



Aviation Investigation Final Report

Location:	BALDWIN, Wisconsin	Accident Number:	CHI86LA236
Date & Time:	September 26, 1986, 10:30 Local	Registration:	N9427F
Aircraft:	HUGHES 269B	Aircraft Damage:	Substantial
Defining Event:		Injuries:	2 None
Flight Conducted Under:	Part 91: General aviation		

Analysis

AFTER PICKING UP HIS PASSENGER AT WILLIAMS PIPELINE, MINNEAPOLIS, MINNESOTA, THE PLT FLEW EASTWARD ALONG INTERSTATE 90 ENROUTE TO A PIPELINE NEAR WAUSAU, WISCONSIN. WHILE FLYING AT APPROXIMATELY 400 FEET, THE PLT AND PASSENGER STATED THAT THE ENGINE STARTED TO MAKE A GRINDING OR KNOCKING NOISE AND THAT THERE WAS AN ALMOST INSTANTANEOUS LOSS OF POWER. THE PLT THEN DROPPED THE COLLECTIVE AND TURNED APPROXIMATELY 40 DEGREES TO THE SANDY, UPWARD SLOPING GROUND. THE NOSE OF THE AIRCRAFT REMAINED LOW AND THE TAILBOOM RAISED. THE MAIN ROTOR BLADES THEN STRUCK THE TAILBOOM. WRECKAGE EXAMINATION REVEALED THAT THE NUMBER FOUR PISTON ROD PROTRUDED THROUGH THE ENGINE CASE, WHICH WAS CRACKED FROM THE HOLE TO THE NUMBER FOUR CYLINDER BASE.

Probable Cause and Findings

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

Findings

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

Findings

1. (C) ENGINE ASSEMBLY, CRANKCASE - CRACKED

Occurrence #2: FORCED LANDING

Phase of Operation: DESCENT - EMERGENCY

Findings

2. AUTOROTATION - INITIATED - PILOT IN COMMAND

Factual Information

Pilot Information

Certificate:	Commercial	Age:	25, Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Unknown
Other Aircraft Rating(s):	Helicopter	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 1 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	September 3, 1986
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	2545 hours (Total, all aircraft), 200 hours (Total, this make and model), 145 hours (Last 90 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	HUGHES	Registration:	N9427F
Model/Series:	269B 269B	Aircraft Category:	Helicopter
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	5-0174
Landing Gear Type:	Skid	Seats:	3
Date/Type of Last Inspection:	September 17, 1986 100 hour	Certified Max Gross Wt.:	1670 lbs
Time Since Last Inspection:	10 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	4240 Hrs	Engine Manufacturer:	LYCOMING
ELT:	Not installed	Engine Model/Series:	HIO-360-AIA
Registered Owner:	PAUL A. DAGNON	Rated Power:	180 Horsepower
Operator:	DAGNON AVIATION	Operating Certificate(s) Held:	
Operator Does Business As:		Operator Designator Code:	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:		Distance from Accident Site:	
Observation Time:		Direction from Accident Site:	
Lowest Cloud Condition:	Clear	Visibility	8 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	9 knots / 11 knots	Turbulence Type Forecast/Actual:	/
Wind Direction:	220°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	28°C / 24°C
Precipitation and Obscuration:	N/A - None - Haze		
Departure Point:	MINNEAPOLIS , MN	Type of Flight Plan Filed:	None
Destination:	CHIPPEWA FALLS , WI	Type of Clearance:	None
Departure Time:	00:00 Local	Type of Airspace:	Class G

Airport Information

Airport:		Runway Surface Type:	
Airport Elevation:		Runway Surface Condition:	
Runway Used:	0	IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	Forced landing

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	1 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 None	Latitude, Longitude:	44.960369,-92.369407(est)

Administrative Information

Investigator In Charge (IIC): Dinwiddie, Carl

Additional Participating Persons:
S. TROKA; DES PLAINES , IL
A. CARMIEEN; DES PLAINES , IL

Original Publish Date:

Last Revision Date:

Investigation Class: [Class](#)

Note:

Investigation Docket: <https://data.nts.gov/Docket?ProjectID=13531>

The National Transportation Safety Board (NTSB) is an independent federal agency charged by Congress with investigating every civil aviation accident in the United States and significant events in other modes of transportation—railroad, transit, highway, marine, pipeline, and commercial space. We determine the probable causes of the accidents and events we investigate, and issue safety recommendations aimed at preventing future occurrences. In addition, we conduct transportation safety research studies and offer information and other assistance to family members and survivors for each accident or event we investigate. We also serve as the appellate authority for enforcement actions involving aviation and mariner certificates issued by the Federal Aviation Administration (FAA) and US Coast Guard, and we adjudicate appeals of civil penalty actions taken by the FAA.

The NTSB does not assign fault or blame for an accident or incident; rather, as specified by NTSB regulation, “accident/incident investigations are fact-finding proceedings with no formal issues and no adverse parties ... and are not conducted for the purpose of determining the rights or liabilities of any person” (Title 49 *Code of Federal Regulations* section 831.4). Assignment of fault or legal liability is not relevant to the NTSB’s statutory mission to improve transportation safety by investigating accidents and incidents and issuing safety recommendations. In addition, statutory language prohibits the admission into evidence or use of any part of an NTSB report related to an accident in a civil action for damages resulting from a matter mentioned in the report (Title 49 *United States Code* section 1154(b)). A factual report that may be admissible under 49 *United States Code* section 1154(b) is available [here](#).