



# National Transportation Safety Board Aviation Accident Final Report

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<b>Location:</b>	NEW HUDSON, MI	<b>Accident Number:</b>	CHI95LA075
<b>Date &amp; Time:</b>	01/24/1995, 1620 EST	<b>Registration:</b>	N618K
<b>Aircraft:</b>	BEECH C45H	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	2 None
<b>Flight Conducted Under:</b>	Part 91: General Aviation - Personal		

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## Analysis

THE PILOT-IN-COMMAND STATED THAT SHORTLY AFTER TAKEOFF, WHEN THE AIRPLANE WAS ABOUT 150 FEET ABOVE THE GROUND OVER A STAND OF TREES, THE LEFT ENGINE LOST POWER. THE PILOTS MADE A HARD FORCED LANDING IN A FIELD, SKIDDED AND CAME TO A STOP AGAINST A FARM BUILDING. THE POWER LOSS OCCURRED OVER A WOODED AREA. POSTACCIDENT EXAMINATION REVEALED THE LEFT ENGINE DRIVEN FUEL PUMP SHAFT HAD FAILED. AIRPLANE RECORDS INDICATED THE MOST RECENT MAINTENANCE OCCURRED IN NOVEMBER 1991. THE AIRPLANE HAD FLOWN 148 HOURS SINCE THAT DATE.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The owner/pilot's inadequate maintenance practices which resulted in a loss of engine power shortly after takeoff and the pilot's inadequate emergency procedure after the power loss occurred. Related factors are trees, diminished airspeed and abrupt touchdown.

## Findings

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Occurrence #1: LOSS OF ENGINE POWER(TOTAL) - MECH FAILURE/MALF  
Phase of Operation: TAKEOFF - INITIAL CLIMB

### Findings

1. 1 ENGINE - FAILURE
  2. FUEL SYSTEM,PUMP - FAILURE
  3. (C) MAINTENANCE - INADEQUATE - OWNER/PILOT MECHANIC
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Occurrence #2: FORCED LANDING

Phase of Operation: EMERGENCY LANDING AFTER TAKEOFF

### Findings

4. (C) EMERGENCY PROCEDURE - INADEQUATE - PILOT IN COMMAND
  5. (F) OBJECT - TREE(S)
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Occurrence #3: HARD LANDING

Phase of Operation: LANDING - FLARE/TOUCHDOWN

### Findings

6. (F) AIRSPEED - DIMINISHED - PILOT IN COMMAND
  7. (F) TOUCHDOWN - ABRUPT - PILOT IN COMMAND
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Occurrence #4: ON GROUND/WATER COLLISION WITH OBJECT

Phase of Operation: LANDING - ROLL

### Findings

8. OBJECT - BUILDING(NONRESIDENTIAL)

## Factual Information

On January 24, 1995, about 1620 eastern standard time, a Beech C45H, N618K, experienced a loss of engine power on the left engine shortly after takeoff from New Hudson, Michigan. The airplane sustained substantial damage during the ensuing forced landing. The two commercially certificated pilots/airplane co-owners on board the airplane reported no injuries. Visual meteorological conditions prevailed for the flight, no flight plan was filed. The pleasure flight operated under 14 CFR Part 91, and originated from New Hudson, Michigan, about 1615, with an intended destination of Port Huron, Michigan.

The two pilots had recently purchased the accident airplane. They reported they picked up the airplane from the previous owner in Sandwich, Illinois, at approximately 1500 on January 16, intending to return to their home base airport in Port Huron. They stated that due to deteriorating weather conditions they diverted to and overnighted in Howell, Michigan. The following day the pilots made several attempts to continue the flight to Port Huron, but eventually returned to Howell due to poor weather conditions. They left the airplane in Howell, and returned on January 21 to continue the trip to Port Huron. The pilots encountered unfavorable weather conditions again, and landed at New Hudson, Michigan.

The pilots returned to New Hudson to pick up the airplane on January 24. They stated everything appeared normal during the runup. The pilot-in-command (PIC, left seat) stated after one aborted takeoff attempt (due to traffic) they took off from runway 25. The PIC stated the airplane was climbing through approximately 150 feet when the second pilot made the initial power reduction to a cruise climb power setting. The PIC reported the left engine lost power just after the power was reset. He requested full power, retracted the landing gear and attempted to feather the left engine. The PIC indicated the airplane was over a stand of trees, with airspeed and altitude decreasing, and he aimed for a snow covered open field ahead. He stated the airplane brushed the tree tops, then contacted the ground at a fairly high rate of descent. The airplane skidded to a stop against a silo and some farm equipment.

Postaccident examination of the airplane engines revealed the left side engine driven fuel pump drive shaft was sheared. Examination of the airplane wreckage revealed the electric fuel boost pump switches were in the OFF position. There was no airplane registration, airworthiness certificate, weight and balance data, or airplane flight manuals on board the airplane. Examination of the airplane maintenance records revealed the most recent maintenance entry was dated November 13, 1991. Records indicated the airplane had flown 148 hours since that date.

The PIC reported 4,386 hours total flight time, including 52 hours in the accident make and model airplane, 4 hours of which were within the preceding 90 days. The second pilot reported 1,050 hours total flight time, including 60 hours in the accident make and model airplane, 2 hours of which were within the preceding 90 days.

## Pilot Information

<b>Certificate:</b>	Commercial	<b>Age:</b>	39, Male
<b>Airplane Rating(s):</b>	Multi-engine Land; Single-engine Land	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	Seatbelt
<b>Instrument Rating(s):</b>	Airplane	<b>Second Pilot Present:</b>	Yes
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 2 Valid Medical--w/ waivers/lim.	<b>Last FAA Medical Exam:</b>	07/13/1993
<b>Occupational Pilot:</b>		<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	4386 hours (Total, all aircraft), 52 hours (Total, this make and model), 4214 hours (Pilot In Command, all aircraft), 110 hours (Last 90 days, all aircraft), 59 hours (Last 30 days, all aircraft), 3 hours (Last 24 hours, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	BEECH	<b>Registration:</b>	N618K
<b>Model/Series:</b>	C45H C45H	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	No
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	AF754
<b>Landing Gear Type:</b>	Retractable - Tricycle	<b>Seats:</b>	2
<b>Date/Type of Last Inspection:</b>	11/13/1991, Annual	<b>Certified Max Gross Wt.:</b>	10200 lbs
<b>Time Since Last Inspection:</b>	148 Hours	<b>Engines:</b>	2 Reciprocating
<b>Airframe Total Time:</b>	1928 Hours	<b>Engine Manufacturer:</b>	P&W
<b>ELT:</b>	Installed, not activated	<b>Engine Model/Series:</b>	R-985
<b>Registered Owner:</b>	EVANS-COLETTA	<b>Rated Power:</b>	450 hp
<b>Operator:</b>	EVANS-COLETTA	<b>Operating Certificate(s) Held:</b>	None

## Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	, 0 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	0000	Direction from Accident Site:	0°
Lowest Cloud Condition:	Unknown / 0 ft agl	Visibility	10 Miles
Lowest Ceiling:	Overcast / 3000 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	5 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	270°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	1° C
Precipitation and Obscuration:			
Departure Point:		Type of Flight Plan Filed:	None
Destination:	PORT HURON, MI (PHN)	Type of Clearance:	None
Departure Time:	1620 EST	Type of Airspace:	Class G

## Airport Information

Airport:	NEW HUDSON (Y47)	Runway Surface Type:	Asphalt
Airport Elevation:	926 ft	Runway Surface Condition:	Snow--wet; Soft
Runway Used:	25	IFR Approach:	
Runway Length/Width:	3015 ft / 37 ft	VFR Approach/Landing:	Forced Landing

## Wreckage and Impact Information

Crew Injuries:	2 None	Aircraft Damage:	Substantial
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 None	Latitude, Longitude:	

## Administrative Information

Investigator In Charge (IIC):	JODI L REEVES	Report Date:	06/29/1995
Additional Participating Persons:	ROBERT L GREEN; BELLEVILLE, MI GERALD C CARTER; BELLEVILLE, MI		
Publish Date:			
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:pubinquiry@ntsb.gov">pubinquiry@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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The Independent Safety Board Act, as codified at 49 U.S.C. Section 1154(b), precludes the admission into evidence or use of any part of an NTSB report related to an incident or accident in a civil action for damages resulting from a matter mentioned in the report. A factual report that may be admissible under 49 U.S.C. § 1154(b) is available [here](#).