Aviation Investigation Final Report

Location:	BIG BEAR CITY, California	**Accident Number:**	LAX99LA296
Date & Time:	September 5, 1999, 14:30 Local	**Registration:**	N849B
Aircraft:	Beech 35-A33	**Aircraft Damage:**	Substantial
Defining Event:		**Injuries:**	1 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot had the mixture leaned for cruise flight. After experiencing a sudden wind gust while landing that moved the airplane off the extended runway centerline, the pilot applied full power and performed a go-around. The pilot said the airplane had trouble climbing. About 600 to 700 feet agl, the engine sputtered, then quit completely. When the pilot slightly enriched the mixture, the engine power returned momentarily. He applied more mixture, but the engine didn't respond and lost all power. While attempting to land in an empty lot, the left wingtip collided with a series of power lines. The airplane came to rest in a field. The fuel level was found to be about 1/2 to 3/4 full in both wing tanks. An examination of the engine was conducted and no discrepancies were found. The recorded weather data listed the density altitude as 9,000 feet at the time of the accident. The POH for the airplane stated that for a rough running engine or loss of engine power, the pilot should fully enrich the mixture, and then lean as required.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's failure to follow the manufacturer's procedures to fully enrich the mixture, which induced an overly lean condition during full power application on the go-around and a resulting loss of power. The high density altitude weather condition was a factor in the accident.

Findings

Occurrence #1: LOSS OF ENGINE POWER(TOTAL) - NONMECHANICAL
Phase of Operation: GO-AROUND (VFR)

Findings
1. (F) WEATHER CONDITION - HIGH DENSITY ALTITUDE
2. (C) MIXTURE - IMPROPER USE OF - PILOT IN COMMAND
3. (C) PROCEDURES/DIRECTIVES - NOT FOLLOWED - PILOT IN COMMAND

Occurrence #2: FORCED LANDING
Phase of Operation: EMERGENCY DESCENT/LANDING

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

Findings
4. OBJECT - WIRE,STATIC

Factual Information

On September 5, 1999, about 1430 hours Pacific daylight time, a Beech 35-A33, N849B, collided with power lines and terrain during a forced landing near the Big Bear City, California, airport. The forced landing was precipitated by a loss of engine power during a go-around from an approach to runway 8. The airplane, owned and operated by the pilot, sustained substantial damage. The private pilot was not injured. The personal cross-country flight, conducted under the provisions of 14 CFR Part 91, originated at the Torrance, California, airport, about 1350, and was en route to Big Bear. Visual meteorological conditions prevailed and no flight plan was filed.

The pilot reported that while he was on final approach to runway 08 with the landing gear down and the flaps set at 10 degrees, a helicopter was taking off from the parallel taxiway. He reported that the windsock was limp, but he experienced a sudden wind gust that pushed the airplane off the runway extended centerline. When the pilot was at 30 to 50 feet agl, he decided to go around and applied full power. After he gained sufficient altitude and a positive rate of climb, he retracted the landing gear and flaps. About 600 to 700 feet agl, the engine sputtered. The pilot reduced the throttle and the engine started back up again, and then quit completely. He checked the magnetos and fuel. He stated that the mixture had been leaned for cruise flight and he enriched it slightly and some power momentarily came back. He applied more mixture but the engine didn't respond. About 400 feet agl, he turned toward an empty lot. The left wingtip collided with a series of power lines but the pilot was able to maintain directional control of the airplane. The airplane came to rest in a field behind a row of homes on about 1/2 square acre of land. The engine twisted off from the fuselage and came to rest inverted.

The sheriff's deputy who responded to the accident site reported that he checked the airplane for fuel. He noted that the fuel level was approximately 1/2 to 3/4 full in both wing tanks. The pilot reported that he had taken off with 42 gallons of fuel.

The sheriff's deputy interviewed a pilot/witness who had been sitting in the airport restaurant during the accident. The witness reported that he observed the accident airplane approaching to land on runway 08. He stated that the plane dipped to the left and appeared to be straining to recover and climb. As the airplane passed by, the witness noted that the flaps were about 20 degrees down. He felt that was unusual because normal takeoff flaps were 10 degrees. The witness further reported that the landing gear retracted and the airplane continued to fly in an easterly direction while continuing to lose altitude. The nose was pointed upward and the tail was pointed downward during this time frame. The witness lost sight of the airplane behind a tree line, and then saw dust indicating that the plane had crashed.

The automated weather observation service for Big Bear Airport listed the density altitude as

9,000 feet at 1425.

An examination of the engine was conducted. The top sparkplugs were removed and examined; they exhibited normal color and wear patterns consistent with the Champion Check-A-Plug chart. The top sparkplug for the No. 5 cylinder was noted to have a lower break away torque than the other five. The valve covers were removed. Each cover contained oil. The rocker assemblies, springs, and valve retainers were secure at each cylinder assembly. Crankshaft rotation produced compression in all six cylinders. Accessory gear and valve train continuity were established. Both magnetos produced sparks at the sparkplug leads in firing order. The exhaust system was inspected. The muffler appeared unobstructed and displayed gray gas path coloration.

The pilot's operating handbook (POH) for the airplane was reviewed and relevant portions are appended to this file. In pertinent part, the POH states that for the condition of a rough running engine or loss of engine power, the pilot should fully enrich the mixture, and then lean as required.

Pilot Information

Certificate:	Private	**Age:**	41,Male
Airplane Rating(s):	Single-engine land	**Seat Occupied:**	Left
Other Aircraft Rating(s):	None	**Restraint Used:**	
Instrument Rating(s):	None	**Second Pilot Present:**	No
Instructor Rating(s):	None	**Toxicology Performed:**	No
Medical Certification:	Class 3 Valid Medical--no waivers/lim.	**Last FAA Medical Exam:**	August 29, 1998
Occupational Pilot:	No	**Last Flight Review or Equivalent:**	
Flight Time:	700 hours (Total, all aircraft), 120 hours (Total, this make and model), 620 hours (Pilot In Command, all aircraft), 30 hours (Last 90 days, all aircraft), 10 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Beech	**Registration:**	N849B
Model/Series:	35-A33 35-A33	**Aircraft Category:**	Airplane
Year of Manufacture:		**Amateur Built:**	
Airworthiness Certificate:	Normal	**Serial Number:**	CD-362
Landing Gear Type:	Retractable - Tricycle	**Seats:**	4
Date/Type of Last Inspection:	November 7, 1998 Annual	**Certified Max Gross Wt.:**	2900 lbs
Time Since Last Inspection:	80 Hrs	**Engines:**	1 Reciprocating
Airframe Total Time:	4200 Hrs	**Engine Manufacturer:**	Continental
ELT:	Installed, activated, did not aid in locating accident	**Engine Model/Series:**	IO-470-K
Registered Owner:	DR. GARY BELZBERG	**Rated Power:**	225 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:**	Day
Observation Facility, Elevation:	L35 ,6748 ft msl	**Distance from Accident Site:**	2 Nautical Miles
Observation Time:	14:25 Local	**Direction from Accident Site:**	180°
Lowest Cloud Condition:	Clear	**Visibility**	10 miles
Lowest Ceiling:	None	**Visibility (RVR):**	
Wind Speed/Gusts:	7 knots /	**Turbulence Type Forecast/Actual:**	/
Wind Direction:	20°	**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:	30 inches Hg	**Temperature/Dew Point:**	20°C / 7°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	TORRANCE , CA (TOA)	**Type of Flight Plan Filed:**	None
Destination:	(L35)	**Type of Clearance:**	None
Departure Time:	13:50 Local	**Type of Airspace:**	Class E

Airport Information

Airport:	BIG BEAR CITY AIRPORT L35	**Runway Surface Type:**	Asphalt
Airport Elevation:	6748 ft msl	**Runway Surface Condition:**	Dry
Runway Used:	8	**IFR Approach:**	None
Runway Length/Width:	5850 ft / 75 ft	**VFR Approach/Landing:**	Forced landing;Full stop;Go around;Traffic pattern

Wreckage and Impact Information

Crew Injuries:	1 None	**Aircraft Damage:**	Substantial
Passenger Injuries:		**Aircraft Fire:**	None
Ground Injuries:	N/A	**Aircraft Explosion:**	None
Total Injuries:	1 None	**Latitude, Longitude:**	34.26062,-116.839401(est)

Administrative Information

Investigator In Charge (IIC):	Mars, Noelani
Additional Participating Persons:	DENNIS PARR; RIVERSIDE , CA
Original Publish Date:	August 13, 2001
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=47286