



Aviation Investigation Final Report

Location:	FLINT, Michigan	Accident Number:	CHI82DA149
Date & Time:	May 3, 1982, 17:08 Local	Registration:	N8963F
Aircraft:	HUGHES 269C	Aircraft Damage:	Substantial
Defining Event:		Injuries:	2 None
Flight Conducted Under:	Part 91: General aviation - Instructional		

Analysis

THE AIRCREW WERE ON AN INSTRUCTIONAL FLIGHT TO PREPARE THE STUDENT, A RATED PILOT, FOR A FLIGHT INSTRUCTOR RATING. AFTER PRACTICING SEVERAL AUTOROTATION APPROACHES, THE HELICOPTER WAS LANDED. THE INSTRUCTOR PILOT (IP) STATED THAT AFTER TOUCHDOWN, HE AND THE STUDENT WERE IN A DISCUSSION WHEN THEY HEARD A LOUD "POP". THE IP DEPLANED AND INSPECTED THE HELICOPTER, BUT FOUND NO IRREGULARITIES. THEY TOOK OFF AND PERFORMED ANOTHER AUTOROTATION. AFTER TOUCHDOWN, THE COLLECTIVE WAS LOWERED, THE HELICOPTER PITCHED LEFT AND FORWARD, AND THE ROTOR BLADES CONTACTED THE GROUND AND TAIL BOOM. AN INVESTIGATION REVEALED THAT THE LEFT FRONT SHOCK STRUT DAMPER ASSEMBLY, NO: 269A3150-5, HAD FAILED. TOTAL TIME ON THE PART WAS 3614 HRS. ACCORDING TO A METALLURGICAL REPORT, A SINGLE OVERLOAD FRACTURE WAS FOUND AT THE CLEVIS ON THE PISTON END OF THE DAMPER. THE CFI DID NOT REPORT ANY HARD LANDINGS.

Probable Cause and Findings

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

Findings

Occurrence #1: AIRFRAME/COMPONENT/SYSTEM FAILURE/MALFUNCTION
Phase of Operation: STANDING

Findings

1. LANDING GEAR,MAIN GEAR SHOCK ABSORBING STRUT - OVERLOAD
2. (C) REASON FOR OCCURRENCE UNDETERMINED

Occurrence #2: ON GROUND/WATER ENCOUNTER WITH TERRAIN/WATER
Phase of Operation: STANDING

Factual Information

Pilot Information

Certificate:	Airline transport; Flight instructor	Age:	30, Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Unknown
Other Aircraft Rating(s):	Helicopter	Restraint Used:	
Instrument Rating(s):	Airplane; Helicopter	Second Pilot Present:	
Instructor Rating(s):	Airplane multi-engine; Airplane single-engine; Helicopter; Instrument airplane; Instrument helicopter	Toxicology Performed:	No
Medical Certification:	Class 1 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	April 27, 1982
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:	4540 hours (Total, all aircraft), 180 hours (Total, this make and model), 4234 hours (Pilot In Command, all aircraft), 10 hours (Last 90 days, all aircraft), 4 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	HUGHES	Registration:	N8963F
Model/Series:	269C 269C	Aircraft Category:	Helicopter
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:		Serial Number:	430200
Landing Gear Type:	Skid	Seats:	3
Date/Type of Last Inspection:	Unknown	Certified Max Gross Wt.:	2050 lbs
Time Since Last Inspection:	645 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	3614 Hrs	Engine Manufacturer:	LYCOMING
ELT:	Not installed	Engine Model/Series:	HIO-360D1A
Registered Owner:	HELICOPTERS LTD.	Rated Power:	200 Horsepower
Operator:	DON D. GOBLE	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:	FNT	Distance from Accident Site:	
Observation Time:	17:29 Local	Direction from Accident Site:	
Lowest Cloud Condition:	Scattered / 6000 ft AGL	Visibility	14 miles
Lowest Ceiling:	Unknown	Visibility (RVR):	
Wind Speed/Gusts:	9 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	20°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	71°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	FLINT , MI (FNT)	Type of Flight Plan Filed:	None
Destination:	FLINT , MI (FNT)	Type of Clearance:	
Departure Time:	16:45 Local	Type of Airspace:	

Airport Information

Airport:	BISHOP FNT	Runway Surface Type:	Asphalt
Airport Elevation:	0 ft msl	Runway Surface Condition:	Dry
Runway Used:	36	IFR Approach:	None
Runway Length/Width:	7850 ft / 150 ft	VFR Approach/Landing:	None

Wreckage and Impact Information

Crew Injuries:	2 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 None	Latitude, Longitude:	42.969886,-83.719497(est)

Administrative Information

Investigator In Charge (IIC):

Additional Participating Persons:

Original Publish Date: May 3, 1983

Last Revision Date:

Investigation Class: [Class](#)

Note:

Investigation Docket: <https://data.ntsb.gov/Docket?ProjectID=70687>

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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](#).