



Aviation Investigation Final Report

Location:	MCCLUSKY, North Dakota	Accident Number:	CHI91DTG02
Date & Time:	June 18, 1991, 08:30 Local	Registration:	N6735
Aircraft:	SIKORSKY H-19- UH19D	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 None
Flight Conducted Under:	Part 137: Agricultural		

Analysis

PILOT WAS MAKING A SPRAY RUN ALONG A CANAL APPROXIMATELY 75 FEET BELOW GROUND LEVEL. HE BEGAN TO CLIMB OUT OF THE CANAL. HE LOST ALL POWER AS HE CLEARED THE CANAL EDGE AND MADE A HARD LANDING. THE MAIN ROTOR BLADES SEVERED THE TAIL BOOM ON LANDING. INVESTIGATION REVEALED A FAILURE OF THE BLOWER/SUPERCHARGER SEAL.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: FAILURE OF THE ENGINE BLOWER/SUPERCHARGER ASSEMBLY. A FACTOR RELATED TO THE ACCIDENT WAS: NO SUITABLE TERRAIN IN WHICH TO MAKE AN IMMEDIATE EMERGENCY LANDING.

Findings

Occurrence #1: LOSS OF ENGINE POWER(TOTAL) - MECH FAILURE/MALF
Phase of Operation: MANEUVERING - AERIAL APPLICATION

Findings

1. (C) ENG ASSEMBLY, BLOWER/IMPELLER/INTEGRAL SUPERCHARGER - FAILURE, TOTAL

Occurrence #2: FORCED LANDING

Phase of Operation: MANEUVERING - TURN TO LANDING AREA (EMERGENCY)

Findings

2. (F) TERRAIN CONDITION - NONE SUITABLE

Occurrence #3: HARD LANDING

Phase of Operation: DESCENT - UNCONTROLLED

Factual Information

Pilot Information

Certificate:	Commercial; Flight instructor	Age:	31, Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Right
Other Aircraft Rating(s):	Helicopter	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	Helicopter	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	May 23, 1991
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:	5800 hours (Total, all aircraft), 150 hours (Total, this make and model)		

Aircraft and Owner/Operator Information

Aircraft Make:	SIKORSKY	Registration:	N6735
Model/Series:	H-19-UH19D H-19-UH19D	Aircraft Category:	Helicopter
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Restricted (Special)	Serial Number:	54-1416
Landing Gear Type:		Seats:	2
Date/Type of Last Inspection:	September 30, 1990 Annual	Certified Max Gross Wt.:	7900 lbs
Time Since Last Inspection:	35 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	3100 Hrs	Engine Manufacturer:	WRIGHT
ELT:	Not installed	Engine Model/Series:	R-1300
Registered Owner:	SHAWN B. MORTEN	Rated Power:	700 Horsepower
Operator:	SHAWN B. MORTEN	Operating Certificate(s) Held:	
Operator Does Business As:		Operator Designator Code:	DKOG

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	20 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	8 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	270°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	20°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:		Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	08:25 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:	None

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	47.480339,-100.439102(est)

Administrative Information

Investigator In Charge (IIC): Edwards, Weston

Additional Participating Persons:

Original Publish Date: March 31, 1993

Last Revision Date:

Investigation Class: [Class](#)

Note:

Investigation Docket: <https://data.nts.gov/Docket?ProjectID=14871>

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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](#).