



# National Transportation Safety Board Aviation Accident Data Summary

<b>Location:</b>	Fruitport, MI	<b>Accident Number:</b>	CHI07LA126
<b>Date &amp; Time:</b>	05/01/2007, 1715 EDT	<b>Registration:</b>	N1120B
<b>Aircraft:</b>	Luscombe 8A	<b>Injuries:</b>	2 Serious
<b>Flight Conducted Under:</b>	Part 91: General Aviation - Personal		

## Analysis

During the climb out the engine lost power. The CFI lowered the nose to establish a glide speed of about 65-70 mph and executed a forced landing to a field. He applied carburetor heat, switched magnetos, and pumped the throttle but with no effect. The CFI saw power line wires and tried to avoid them by going under the wires, but the airplane's right wing hit a power line pole. The airplane rotated to the right and landed in the ditch next to a road. The engine was put on an engine test stand and the engine run revealed that it met operational specifications. The temperature was 16 degrees Celsius and the dew point was 12 degrees Celsius. The mechanic who conducted the airplane's annual inspection five months earlier and who received dual instruction in the airplane before the accident flight stated that he encountered carburetor icing while taxiing and while in cruise flight. A review of two Luscombe owners' handbooks from the late 1940s and early 1950s found guidance recommending full carburetor heat for takeoffs and landings. A placard located next to the carburetor heat lever on the instrument panel stated the following: "Full Carburetor Air Heat Required for Takeoff and Landing." Although originally intended to correct fuel flow problems in early model 8As (during takeoffs with high pitch attitudes), the placard comports with Luscombe 8A owners and pilot operating manual guidance on carburetor icing avoidance. The certificated flight instructor reported that he had not applied carburetor heat until the engine lost power after takeoff.

## Probable Cause

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The flight instructor failed to use carburetor heat during takeoff in icing conditions. A factor was the power line pole.

## Findings

Occurrence #1: LOSS OF ENGINE POWER  
Phase of Operation: TAKEOFF - INITIAL CLIMB

### Findings

1. (C) CARBURETOR HEAT - NOT USED - PILOT IN COMMAND(CFI)
2. WEATHER CONDITION - CARBURETOR ICING CONDITIONS

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

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

Findings

3. (F) OBJECT - UTILITY POLE  
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Occurrence #4: IN FLIGHT COLLISION WITH TERRAIN/WATER  
Phase of Operation: DESCENT - UNCONTROLLED

Findings

4. TERRAIN CONDITION - DITCH

### Flight Instructor Information

<b>Certificate:</b>	Flight Instructor; Commercial	<b>Age:</b>	30
<b>Airplane Rating(s):</b>	Multi-engine Land; Single-engine Land; Single-engine Sea	<b>Instrument Rating(s):</b>	Airplane
<b>Other Aircraft Rating(s):</b>	None	<b>Instructor Rating(s):</b>	Airplane Multi-engine; Airplane Single-engine; Instrument Airplane
<b>Flight Time:</b>	2560 hours (Total, all aircraft), 8 hours (Total, this make and model), 2380 hours (Pilot In Command, all aircraft), 51 hours (Last 90 days, all aircraft), 35 hours (Last 30 days, all aircraft), 3 hours (Last 24 hours, all aircraft)		

### Student Pilot Information

<b>Certificate:</b>	Private	<b>Age:</b>	50
<b>Airplane Rating(s):</b>	Single-engine Land	<b>Instrument Rating(s):</b>	Airplane
<b>Other Aircraft Rating(s):</b>	None	<b>Instructor Rating(s):</b>	None
<b>Flight Time:</b>	400 hours (Total, all aircraft)		

### Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Luscombe	<b>Registration:</b>	N1120B
<b>Model/Series:</b>	8A	<b>Engines:</b>	1 Reciprocating
<b>Operator:</b>	On file	<b>Engine Manufacturer:</b>	Continental
<b>Operating Certificate(s) Held:</b>	None	<b>Engine Model/Series:</b>	A & C 65
<b>Flight Conducted Under:</b>	Part 91: General Aviation - Personal		

## Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	MKG, 628 ft msl	Weather Information Source:	Weather Observation Facility
Lowest Ceiling:	None	Wind Speed/Gusts, Direction:	5 knots / , 30°
Temperature:	17° C	Visibility	10 Miles
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Fruitport, MI (39Z)	Destination:	

## Airport Information

Airport:	Flying-a-Ranch (39Z)	Runway Surface Type:	Grass/turf
Runway Used:	9	Runway Surface Condition:	Soft
Runway Length/Width:	1925 ft / 70 ft		

## Wreckage and Impact Information

Crew Injuries:	1 Serious	Aircraft Damage:	Substantial
Passenger Injuries:	1 Serious	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Latitude, Longitude:	43.105000, -86.123611		

## Administrative Information

Investigator In Charge (IIC):	James Silliman	Adopted Date:	02/28/2008
Investigation Docket:	NTSB accident and incident dockets serve as permanent archival information for the NTSB's investigations. Dockets released prior to June 1, 2009 are publicly available from the NTSB's Record Management Division at <a href="mailto:pubinq@ntsb.gov">pubinq@ntsb.gov</a> , or at 800-877-6799. Dockets released after this date are available at <a href="http://dms.nts.gov/pubdms/">http://dms.nts.gov/pubdms/</a> .		

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