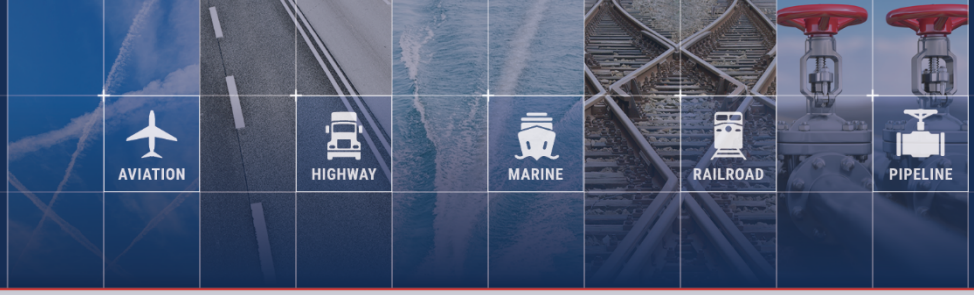

Aviation Investigation Final Report

Location:	PACOIMA, California	**Accident Number:**	LAX96LA273
Date & Time:	July 15, 1996, 19:23 Local	**Registration:**	N87107
Aircraft:	Bellanca 8GCBC	**Aircraft Damage:**	Destroyed
Defining Event:		**Injuries:**	1 Serious, 1 Minor
Flight Conducted Under:	Part 91: General aviation - Instructional		

Analysis

The CFI had the airplane refueled in preparation for his student's BFR. The CFI and the student (a private pilot) departed, climbed to traffic pattern altitude, and entered the downwind leg. Abeam the control tower, the private pilot was issued a landing clearance and the pilot turned onto the base leg while the airplane descended. The CFI reported that when he instructed his student to decrease the descent rate, he realized that engine power was suddenly unavailable. The CFI took the controls, made a forced landing in a residential area, and collided with obstacles. The postimpact examination of the airframe and engine did not reveal evidence of fuel system contamination or blockages. The engine was successfully test run.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: a total loss of engine power for undetermined reasons.

Findings

Occurrence #1: LOSS OF ENGINE POWER(TOTAL) - NONMECHANICAL
Phase of Operation: APPROACH - VFR PATTERN - BASE TURN

Findings
1. (C) REASON FOR OCCURRENCE UNDETERMINED

Occurrence #2: FORCED LANDING

Phase of Operation: EMERGENCY DESCENT/LANDING

Occurrence #3: IN FLIGHT COLLISION WITH OBJECT
Phase of Operation: EMERGENCY DESCENT/LANDING

Findings
2. OBJECT - TREE(S)
3. OBJECT - VEHICLE

Factual Information

HISTORY OF FLIGHT

On July 15, 1996, at 1923 hours Pacific daylight time, a Bellanca 8GCBC, N87107, operated by Red Baron, Pacoima, California, experienced a total loss of engine power while on base leg to the Whiteman Airport, Los Angeles, California. The certificated flight instructor (CFI) took the controls from the private pilot, who was receiving a biennial flight review, and the CFI made a forced landing in a residential area of Pacoima. The airplane was destroyed. The CFI/airline transport pilot (ATP) received minor injuries, and the private pilot was seriously injured. Visual meteorological conditions prevailed at the time of the instructional flight, and no flight plan was filed. The flight originated from the Whiteman Airport at 1920.

According to the CFI, prior to takeoff the airplane was serviced with 14 gallons of fuel. Airport personnel reported that 9 gallons of fuel were pumped into the right fuel tank which completely filled it, and 5 gallons were pumped into the left tank. The CFI and the private pilot indicated that no abnormal conditions were observed during the engine ground runup, and the takeoff was uneventful.

The airplane climbed to the traffic pattern altitude. When the airplane was downwind, abeam the position of the control tower, the private pilot received a clearance to land on runway 12. The pilot continued flying on the downwind leg, turned onto the base leg and descended. The CFI reported that he instructed the private pilot to add engine power to decrease the rate of descent, but no engine power was available.

The CFI stated that he took the controls, verified that the engine had failed and made a forced landing. Unable to glide to the airport, the CFI reported that he landed in the safest location available. The airplane collided with trees and an automobile about 1.5 miles northwest of the airport. No one on the ground was injured.

The CFI reported that seconds prior to the loss of engine power all airplane systems appeared to have been operating normally. When the power loss occurred it was not preceded or accompanied by any unusual vibration or sounds, there was no warning.

TESTS AND RESEARCH

On July 15, 1996, the National Transportation Safety Board examined the accident airplane while in storage at National Aircraft Salvage, Long Beach, California. The following summarizes the fuel system examination procedures and observations during the engine test run:

1. The left and right wing tanks were opened and visually inspected. No contaminants or obstructions were observed in either tank, in the fuel screens, or in the lines.

2. No obvious deformation was noted in the propeller blade assembly.

3. The throttle, mixture, and the carburetor heat control were found connected to the carburetor assembly/air box.

4. About 4 ounces of blue colored fluid was drained from the fuel strainer, and the fuel screen was clear.

5. The carburetor finger screen was found clear.

6. A temporary (auxiliary) fuel tank and battery were secured to the airplane.

7. The engine was started on the first attempt following the procedures described in the Bellanca owner's manual.

8. The engine rpm was varied from 500 to 2,200 during 4 minutes of engine operation. The first minute the engine was operated at 500 rpm, and the following 3 minutes it was operated at 2,200 rpm. The oil pressure indicated 55 psi, and the oil temperature indicated 100 degrees Fahrenheit.

9. The mixture control knob was pulled in an aft direction to shut off the engine. No discrepancies were observed during the test.

Pilot Information

Certificate:	Airline transport; Flight instructor	**Age:**	41,Male
Airplane Rating(s):	Single-engine land; Single-engine sea; Multi-engine land	**Seat Occupied:**	Rear
Other Aircraft Rating(s):	None	**Restraint Used:**	
Instrument Rating(s):	Airplane	**Second Pilot Present:**	Yes
Instructor Rating(s):	Airplane single-engine	**Toxicology Performed:**	No
Medical Certification:	Class 2 Valid Medical--no waivers/lim.	**Last FAA Medical Exam:**	August 3, 1995
Occupational Pilot:	UNK	**Last Flight Review or Equivalent:**	
Flight Time:	2863 hours (Total, all aircraft), 147 hours (Total, this make and model), 2608 hours (Pilot In Command, all aircraft), 76 hours (Last 90 days, all aircraft), 24 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Bellanca	**Registration:**	N87107
Model/Series:	8GCBC 8GCBC	**Aircraft Category:**	Airplane
Year of Manufacture:		**Amateur Built:**	
Airworthiness Certificate:	Normal	**Serial Number:**	68-74
Landing Gear Type:	Tailwheel	**Seats:**	2
Date/Type of Last Inspection:	January 12, 1996 Annual	**Certified Max Gross Wt.:**	2150 lbs
Time Since Last Inspection:	53 Hrs	**Engines:**	1 Reciprocating
Airframe Total Time:	899 Hrs	**Engine Manufacturer:**	Lycoming
ELT:	Installed, activated, did not aid in locating accident	**Engine Model/Series:**	O-360-C2E
Registered Owner:	DARRELL D. LATHAM	**Rated Power:**	180 Horsepower
Operator:	RED BARON AERIAL ADVERTISING	**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:**	Day
Observation Facility, Elevation:	WHP ,1003 ft msl	**Distance from Accident Site:**	2 Nautical Miles
Observation Time:	19:30 Local	**Direction from Accident Site:**	
Lowest Cloud Condition:	Clear	**Visibility**	7 miles
Lowest Ceiling:	None	**Visibility (RVR):**	
Wind Speed/Gusts:	12 knots /	**Turbulence Type Forecast/Actual:**	/
Wind Direction:	130°	**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:	29 inches Hg	**Temperature/Dew Point:**	26°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	(WHP)	**Type of Flight Plan Filed:**	None
Destination:		**Type of Clearance:**	VFR
Departure Time:	19:20 Local	**Type of Airspace:**	Class D

Airport Information

Airport:	WHITEMAN WHP	**Runway Surface Type:**	Asphalt
Airport Elevation:	1003 ft msl	**Runway Surface Condition:**	Dry
Runway Used:	12	**IFR Approach:**	None
Runway Length/Width:	4120 ft / 75 ft	**VFR Approach/Landing:**	Forced landing;Traffic pattern

Wreckage and Impact Information

Crew Injuries:	1 Serious, 1 Minor	**Aircraft Damage:**	Destroyed
Passenger Injuries:		**Aircraft Fire:**	None
Ground Injuries:	N/A	**Aircraft Explosion:**	None
Total Injuries:	1 Serious, 1 Minor	**Latitude, Longitude:**	34.250835,-118.410621(est)

Administrative Information

Investigator In Charge (IIC):	Pollack, Wayne
Additional Participating Persons:	KEN BROWN; VAN NUYS , CA
Original Publish Date:	August 25, 1997
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=29509