

Aviation Investigation Final Report

Location:	HECTOR, Minnesota		Accident Number:	CHI85LA352
Date & Time:	August 18, 1985, 17:0	00 Local	Registration:	N8777F
Aircraft:	HUGHES	269A	Aircraft Damage:	Substantial
Defining Event:			Injuries:	2 None
Flight Conducted Under:	Part 91: General avia	tion - Personal		

Analysis

AFTER LIFTOFF FROM AN OPEN FIELD, ON A SHORT LOCAL FLIGHT THE HELICOPTER EXPERIENCED FUEL EXHAUSTION. DURING THE AUTO ROTATION LANDING, IN AN OPEN FIELD THE HELICOPTER ROLLED ON THE SIDE.

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) - NONMECHANICAL Phase of Operation: CRUISE - NORMAL

Findings

(C) PREFLIGHT PLANNING/PREPARATION - INADEQUATE - PILOT IN COMMAND
(C) FUEL SUPPLY - INADEQUATE - PILOT IN COMMAND
(C) REFUELING - NOT PERFORMED - PILOT IN COMMAND
(F) FLUID, FUEL - EXHAUSTION

Occurrence #2: FORCED LANDING Phase of Operation: DESCENT - EMERGENCY Occurrence #3: ROLL OVER Phase of Operation: LANDING - FLARE/TOUCHDOWN

Factual Information

Pilot Information

Certificate:	Commercial	Age:	43,Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Right
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 2 Valid Medicalno waivers/lim.	Last FAA Medical Exam:	October 10, 1984
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	5885 hours (Total, all aircraft), 86 hours (Total, this make and model), 5770 hours (Pilot In Command, all aircraft), 43 hours (Last 90 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	HUGHES	Registration:	N8777F
Model/Series:	269A 269A	Aircraft Category:	Helicopter
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	62-0101
Landing Gear Type:	Skid	Seats:	2
Date/Type of Last Inspection:	June 1, 1984 Annual	Certified Max Gross Wt.:	1550 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	1878 Hrs	Engine Manufacturer:	LYCOMING
ELT:	Not installed	Engine Model/Series:	HIO-360 SER
Registered Owner:	ROYALAIRE	Rated Power:	210 Horsepower
Operator:		Operating Certificate(s) Held:	None
Operator Does Business As:		Operator Designator Code:	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VM0	C)	Condition of Light:	Day
Observation Facility, Elevation:			Distance from Accident Site:	
Observation Time:			Direction from Accident Site:	
Lowest Cloud Condition:	Clear		Visibility	20 miles
Lowest Ceiling:	None		Visibility (RVR):	
Wind Speed/Gusts:	10 knots /		Turbulence Type Forecast/Actual:	/
Wind Direction:	315°		Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches H	g	Temperature/Dew Point:	24°C / 7°C
Precipitation and Obscuration:	No Obscuration; No Precipitation			
Departure Point:	HECTOR	, MN (1D6)	Type of Flight Plan Filed:	None
Destination:			Type of Clearance:	None
Departure Time:	16:57 Local		Type of Airspace:	Class G

Airport Information

Airport:		Runway Surface Type:	Grass/turf
Airport Elevation:	0 ft msl	Runway Surface Condition:	Dry
Runway Used:	0	IFR Approach:	None
Runway Length/Width:	0 ft / 0 ft	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:	44.74018,-94.710807(est)

Administrative Information

Investigator In Charge (IIC):	Mc avoy, Edward	
Additional Participating Persons:	J C MOORE; MINNEAPOLIS , MN	
Original Publish Date:		
Last Revision Date:		
Investigation Class:	<u>Class</u>	
Note:		
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=13195	

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.