



# National Transportation Safety Board Aviation Accident Final Report

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<b>Location:</b>	EARLHAM, IA	<b>Accident Number:</b>	CHI92DCD07
<b>Date &amp; Time:</b>	07/01/1992, 2040 CDT	<b>Registration:</b>	N79WA
<b>Aircraft:</b>	BERNARD W. RESNIK ACRO-SPECIAL	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	1 Serious, 1 Minor
<b>Flight Conducted Under:</b>	Part 91: General Aviation - Personal		

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## Analysis

THE HOMEBUILT ACCIDENT AIRPLANE LOST ENGINE POWER DURING INITIAL CLIMB FROM TAKEOFF. IT COLLIDED WITH TREES AND TERRAIN DURING A FORCED LANDING. THE PILOT DESCRIBED HOW HE HAD BEEN FLYING ABOUT 45 MINUTES AND HAD DONE TWO LANDINGS AND TAKEOFFS. DURING THE THIRD TAKEOFF THE AIRPLANE HAD CLIMBED ABOUT 75 TO 100 FEET WHEN THE ENGINE LOST POWER. EXAMINATION OF THE CARBURETOR AIR BOX REVEALED A FLAPPER VALVE IN THE AIR BOX HAD BROKEN. THE VALVE PLATE WAS FREE TO MOVE ABOUT IN THE SPACE BETWEEN THE SHAFT AND THE CARBURETOR AIR INTAKE. THE PLATE HAD BEEN SECURED TO THE SHAFT WITH TWO SPOT WELDS. THE SURFACE OF THE BROKEN WELDS APPEARED DULL EXCEPT FOR A SMALL PORTION ON ONE WELD WHERE THE BREAK APPEARED SHINY. THE CARBURETOR AIR BOX HAD BEEN PURCHASED FROM AN AIRCRAFT SALVAGE OPERATOR FOR INSTALLATION ON THE AIRPLANE.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be:  
A LOSS OF TOTAL ENGINE POWER WHEN A FAILED FLAPPER VALVE IN THE AIR BOX BLOCKED THE FLOW OF AIR THROUGH THE CARBURETOR THROAT.

## Findings

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

### Findings

1. (C) INDUCTION AIR CONTROL/SYSTEM - BLOCKED(TOTAL)

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

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Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER  
Phase of Operation: LANDING - FLARE/TOUCHDOWN

### Findings

2. TERRAIN CONDITION - GROUND

## Factual Information

### Pilot Information

<b>Certificate:</b>	Private	<b>Age:</b>	45, Male
<b>Airplane Rating(s):</b>	Single-engine Land	<b>Seat Occupied:</b>	Rear
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	Seatbelt
<b>Instrument Rating(s):</b>	None	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 3 Expired	<b>Last FAA Medical Exam:</b>	06/20/1989
<b>Occupational Pilot:</b>		<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	357 hours (Total, all aircraft), 5 hours (Total, this make and model), 357 hours (Pilot In Command, all aircraft), 17 hours (Last 90 days, all aircraft), 9 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

### Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	BERNARD W. RESNIK	<b>Registration:</b>	N79WA
<b>Model/Series:</b>	ACRO-SPECIAL ACRO-SPECI	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	Yes
<b>Airworthiness Certificate:</b>	Experimental	<b>Serial Number:</b>	3
<b>Landing Gear Type:</b>	Tailwheel	<b>Seats:</b>	2
<b>Date/Type of Last Inspection:</b>	05/27/1992, Annual	<b>Certified Max Gross Wt.:</b>	1550 lbs
<b>Time Since Last Inspection:</b>	10 Hours	<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	101 Hours	<b>Engine Manufacturer:</b>	LYCOMING
<b>ELT:</b>	Not installed	<b>Engine Model/Series:</b>	O-320-E2D
<b>Registered Owner:</b>	CAREY, JAMES D	<b>Rated Power:</b>	150 hp
<b>Operator:</b>	PRICE, JAMES F	<b>Operating Certificate(s) Held:</b>	None

## Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Dusk
Observation Facility, Elevation:	DSM, 957 ft msl	Distance from Accident Site:	25 Nautical Miles
Observation Time:	2050 CDT	Direction from Accident Site:	90°
Lowest Cloud Condition:	Unknown / 0 ft agl	Visibility	7 Miles
Lowest Ceiling:	Broken / 8500 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	7 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	180°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	29° C / 19° C
Precipitation and Obscuration:			
Departure Point:		Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	VFR
Departure Time:	2040 CDT	Type of Airspace:	Class G

## Wreckage and Impact Information

Crew Injuries:	1 Serious	Aircraft Damage:	Substantial
Passenger Injuries:	1 Minor	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Serious, 1 Minor	Latitude, Longitude:	

## Administrative Information

Investigator In Charge (IIC):	LARRY E BROWN	Report Date:	09/14/1993
Additional Participating Persons:	NICK H SPASIC; DES MOINES, IA		
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](#).