



Aviation Investigation Final Report

Location:	HALIFAX, Massachusetts	Accident Number:	NYC83FNA04
Date & Time:	August 3, 1983, 19:32 Local	Registration:	N37799
Aircraft:	SIKORSKY H-19D	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 None
Flight Conducted Under:	Part 137: Agricultural		

Analysis

AFTER ARRIVING AT THE FIELD TO BE SPRAYED, THE PLT INITIATED A DESCENT TO BEGIN AERIAL APPLICATION. AT APRX 40 FT AGL & 50 KTS, THE ENG FAILED. THE PLT ENTERED AN AUTOROTATION, BUT COULD NOT AVOID TELEPHONE WIRES. HE WAS ABLE TO AVOID HITTING A DIKE, BUT IN DOING SO, HE FLARED IN A NOSE HIGH ATTITUDE. SUBSEQUENTLY, THE TAIL SKID & ROTOR IMPACTED THE TERRAIN. AN INVESTIGATION REVEALED THAT THE #1 EXHAUST VALVE HAD FAILED.

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: MANEUVERING - AERIAL APPLICATION

Findings
1. (C) ENGINE ASSEMBLY, VALVE, INTAKE - FAILURE, TOTAL

Occurrence #2: FORCED LANDING
Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings

2. (F) AUTOROTATION - PERFORMED - PILOT IN COMMAND

Occurrence #3: IN FLIGHT COLLISION WITH OBJECT

Phase of Operation: APPROACH - VFR PATTERN - FINAL APPROACH

Findings

3. (F) OBJECT - WIRE, TRANSMISSION

Occurrence #4: IN FLIGHT COLLISION WITH TERRAIN/WATER

Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings

4. (F) TERRAIN CONDITION - DIRT BANK/RISING EMBANKMENT

5. (F) MANEUVER - INITIATED - PILOT IN COMMAND

6. (F) TERRAIN CONDITION - OPEN FIELD

Factual Information

Pilot Information

Certificate:	Commercial	Age:	62, Male
Airplane Rating(s):	Single-engine land; Single-engine sea; Multi-engine land	Seat Occupied:	Right
Other Aircraft Rating(s):	Helicopter	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):		Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medical--w/ waivers/lim	Last FAA Medical Exam:	October 21, 1982
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	9377 hours (Total, all aircraft), 1117 hours (Total, this make and model), 9210 hours (Pilot In Command, all aircraft), 321 hours (Last 90 days, all aircraft), 6 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	SIKORSKY	Registration:	N37799
Model/Series:	H-19D H-19D	Aircraft Category:	Helicopter
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Restricted (Special)	Serial Number:	15-642
Landing Gear Type:		Seats:	2
Date/Type of Last Inspection:	March 15, 1983 100 hour	Certified Max Gross Wt.:	7900 lbs
Time Since Last Inspection:	90 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	2481 Hrs	Engine Manufacturer:	WRIGHT
ELT:	Not installed	Engine Model/Series:	R-1300-30
Registered Owner:	C&W AG AIR	Rated Power:	700 Horsepower
Operator:		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	15 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	5 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	245°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	26°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	HANSON , MA (MA02)	Type of Flight Plan Filed:	None
Destination:	HALIFAX , MA	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:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	

Administrative Information

Investigator In Charge (IIC): Roy, Jeffrey

Additional Participating Persons:

Original Publish Date:

Last Revision Date:

Investigation Class: [Class](#)

Note:

Investigation Docket: <https://data.nts.gov/Docket?ProjectID=35108>

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](#).