Aviation Investigation Final Report

Location:	La Verne, California	**Accident Number:**	WPR19FA001
Date & Time:	October 1, 2018, 11:50 Local	**Registration:**	N7997M
Aircraft:	Beech V35	**Aircraft Damage:**	Destroyed
Defining Event:	Collision during takeoff/land	**Injuries:**	1 Fatal
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot was approaching his home airport in day visual meteorological conditions at the conclusion of a cross-country flight. The tower controller cleared the pilot for a straight-in approach to runway 8R and advised him that another airplane about 1 mile ahead was inbound for landing on the parallel runway, 8L. A short time later, the controller asked the accident pilot if he had the other airplane in sight. The pilot responded that he was looking for the traffic and was inbound for runway 8L. The controller immediately corrected the pilot and verified he was cleared to land on runway 8R, which the pilot confirmed. Shortly thereafter, the pilot told the controller that he had the other airplane in sight and that it was aligned with runway 8R. The controller queried the pilot of the other airplane and verified that that airplane was cleared for landing on runway 8L, then confirmed with the accident pilot that the accident airplane was cleared for 8R. About 20 seconds later, the controller asked the accident pilot if he was landing 8R and subsequently instructed him to go-around and offset his flight path to the right. There was no further communication from the accident airplane.
Witnesses, who were at the site of an aircraft accident that occurred the previous day near the end of the runways, heard the accident airplane impact trees. They turned to see the airplane in a left banking, nose-low attitude that progressively steepened before the airplane impacted the ground, a post-impact fire ensued. Radar data showed the accident airplane proceeding toward the airport left of the runway 8R centerline until it was about 0.76 nautical mile (nm) west of the runway 8R, when it turned right, then left.

The final 3 radar targets showed a right turn toward runway 8R. Radar data showed that the other airplane was flying right of the runway 8L centerline until about 0.64 nm of runway 8L, when it turned left toward runway 8L.

Examination revealed no anomalies with the airframe or engine that would have precluded normal operation.

Given the apparent confusion regarding the inbound airplanes' runway assignments and the multiple

communications with air traffic control, it is likely that the pilot's attention was diverted from the task of flying the airplane throughout the approach. It is likely that the pilot's distraction resulted in his failure to recognize that the airplane had descended below a proper approach path, and the airplane's subsequent collision with trees.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be:

The pilot's failure to maintain clearance from trees during a visual approach for landing. Contributing to the accident was the pilot's distraction during the approach.

Findings

Personnel issues	Use of equip/system - Pilot
Aircraft	Descent/approach/glide path - Not attained/maintained
Personnel issues	Task monitoring/vigilance - Pilot

Factual Information

History of Flight

Approach-VFR pattern final	Abrupt maneuver
Approach-VFR pattern final	Collision during takeoff/land (Defining event)

On October 1, 2018, about 1150 Pacific daylight time, a Beech V35 airplane, N7997M, was destroyed when it was involved in an accident near La Verne, California. The pilot was fatally injured. The airplane was operated as a Title 14 *Code of Federal Regulations* Part 91 personal flight.

The pilot's family reported that he had flown to Bishop, California, and was returning home to Brackett Field Airport (POC), La Verne, California, on the day of the accident.

Air traffic control communication information provided by the Federal Aviation Administration revealed that the POC tower controller instructed the pilot to perform a straight-in approach for runway 8R, which the pilot acknowledged. About 19 seconds later, the controller advised the pilot that there was a Cessna 1 mile ahead inbound for runway 8L and subsequently cleared the accident pilot to land on runway 8R. The pilot confirmed that he was cleared to land on runway 8R and stated that he was looking for the traffic. About 32 seconds later, the controller asked the pilot if he had the Cessna in sight; the pilot replied that he did not. The controller subsequently informed the pilot that the traffic was for the north runway and should not be a factor. The pilot advised the controller shortly thereafter that he would keep looking for the traffic, and that he was "going to 8L." The controller immediately responded, "negative, you are going to 8R, they are 8L," to which the pilot responded, "I knew that."

About 47 seconds later, the pilot notified the controller that he had the Cessna in sight and stated that it was aligned with runway 8R. The controller verified with the pilot of the Cessna that the airplane was landing on runway 8L, to which the pilot replied, "Landing on 8L." The controller then confirmed with the accident pilot that the accident airplane was cleared for runway 8R, and the pilot confirmed. About 20 seconds later, the controller asked the accident pilot if he was landing 8R, and subsequently instructed the pilot to go-around and offset his flight path to the right. There was no further communication from the accident airplane.

Recorded radar data (Figure 1) showed that both the accident airplane and the Cessna were approaching the airport from the west. The accident airplane was behind the Cessna, with the horizontal spacing between the two airplanes decreasing throughout the approach to landing. The Cessna's radar track indicated that it was south of the runway 8L centerline until 1147:31, when it turned left/north to align with runway 8L. The accident airplane's radar track showed that it was mostly north of the runway 8R centerline until 1147:54, when it made a right/south turn toward the runway 8R centerline. The data showed that, at 1147:59, the accident airplane was aligned with runway 8L, then turned right toward runway 8R. The last radar return was about 2,150 ft west of the runway 8R threshold and about 1,648 ft west of the accident site at 1,000 ft mean sea level (msl).

Figure 1: Radar data plots for the accident airplane and Cessna with extended runway centerlines.

Two witnesses, who were conducting an investigation of an aircraft accident that occurred the day before, were located adjacent to the accident site as depicted in Figure 2. Both witnesses heard the sound of the airplane impacting trees before they turned to see it in a left banking, nose-low attitude that progressively steepened before the airplane impacted the ground. A post-impact fire ensued.

Figure 2: Accident site locations in relationship to runway 8R. Photo courtesy of the La Verne Fire Department.

Pilot Information

Certificate:	Private	**Age:**	60,Male
Airplane Rating(s):	Single-engine land	**Seat Occupied:**	Left
Other Aircraft Rating(s):	None	**Restraint Used:**	Lap only
Instrument Rating(s):	None	**Second Pilot Present:**	No
Instructor Rating(s):	None	**Toxicology Performed:**	Yes
Medical Certification:	Class 2 With waivers/limitations	**Last FAA Medical Exam:**	September 7, 2017
Occupational Pilot:	No	**Last Flight Review or Equivalent:**	April 12, 2017
Flight Time:	306 hours (Total, all aircraft), 91.4 hours (Total, this make and model), 51 hours (Last 90 days, all aircraft), 16.8 hours (Last 30 days, all aircraft)		

The pilot had received 41.3 hours of dual instruction in the accident airplane make and model.

Aircraft and Owner/Operator Information

Aircraft Make:	Beech	**Registration:**	N7997M
Model/Series:	V35	**Aircraft Category:**	Airplane
Year of Manufacture:	1966	**Amateur Built:**	
Airworthiness Certificate:	Normal	**Serial Number:**	D-8277
Landing Gear Type:	Retractable - Tricycle	**Seats:**	4
Date/Type of Last Inspection:	November 10, 2017 Annual	**Certified Max Gross Wt.:**	
Time Since Last Inspection:		**Engines:**	Reciprocating
Airframe Total Time:	6142.41 Hrs as of last inspection	**Engine Manufacturer:**	Continental
ELT:	Installed, not activated	**Engine Model/Series:**	IO-520-BA
Registered Owner:		**Rated Power:**	285 Horsepower
Operator:	On file	**Operating Certificate(s) Held:**	None

Narrative aircraft info place holder

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	**Condition of Light:**	Day
Observation Facility, Elevation:	KPOC,1011 ft msl	**Distance from Accident Site:**	1 Nautical Miles
Observation Time:	17:47 Local	**Direction from Accident Site:**	44°
Lowest Cloud Condition:	Clear	**Visibility**	10 miles
Lowest Ceiling:	None	**Visibility (RVR):**	
Wind Speed/Gusts:	5 knots /	**Turbulence Type Forecast/Actual:**	/
Wind Direction:	120°	**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:	29.87 inches Hg	**Temperature/Dew Point:**	28°C / 10°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Bishop, CA	**Type of Flight Plan Filed:**	None
Destination:	La Verne, CA (POC)	**Type of Clearance:**	VFR
Departure Time:	10:20 Local	**Type of Airspace:**	Class D

Narrative meteorological information place holder

Airport Information

Airport:	BRACKETT FIELD POC	**Runway Surface Type:**	Asphalt
Airport Elevation:	1013 ft msl	**Runway Surface Condition:**	Dry
Runway Used:	08R	**IFR Approach:**	None
Runway Length/Width:	4840 ft / 75 ft	**VFR Approach/Landing:**	Straight-in

The tower-controlled airport was located within class D airspace. Runway 8L was displaced about 1,100 ft beyond the approach end of runway 8R. The runway 8L centerline was about 300 ft north of the runway 8R centerline.

Wreckage and Impact Information

Crew Injuries:	1 Fatal	**Aircraft Damage:**	Destroyed
Passenger Injuries:		**Aircraft Fire:**	None
Ground Injuries:	N/A	**Aircraft Explosion:**	None
Total Injuries:	1 Fatal	**Latitude, Longitude:**	34.092224,-117.791946

The first identified point of contact (FIPC) was a 50-ft-tall tree about 900 ft from the approach end of runway 8R and about 185 ft north of the runway centerline. The wreckage debris path (Figure 3) was about 400 ft long and oriented on a heading of about 070° magnetic.

A freshly cut tree limb was located about 146 ft beyond the FIPC. Paint chips consistent with the color of the airplane were located about 319 ft from the FIPC. About 30 ft beyond the paint chips was the propeller assembly and an impact crater that was about 2 ft wide and 4 ft in length. Portions of the nose wheel landing gear door, engine cowling, and green right-wing navigation lens fragments were located about 364 ft from the FIPC. The outboard 5 ft of the left wing was located about 370 ft from the FIPC (Figure 4). The main wreckage was located about 394 ft from the FIPC. The airplane came to rest upright on a heading of about 198°. The left aileron was located about 6 ft beyond the main wreckage.

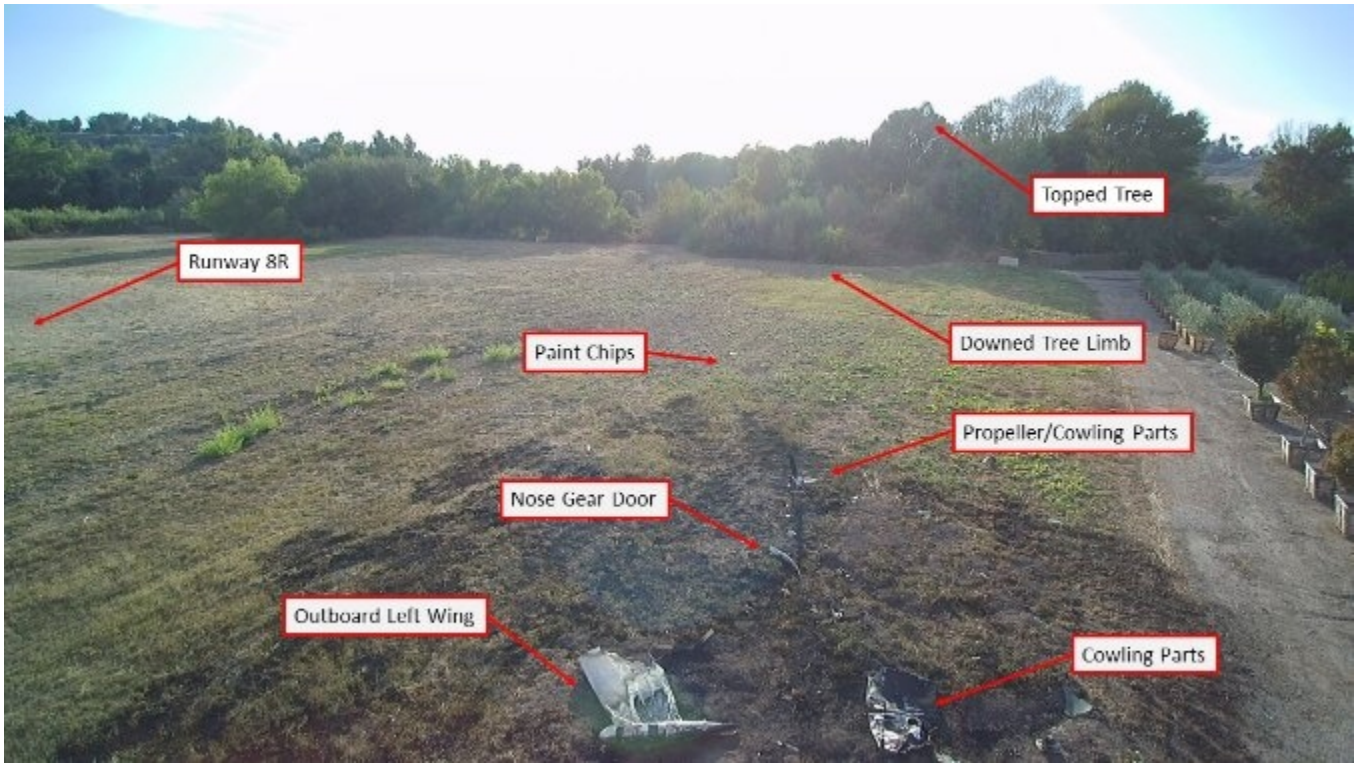

Figure 3: Wreckage debris path, looking west from main wreckage. Photo courtesy of the La Verne Fire Department.

Figure 4: Aerial view of the accident site in relation to runway 8R. Photo courtesy of the La Verne Fire Department.

The fuselage from the rear seats forward was mostly consumed by fire. The instrument panel, instruments, front seats, and control column were fire damaged. The fuselage structure aft of the rear seats was mostly intact and buckled along the bottom sides of the fuselage.

The left and right ruddervators remained attached to the empennage. The right ruddervator was undamaged and the trim tab remained attached. The left ruddervator remained attached but was displaced downward beyond its full deflection. The trim tab was bent upward and disconnected from the trim tab control cable.

The left wing remained attached to the fuselage and exhibited fire damage. The flap remained attached to the wing structure and appeared to be in the retracted position. The left main landing gear appeared to be in the extended position. A majority of the wing structure was consumed by fire. The separated outboard portion of the left wing was fire damaged. The tip tank remained attached to the wing

structure. The leading edge of the wing just inboard of the tip tank was buckled and bent and the tip tank appeared to be displaced/bent slightly inboard. The aileron was separated and exhibited bending and buckling throughout its span.

The right wing remained attached to the fuselage and was fire damaged. The wing structure was mostly consumed by fire. Remains of the flap and aileron were observed. The tip tank was partially attached to the wing. The right main landing gear appeared to be in the extended position.

Control continuity was established throughout the main wreckage from the cockpit controls aft to the ruddervators and to both aileron bellcranks. Two separations were observed in the left aileron control cable and appeared to have been cut by first responders. The left flap actuator measured 3 inches, which equated to about 10° extended. The ruddervator trim actuator measured .65 inches, which equated to 20° nose down.

The engine was separated from the airframe and exhibited thermal damage. All six cylinders remained attached. The starter and propeller were separated from the engine. The crankshaft was rotated using a hand tool; rotational continuity was established throughout the engine and valve train. Thumb compression and suction was obtained on all six cylinders. All six cylinders were examined internally using a lighted borescope and were all found unremarkable.

The propeller was separated from the engine. All three propeller blades remained attached to the hub assembly; however, one of the propeller blades was loose within its mount. The blades were labeled A, B, and C for identification. Blade A rotated freely within the hub and exhibited minor aft bending, leading edge polishing, and slight chordwise scratches near the blade tip. Blade B exhibited minor aft bending near the blade tip and chordwise scratches throughout the outboard half of the blade. Blade C was unremarkable.

Additional Information

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Injuries to Persons

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Damage to Aircraft

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Other Damage

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Communications

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Flight recorders

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Medical and Pathological Information

The County of Los Angeles Coroner, Los Angeles, California, performed an autopsy of the pilot. The pilot's cause of death was multiple blunt force trauma.

The FAA's Forensic Sciences Laboratory performed toxicology testing of the pilot; results were negative for all tested-for substances.

Fire

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Survival Aspects

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Tests and Research

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Organizational and Management Information

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Useful or Effective Investigation Techniques

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Administrative Information

Investigator In Charge (IIC):	Cawthra, Joshua		
Additional Participating Persons:	Steve Sonneson; Federal Aviation Administration; Los Angeles, CA Kurt Gibson; Continental Motors; Mobile, AL Jennifer Barclay; Textron Aviation; Wichita, KS		
Original Publish Date:	December 3, 2020	**Investigation Class:**	2
Note:	The NTSB traveled to the scene of this accident.		
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=98386		

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