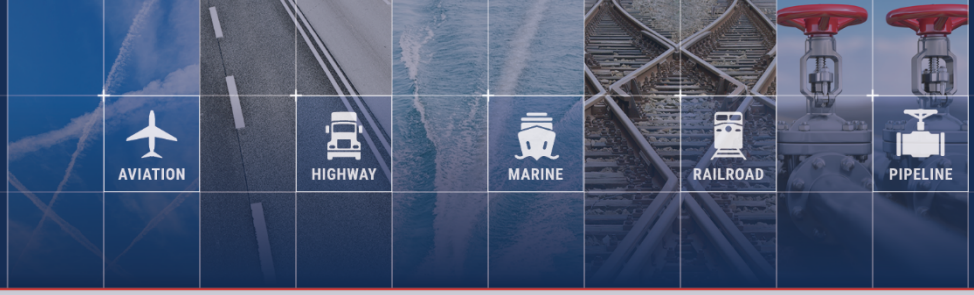

Aviation Investigation Final Report

Location:	Rio Linda, California	**Accident Number:**	WPR12LA128
Date & Time:	March 10, 2012, 19:25 Local	**Registration:**	N6697L
Aircraft:	Beech 76	**Aircraft Damage:**	Substantial
Defining Event:	Loss of engine power (total)	**Injuries:**	3 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

According to the pilot, he began his descent from 3,000 feet mean sea level (msl) by lowering the landing gear and reducing the power on both engines. When the airplane reached an altitude of about 1,200 feet msl, the left engine lost power. The pilot was about to feather the left propeller when engine power was momentarily restored followed by both engines losing power. He selected a “dark space” on the ground and performed a forced landing. During the landing, the airplane collided with a ditch and a fence.

Postaccident examination of the engines revealed no evidence of mechanical malfunctions or failures that would have precluded normal operation. About the time of the accident, a weather station about 4 nautical miles from the accident site reported a temperature of 52 degrees F and dew point of 45 degrees F. These weather conditions were conducive to the formation of serious carburetor icing at cruise and glide power settings. The pilot did not report applying carburetor heat when he initiated the descent, during descent, or following the loss of engine power. Additionally, the pilot stated that he believed carburetor icing caused both engines to lose power.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: A loss of engine power due to carburetor icing, and the pilot's failure to use carburetor heat during descent while operating in an area conducive to carburetor icing.

Findings

Environmental issues	Conducive to carburetor icing - Effect on equipment
Personnel issues	Lack of action - Pilot
Environmental issues	Rough terrain - Not specified

Factual Information

History of Flight

Enroute-descent	Loss of engine power (total) (Defining event)
Emergency descent	Off-field or emergency landing
Landing	Collision with terr/obj (non-CFIT)

On March 10, 2012, about 1925 Pacific standard time, a Beech 76, N6697L, sustained substantial damage following a dual engine power loss and subsequent forced landing near Rio Linda, California. The airline transport pilot and his two passengers were not injured. The pilot was operating the airplane under the provisions of 14 Code of Federal Regulations Part 91. Night visual meteorological conditions prevailed for the personal cross-country flight, which had originated from Visalia, California, about 1810, with an intended destination of McClellan Airfield, Sacramento, California. A flight plan had not been filed.

The pilot reported that he began to descend from his en route altitude of 3,000 feet mean sea level by lowering the landing gear and reducing power on both engines to 18 inches of manifold pressure. When the airplane reached an altitude of about 1,200 feet msl, the left engine lost power. The pilot advanced the power, propeller, and mixture controls full forward and was about to feather the left propeller when the engine “came alive for a couple of seconds,” and then both engines lost power. He selected a dark space on the ground and performed a forced landing. During the landing, the airplane collided with a ditch and a fence. The airplane’s right wing was separated from the fuselage, and the fuselage and left wing were bent and wrinkled.

Local fire department personnel who responded to the accident site reported that the right wing fuel tank was breached, and they observed about 5 gallons of fluid flow out of the tank. A local law enforcement officer removed the left wing fuel tank cap, looked in the opening, and was unable to see any fuel. Review of photographs of the airplane at the accident site taken by Federal Aviation Administration (FAA) inspectors the day after the accident revealed damage to the left wing consistent with the left wing fuel tank being breached. Additionally, the photographs showed that the left wing was displaced from the fuselage and tilted so that the left wing tip was raised above its normal position, which would have precluded an accurate determination of the quantity of fuel in the left wing tank by looking into the fuel filler opening.

On May 15, 2012, a Federal Aviation Administration (FAA) inspector examined the airplane’s engines. The examination revealed no evidence of any pre-impact mechanical malfunctions or failures that would have prevented normal operation of the engines. A report of the examination is contained in the public docket for this accident.

At 1915, McClellan Airfield, located 4 nautical miles southeast of the accident site, was

reporting a temperature of 52 degrees F and a dew point of 45 degrees F. For these conditions, the carburetor icing probability chart from DOT/FAA/CT-82/44 Publication: Light Aircraft Piston Engine Carburetor Ice Detector/Warning Device Sensitivity/Effectiveness, June 1982, shows a probability of serious icing at cruise and glide power settings. The pilot stated that he felt “the only cause to lose both engines within a few seconds could be carburetor icing.” The pilot did not report applying carburetor heat when he initiated descent, during descent, or following the loss of engine power.

Pilot Information

Certificate:	Airline transport; Flight instructor	**Age:**	32,Male
Airplane Rating(s):	Single-engine land; Multi-engine land	**Seat Occupied:**	Left
Other Aircraft Rating(s):	None	**Restraint Used:**	
Instrument Rating(s):	Airplane	**Second Pilot Present:**	No
Instructor Rating(s):	Airplane multi-engine; Airplane single-engine	**Toxicology Performed:**	No
Medical Certification:	Class 3 Without waivers/limitations	**Last FAA Medical Exam:**	February 28, 2009
Occupational Pilot:	No	**Last Flight Review or Equivalent:**	August 20, 2011
Flight Time:	2700 hours (Total, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Beech	**Registration:**	N6697L
Model/Series:	76	**Aircraft Category:**	Airplane
Year of Manufacture:		**Amateur Built:**	
Airworthiness Certificate:	Normal	**Serial Number:**	ME-271
Landing Gear Type:	Retractable - Tricycle	**Seats:**	4
Date/Type of Last Inspection:	February 27, 2012 Annual	**Certified Max Gross Wt.:**	3900 lbs
Time Since Last Inspection:	4 Hrs	**Engines:**	2 Reciprocating
Airframe Total Time:	as of last inspection	**Engine Manufacturer:**	LYCOMING
ELT:	Installed, activated, did not aid in locating accident	**Engine Model/Series:**	O&VO-360 SER
Registered Owner:	On file	**Rated Power:**	180 Horsepower
Operator:	On file	**Operating Certificate(s) Held:**	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	**Condition of Light:**	Night/dark
Observation Facility, Elevation:	MCC,77 ft msl	**Distance from Accident Site:**	4 Nautical Miles
Observation Time:	19:15 Local	**Direction from Accident Site:**	120°
Lowest Cloud Condition:	Clear	**Visibility**	10 miles
Lowest Ceiling:	None	**Visibility (RVR):**	
Wind Speed/Gusts:	13 knots / 16 knots	**Turbulence Type Forecast/Actual:**	/
Wind Direction:	200°	**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:	29.97 inches Hg	**Temperature/Dew Point:**	11°C / 7°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Visalia, CA (VIS)	**Type of Flight Plan Filed:**	None
Destination:	Sacramento, CA (MCC)	**Type of Clearance:**	None
Departure Time:	18:10 Local	**Type of Airspace:**	

Wreckage and Impact Information

Crew Injuries:	1 None	**Aircraft Damage:**	Substantial
Passenger Injuries:	2 None	**Aircraft Fire:**	None
Ground Injuries:	N/A	**Aircraft Explosion:**	None
Total Injuries:	3 None	**Latitude, Longitude:**	38.694999,-121.469718(est)

Administrative Information

Investigator In Charge (IIC):	Struhsaker, James
Additional Participating Persons:	Norbert Schuchbauer; Federal Aviation Administration FSDO; Sacramento, CA
Original Publish Date:	August 29, 2013
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=83088