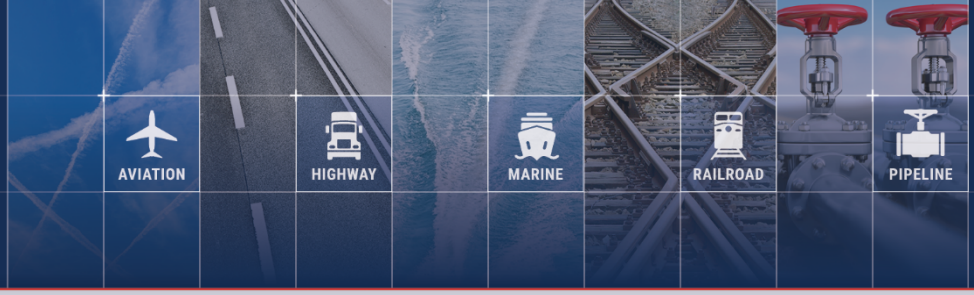

Aviation Investigation Factual Report

Location:	PINE MOUNTAIN, California	**Accident Number:**	LAX93FA360
Date & Time:	September 19, 1993, 20:15 Local	**Registration:**	N9778Y
Aircraft:	BEECH 95-A55	**Aircraft Damage:**	Destroyed
Defining Event:		**Injuries:**	2 Fatal
Flight Conducted Under:	Part 91: General aviation - Personal		

Factual Information

HISTORY OF FLIGHT

On September 19, 1993, at 2015 hours Pacific daylight time, a Beech 95-A55, N9778Y, collided with a tree while in cruise flight near Pine Mountain, California. The pilot was conducting a visual flight rules personal flight to Brackett Airport, La Verne, California. The airplane, operated by the pilot/owner, was destroyed. The certificated commercial pilot and his passenger received fatal injuries. Visual meteorological conditions prevailed. The flight originated at Oakland International Airport, Oakland, California, at 1843 hours. A flight plan was not filed; nor was it required.

The California wing of the Civil Air Patrol (CAP) was notified of Satellite hits from an emergency locator transponder (ELT) at approximately 0515 hours on September 20, 1993. The Mission Commander reported to Safety Board investigators that the aircrew was ready to launch to commence the search at 0625 hours. A relief aircrew was launched at approximately 1230 hours. The CAP Mission Commander reportedly received a positive identification of the crash site at 1545 hours. The Mission Commander reported verification of the aircraft type, the number of fatalities at 1645 hours.

There were no witnesses to the airplane accident. According to a national track analysis plot (NTAP) derived from the Federal Aviation Administration (FAA), Los Angeles Air Route Traffic Control Center, the airplane was at 8600 feet (as shown on the Mode C aircraft mounted transponder) at 2013:19 hours.

CREW INFORMATION

The pilot held a commercial pilot certificate which was issued on August 19, 1980, with an airplane single, multi-engine land, single engine sea, rotorcraft-helicopter, and instrument airplane ratings. The most recent second class medical certificate was issued to the pilot on May 5, 1992, with a restriction that "the holder shall wear corrective lenses for distant vision while exercising the privileges of his airman's certificate."

According to the FAA Civil Aeromedical Institute in Oklahoma City, Oklahoma, the pilot reported 2600 hours total time and 60 hours in the last six months as of the last reported medical application dated May 5, 1992. Safety Board investigators were unable to recover the pilot's logbooks to determine if the pilot had complied with the applicable biennial flight review currency requirements within the preceding six months.

Additionally, the pilot held a certificate for instrument airplane flight instructor, airplane single engine and multi-engine flight instructor ratings.

The pilot also held certificates for the advanced and instrument ground instructor.

AIRCRAFT INFORMATION

The airplane, a Beech model 95-A55, had accumulated an unknown amount of flight time. The hobbs meter aboard the airplane read 1092.2 hours at the time of the accident.

The aircraft's maintenance records were not recovered, thus, Safety Board investigators were unable to determine the type of the last inspection or any maintenance history on the airplane.

METEOROLOGICAL INFORMATION

Visual meteorological conditions were reported by the Kern County Sheriff's officers and local search and rescue personnel near the accident site on the evening of September 19, 1993.

Safety Board investigators compiled information derived from a computer generated plot of the Sun/Moon altitude, azimuth and percent of illumination. The data extracted revealed that the moon's altitude at 1953 hours was 16.6 degrees relative to the horizon. At 2033 hours, the moon's altitude was 10.1 degrees. The percent of available moon illumination throughout this time period was 22 percent.

According to the National Weather Service station located at Van Nuys, California, surface weather observation for the accident date of September 19, 1993, at 2046 hours was : "Clear, 20 miles visibility, temperature 67 degrees Fahrenheit, dewpoint 56 degrees Fahrenheit, wind 090 degrees at 06 knots, altimeter 29.83 Hg." Van Nuys Airport is located about 55 statute miles southeast of the accident site.

The National Weather Service, Bakersfield, California, reported the following weather at 1550 hours: "Estimated 14,000 broken, 20,000 broken, surface visibility 10 miles, altimeter 29.81 inches Hg, temperature 80 degrees Fahrenheit, dewpoint 50 degrees Fahrenheit, wind 310 degrees at 07 knots, virga northwest."

COMMUNICATIONS

The pilot contacted Oakland Airport Control Tower personnel at 1835 local hours and told them he would "be departing VFR (visual flight rules)...I'd like a squawk code, be going 7500 feet to Los Angeles,...down to Pomona/Brackett." The pilot of the accident airplane requested taxi clearance at 1840 hours, and was issued a transponder code of 3360 and an altitude restriction of "at or below 2500 feet", while in the terminal control area. At 1843 hours, Oakland Control Tower personnel instructed the pilot to "taxi into position and hold on Runway 27 Right." At 1844 hours, the pilot of N9778Y was "cleared for takeoff."

At 1845 hours, the pilot was instructed by control tower personnel to report his altitude. The

pilot advised the tower he'll "be climbing to 7500 feet." At 1848 hours, the tower controller contacted Bay Tracon to initiate a handoff to his sector. The Bay controller advised the Oakland Tower controller that he was unable to provide services due to his workload, and instructed the controller to "terminate services for N9778Y." The Oakland controller told the pilot of N9778Y that the radar services were terminated and he was instructed to squawk 1200, and that a frequency change was approved.

The pilot of the accident aircraft was told by the Oakland Tower controller that he could attempt to contact Bay Approach control on frequency 135.4 MHZ for further advisories. The pilot eventually was told to contact Los Angeles Center on 119.05 MHZ. Los Angeles Air Route Traffic Control Center (hereafter referred to as LA ARTCC), sector 15, was advised by the pilot of the accident airplane that "78 Yankee with you at 7.5 (7,500 feet)."

Later LA Sector 15 ARTCC asked the pilot of N9778Y, "what's your next point of navigation?" The pilot responded, "going Gorman, Gorman direct Brackett." LA Sector 15 ARTCC responded, "N778Y, contact Los Angeles Center 132.6, if unable, reattempt in 15 miles." The pilot responded, "78Y, unable to reach 132.6."

LA ARTCC sector 15 responded, "N78Y, roger, reattempt center 132.6, if unable, reattempt in 15 miles. You are in an area of poor radio coverage."

No further radio communications were received by the pilot of the accident airplane.

LA ARTCC, sector 13, (the sector that the airplane was reportedly attempting to contact), made two radio communications in the blind; "978Y, are you with me?" He received no response.

Safety Board investigators reviewed a publication which is printed for usage by the U. S. Department of Transportation, Federal Aviation Administration publication, 7110.65H, "Air Traffic Control", published September 16, 1993, which prescribes air traffic control procedures and phraseology for use by personnel providing air traffic control services.

According to paragraph 10-2-1, subparagraph 10-14a2, entitled "Emergency Situations", it states "consider that an aircraft emergency exists and inform the RCC, (rescue coordination center) or ARTCC and alert the DF (direction finding) net when: an emergency is declared by either the pilot or facility personnel. Note: an example of an emergency which should be declared by facility personnel is unexpected loss of radar contact and radar communication with an aircraft." No attempt, other than the two calls in the blind was made by the sector 13 controller to comply with paragraph 10-2-1.

WRECKAGE AND IMPACT

The accident site is located in the Los Padres National Forest on Sawmill Mountain, on the 16.5 statute mile/257 degree radial of the Gorman VOR. The elevation of the accident site is about 8,750 feet mean sea level. The site is in a hilly/mountainous area with vegetation

primarily consisting of bushes and trees ranging in height to about 60 feet, with rocky soil.

The first located tree strike was with a pine tree about 120 feet below the crest of the mountain. A ground scar was located approximately 25 feet beyond the first located tree strike on a 30 degree up-sloping terrain.

All of the airplane's major components were found at the impact area. The main wreckage was located about 310 feet from the initial tree strike on a 128 degree magnetic bearing. The main wreckage consisted of the empennage, fuselage, left and right inner wing and the left engine. The main wreckage came to rest in an inverted position. Both wings were found attached at their respective wing-to-fuselage attach fittings. However, both wings separated at their engine nacelle area. About 6 feet of the outboard right wing was located about 230 feet from the initial tree impact area. The right wing leading edge and elevator were located about 73 feet from the first located tree strike, imbedded about 5 feet from the bottom of the tree. The right wing front spar was located at the base of this tree.

The left outboard wing was located at the initial tree impact area about 20 feet from the bottom of the tree. The left wing tip was located about 40 feet southeast of the first located tree strike.

Flight control continuity could not be established due to extensive impact damage the airplane sustained during the impact sequence. The flap actuators were found extended 2 1/8 inches, and the elevator trim tab actuators were found extended 1 1/4 inches. According to the Beech Aircraft representative, these settings corresponded to the normal settings during cruise flight. No other flight control settings could be established.

The main and nose gear assemblies were located in the up and locked position.

Both engines sustained significant impact damage. The right engine came to rest about 20 feet from the main wreckage on a bearing of 080 degrees. The left engine was located underneath the main wreckage and was attached to the left wing.

The propeller blades of both propeller assemblies exhibited extreme leading edge gouging, chordwise scratches, and "S" twisting. One propeller blade of the right propeller assembly separated from it's hub and was found about 10 feet away from the engine; the remaining blade remained attached to the hub.

The left propeller hub, with both blades attached, separated from the engine crankshaft and was located about 55 feet southeast of the initial tree impact area. Both propeller blade tips separated about 12 inches from the outboard end of the blades.

MEDICAL AND PATHOLOGICAL INFORMATION

An autopsy was performed on the pilot on September 21, 1993, by Dr. A. L. Dollinger, M.D. The

autopsy listed the cause of death as "multiple injuries (seconds), due to blunt force trauma, (seconds)."

A toxicological examination was performed by the Kern County Coroner's Facility, Bakersfield, California on October 11, 1993. The toxicological results were negative for all volatiles and screened drugs.

Toxicological specimens were not sent to the Civil Aeromedical Institute in Oklahoma City, Oklahoma, for analysis although requested by the Safety Board.

ADDITIONAL INFORMATION

The Safety Board released the airplane wreckage to Mr. Jeff Pace, son of the deceased, on November 1, 1993.

Pilot Information

Certificate:	Commercial; Flight instructor	**Age:**	57,Male
Airplane Rating(s):	Single-engine land; Single-engine sea; Multi-engine land	**Seat Occupied:**	Left
Other Aircraft Rating(s):	Helicopter	**Restraint Used:**	
Instrument Rating(s):	Airplane	**Second Pilot Present:**	No
Instructor Rating(s):	Airplane multi-engine; Airplane single-engine; Helicopter	**Toxicology Performed:**	Yes
Medical Certification:	Class 2 Valid Medical--w/ waivers/lim	**Last FAA Medical Exam:**	May 5, 1992
Occupational Pilot:	No	**Last Flight Review or Equivalent:**	
Flight Time:	2600 hours (Total, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	BEECH	**Registration:**	N9778Y
Model/Series:	95-A55 95-A55	**Aircraft Category:**	Airplane
Year of Manufacture:		**Amateur Built:**	
Airworthiness Certificate:	Normal	**Serial Number:**	TC439
Landing Gear Type:	Retractable - Tricycle	**Seats:**	4
Date/Type of Last Inspection:	Unknown	**Certified Max Gross Wt.:**	5000 lbs
Time Since Last Inspection:		**Engines:**	2 Reciprocating
Airframe Total Time:		**Engine Manufacturer:**	CONTINENTAL
ELT:	Installed, activated, aided in locating accident	**Engine Model/Series:**	IO-470-L
Registered Owner:	LAWRENCE PACE	**Rated Power:**	260 Horsepower
Operator:		**Operating Certificate(s) Held:**	None
Operator Does Business As:		**Operator Designator Code:**	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	**Condition of Light:**	Night/dark
Observation Facility, Elevation:	VNY ,799 ft msl	**Distance from Accident Site:**	55 Nautical Miles
Observation Time:	20:46 Local	**Direction from Accident Site:**	320°
Lowest Cloud Condition:	Clear	**Visibility**	20 miles
Lowest Ceiling:	None	**Visibility (RVR):**	
Wind Speed/Gusts:	6 knots / None	**Turbulence Type Forecast/Actual:**	/
Wind Direction:	90°	**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:	29 inches Hg	**Temperature/Dew Point:**	19°C / 13°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	OAKLAND (OAK)	**Type of Flight Plan Filed:**	None
Destination:	BRACKET FIELD (POC)	**Type of Clearance:**	VFR on top
Departure Time:	18:43 Local	**Type of Airspace:**	Class G

Airport Information

Airport:		**Runway Surface Type:**	
Airport Elevation:		**Runway Surface Condition:**	
Runway Used:	0	**IFR Approach:**	None
Runway Length/Width:		**VFR Approach/Landing:**	None

Wreckage and Impact Information

Crew Injuries:	1 Fatal	**Aircraft Damage:**	Destroyed
Passenger Injuries:	1 Fatal	**Aircraft Fire:**	None
Ground Injuries:	N/A	**Aircraft Explosion:**	None
Total Injuries:	2 Fatal	**Latitude, Longitude:**	34.839061,-119.169502(est)

Administrative Information

Investigator In Charge (IIC):	Childress, Debbie
Additional Participating Persons:	JIM HALLOWS; FRESNO , CA JAMES E STERMER; WICHITA , KS MIKE GRIMES; LANCASTER , CA
Report Date:	March 17, 1994
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=28348