



Aviation Investigation Final Report

Location:	BRICKTOWN, New	Jersey	Accident Number:	NYC83FHD01
Date & Time:	June 8, 1983, 19:30	Local	Registration:	N67155
Aircraft:	HILLER	UH-12D	Aircraft Damage:	Substantial
Defining Event:			Injuries:	1 None
Flight Conducted Under:	Part 137: Agricultur	al		

Analysis

THE PLT REPORTED AN ERRATIC RPM DROP & A PARTIAL LOSS OF POWER DURING A SWATH RUN. THIS OCCURRED WHEN THE HELICOPTER WAS APRX 10 FT ABOVE TREES AT APRX 40 KTS. THE ACFT BEGAN LOSING AIRSPEED & ALTITUDE. DURING AN EMERGENCY LANDING, THE TAIL ROTOR & MAIN ROTOR BLADES STRUCK TREE BRANCHES & THE PLEXIGLASS & LANDING GEAR WERE DAMAGED. DURING AN INVESTIGATION, THE IGNITION HARNESSES WERE CHECKED & THE #4 & #6 LEAD ASSEMBLIES, PN 10-720642, SHOWED LEAKAGE AT THE SLEEVE ASSEMBLY POINT (BENDIX PN 10-320473). A PARTIAL TEARDOWN OF THE ENG REVEALED NO OTHER PREIMPACT MECHANICAL FAILURE.

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: MANEUVERING - AERIAL APPLICATION

Findings

1. (C) IGNITION SYSTEM, IGNITION HARNESS - OUTPUT LOW 2. (C) IGNITION SYSTEM, IGNITION LEAD - LEAK

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

Occurrence #3: ON GROUND/WATER ENCOUNTER WITH TERRAIN/WATER Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings 3. (F) OBJECT - TREE(S)

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

Factual Information

Pilot Information

Certificate:	Commercial; Flight instructor	Age:	36,Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Center
Other Aircraft Rating(s):		Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	Airplane multi-engine; Airplane single-engine; Glider; Helicopter	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medical–no waivers/lim.	Last FAA Medical Exam:	May 10, 1983
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	1729 hours (Total, all aircraft), 360 hours (Total, this make and model), 1661 hours (Pilot In Command, all aircraft), 112 hours (Last 90 days, all aircraft), 30 hours (Last 30 days, all aircraft), 3 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	HILLER	Registration:	N67155
All Clait Make.	HILLER	Registration.	107133
Model/Series:	UH-12D UH-12D	Aircraft Category:	Helicopter
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Restricted (Special)	Serial Number:	1335
Landing Gear Type:	Skid	Seats:	3
Date/Type of Last Inspection:	May 15, 1983 Annual	Certified Max Gross Wt.:	2750 lbs
Time Since Last Inspection:	56 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	7055 Hrs	Engine Manufacturer:	LYCOMING
ELT:	Not installed	Engine Model/Series:	VO-435-A1C
Registered Owner:	RACO HELICOPTER CORPORATION	Rated Power:	250 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:	Dusk
Observation Facility, Elevation:		Distance from Accident Site:	
Observation Time:		Direction from Accident Site:	
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	5 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	180°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	27°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	FARMINGDALE ,NJ (BLM)	Type of Flight Plan Filed:	None
Destination:		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:	
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):	Jiggens, L.
Additional Participating Persons:	
Original Publish Date:	
Last Revision Date:	
Investigation Class:	<u>Class</u>
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=35099

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 <u>here</u>.