Nose: Not applicable	Left: Not applicable	Right: Not applicable
Landing gear selector:	Extended		Emer gear handle: Stowed
Environmental System Controls and Read Outs			
Cabin heater:	Undt	Cabin vent:	Undt
Air conditioner:	Undt	Oxygen system:	Not applicable
		Oxygen quantity:	Not applicable
Icing System Information and Switches			
Certified into known icing?	No		De-icing boots installed?
Pitot heat:	Undetermined		Stall heat:
	Undetermined		
De-ice:	Surface: Not applicable	Propeller: Not applicable	Windshield: Not applicable
Anti-ice:	Surface: Not applicable	Propeller: Not applicable	Windshield: Not applicable
ELT Information			
Installed?	Undt	Manufacturer:	Undetermined
		Model:	Undetermined
		Type:	Undetermined
Serial number:	Undt	Battery due date:	Undetermined
		Armed:	Undetermined
		Activated:	Undetermined

Remarks:

The position of the landing gear actuator arms indicated the gear was extended. The push/pull rods from the gearbox were fractured on impact.



Landing Gear Retract Gearbox, ASI-18-DC-040 Wreckage Exam

Cabin and Equipment/Furnishings

Restraint System Information						
Seat	Occupied	Restraint type	Restraint used	Condition	Manufacturer	
1	Yes	Undetermined	Undt	Burned	Undetermined	
2	No	Undetermined	N/A	Burned	Undetermined	
3	No	Undetermined	N/A	Burned	Undetermined	
4	No	Undetermined	N/A	Burned	Undetermined	

Seat Condition Information					
Seat	Orientation	Feet intact	Back intact	Base intact	Rail intact
1	Forward facing	See below	See below	See below	See below
2	Forward facing	See below	See below	See below	See below
3	Forward facing	Yes	Partially	Yes	Yes
4	Forward facing	Yes	Yes	Yes	Yes

Remarks:

The upholstery on the two forward seats was destroyed by the post impact fire leaving only the frames. The position of each seat frame was undetermined.

Instrument Panel

Navigation Instruments							
Analog primary instruments				Autopilot type: 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: Undetermined		Master alternator: Undetermined		Avionics 1: Undetermined			
Stand-by battery: Undetermined		Alternator 2: Undetermined		Avionics 2: Undetermined			
Lighting Switch Positions							
Navigation: Undetermined		Rotating Beacon: Undetermined		Landing: Undetermined			
Taxi: Undetermined		Strobe: Undetermined		Instrument: Undetermined			
Wing Ice: Undetermined							
Ignition Switch Position							
Key: Undetermined							

Remarks:

The instrument panel was destroyed by post-impact fire.

7. Powerplant Description

Engine Instruments						
Hour meter:	Undt	Tach RPM:	Undt	Tach hours:	Undt	
Oil press:	Undt	Oil temp:	Undt	EGT:	Undt	
Fuel press:	Undt	Fuel flow:	Undt	Ammeter:	Undt	
Manifold press: Undt						
CHT: Undt						
Voltmeter: Undt						
Engine Control Positions						
	Cockpit	Engine		Cockpit	Engine	
Throttle:	Undetermined	Undetermined	Cowl flaps:	Undetermined	Undetermined	
Mixture:	Undetermined	Undetermined	Carburetor heat:	Undetermined	Undetermined	
Propeller:	Undetermined	Undetermined	Primer:	Undetermined		
Engine Condition						
Engine attached to airframe: No			Propeller attached to engine: No			
Engine compression: Yes			Valve train continuity: Yes			
Vacuum pump drive shaft: Intact						
Engine Fuel System Condition						
Fuel pump drive shaft: Intact			Carburetor inlet screen: Not applicable			
Fuel distribution valve screen: See below			Fuel injectors: Clean			
Magnetos Condition						
Left magneto attached: Yes			Right magneto attached: Yes			
Left magneto spark: All leads			Right magneto spark: All 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:

Engine continuity and compression were established. The magnetos were thermally damaged but sparked at all leads on the right and left. The fine wire spark plugs were observed clean and normally worn. The fuel distribution valve was damaged in the post-impact fire. The diaphragm was burned and soot was found in the screen. No pre-accident abnormalities were noted within the engine.

Propeller

The propeller was separated from the engine at impact. Blade one was bent slightly aft at the tip and was found loose in the hub. Blade two was bent aft at the root and exhibited leading edge burnishing; the blade was loose in the hub. Blade three was straight with minimal damage. The propeller exhibited signatures of low power rotational impact.



Propeller, ASI-18-DC-062 Wreckage Exam

8. Research & Testing

None.