



Aviation Investigation Final Report

Location:	BROOKVILLE, New York	Accident Number:	NYC82DA097
Date & Time:	May 15, 1982, 16:15 Local	Registration:	N911X
Aircraft:	BELL 47G-2	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

WHILE RETURNING TO THE HELIPORT, THE PILOT NOTICED A DECAY IN THE ENGINE AND ROTOR RPM'S. HE ELECTED TO MAKE A PRECAUTIONARY LANDING IN A PLOWED FIELD. DURING LANDING, THE MANIFOLD PRESSURE WENT TO THE RED LINE WHILE THE RPM DECAYED. THE HELICOPTER TOUCHED DOWN SOFTLY, BUT WITH ABOUT 10 MPH FORWARD SPEED. IT ROLLED FORWARD AND TO THE RIGHT WHEN THE SKIDS DUG INTO THE SOFT GROUND. AN INVESTIGATION REVEALED THAT THE NO. 6 CYLINDER HAD A LOW COMPRESSION READING OF 5/80 WITH BLOW-BY EVIDENT INTO THE INTAKE SYSTEM. WHEN THE CYLINDER WAS REMOVED, THE INTAKE VALVE WAS FOUND NOT TO BE SEATING PROPERLY. NO OTHER MALFUNCTION OR DEFECT OF THE ENGINE OR ENGINE CONTROLS WAS NOTED.

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(PARTIAL) - MECH FAILURE/MALF
Phase of Operation: CRUISE - NORMAL

Findings

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

2. PRECAUTIONARY LANDING - INITIATED - PILOT IN COMMAND

Occurrence #2: LOSS OF ENGINE POWER(TOTAL) - MECH FAILURE/MALF
Phase of Operation: APPROACH

Findings

3. (C) ENGINE ASSEMBLY, VALVE, INTAKE - LEAK

Occurrence #3: FORCED LANDING
Phase of Operation: LANDING

Findings

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

Occurrence #4: NOSE OVER
Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings

5. (F) TERRAIN CONDITION - SOFT

Factual Information

Pilot Information

Certificate:	Commercial	Age:	26, Male
Airplane Rating(s):		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 2 Valid Medical-w/ waivers/lim	Last FAA Medical Exam:	March 9, 1982
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:	192 hours (Total, all aircraft), 42 hours (Total, this make and model), 106 hours (Pilot In Command, all aircraft), 6 hours (Last 90 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	BELL	Registration:	N911X
Model/Series:	47G-2 47G-2	Aircraft Category:	Helicopter
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:		Serial Number:	2511
Landing Gear Type:	Skid	Seats:	3
Date/Type of Last Inspection:	Unknown	Certified Max Gross Wt.:	2450 lbs
Time Since Last Inspection:	82 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	2642 Hrs	Engine Manufacturer:	LYCOMING
ELT:	Not installed	Engine Model/Series:	VIO-435-A1E
Registered Owner:	ISLAND HELICOPTER, INC.	Rated Power:	240 Horsepower
Operator:	ISLAND HELICOPTER, INC.	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	50 miles
Lowest Ceiling:	Unknown	Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/
Wind Direction:	0°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	78°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	GARDEN CITY , NY (4N6)	Type of Flight Plan Filed:	None
Destination:	GARDEN CITY , NY (4N6)	Type of Clearance:	None
Departure Time:	15:55 Local	Type of Airspace:	

Airport Information

Airport:		Runway Surface Type:	
Airport Elevation:	0 ft msl	Runway Surface Condition:	
Runway Used:	0	IFR Approach:	None
Runway Length/Width:	0 ft / 0 ft	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:	40.749565,-73.580474(est)

Administrative Information

Investigator In Charge (IIC):

Additional Participating Persons:

Original Publish Date: May 15, 1983

Last Revision Date:

Investigation Class: [Class](#)

Note:

Investigation Docket: <https://data.nts.gov/Docket?ProjectID=70045>

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](#).