



# National Transportation Safety Board Aviation Accident Final Report

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<b>Location:</b>	BEDFORD, IN	<b>Accident Number:</b>	CHI88DEX06
<b>Date &amp; Time:</b>	07/01/1988, 1815 EST	<b>Registration:</b>	N42684
<b>Aircraft:</b>	PIPER J3	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	1 None
<b>Flight Conducted Under:</b>	Part 91: General Aviation - Personal		

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## Analysis

AIRCRAFT WAS IN CRUISE FLIGHT AT 1000 FEET AGL WHEN THE PILOT HEARD A BACKFIRE FROM THE ENGINE FOLLOWED BY IMMEDIATE AND TOTAL LOSS OF POWER. FORCED LANDING WAS MADE IN RUGGED, ROCKY TERRAIN. LANDING GEAR SHEARED OFF ON ROLLOUT. INVESTIGATION REVEALED FAILURE OF MAGNETO TIMING GEAR, AND ITS FOUR ATTACHING BOLTS.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be:

## Findings

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Occurrence #1: LOSS OF ENGINE POWER(TOTAL) - MECH FAILURE/MALF  
Phase of Operation: CRUISE - NORMAL

### Findings

1. (C) ENGINE ASSEMBLY,TIMING GEAR - FAILURE,TOTAL  
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Occurrence #2: FORCED LANDING  
Phase of Operation: DESCENT - EMERGENCY  
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Occurrence #3: ON GROUND/WATER ENCOUNTER WITH TERRAIN/WATER  
Phase of Operation: LANDING - FLARE/TOUCHDOWN

### Findings

2. (F) TERRAIN CONDITION - OVERLOAD  
3. LANDING GEAR,MAIN GEAR - OVERLOAD

## Factual Information

### Pilot Information

<b>Certificate:</b>	Flight Instructor; Commercial	<b>Age:</b>	43, 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>	Airplane	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	Airplane Single-engine	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 2 Valid Medical--w/ waivers/lim.	<b>Last FAA Medical Exam:</b>	04/04/1988
<b>Occupational Pilot:</b>		<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	1661 hours (Total, all aircraft), 200 hours (Total, this make and model), 1546 hours (Pilot In Command, all aircraft), 55 hours (Last 90 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

### Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	PIPER	<b>Registration:</b>	N42684
<b>Model/Series:</b>	J3 J3	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	No
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	14979
<b>Landing Gear Type:</b>	Tailwheel	<b>Seats:</b>	2
<b>Date/Type of Last Inspection:</b>	06/10/1987, Annual	<b>Certified Max Gross Wt.:</b>	1220 lbs
<b>Time Since Last Inspection:</b>	55 Hours	<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	4000 Hours	<b>Engine Manufacturer:</b>	CONTINENTAL
<b>ELT:</b>	Not installed	<b>Engine Model/Series:</b>	A65
<b>Registered Owner:</b>	DONALD G. HENDERSON	<b>Rated Power:</b>	65 hp
<b>Operator:</b>	DONALD G. HENDERSON	<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:	Clear / 0 ft agl	Visibility	0 Miles
Lowest Ceiling:	None / 0 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	10 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	90°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	
Precipitation and Obscuration:			
Departure Point:		Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	1810 EST	Type of Airspace:	Class G

## Wreckage and Impact Information

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

## Administrative Information

Investigator In Charge (IIC):	ALBERT C MICHAELS	Report Date:	07/10/1989
Additional Participating Persons:	GARY L TEMPLE; INDIANAPOLIS, IN		
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](#).