



Aviation Investigation Final Report

Location:	NEWARK, Delaware	Accident Number:	BF087DHD02
Date & Time:	November 25, 1986, 14:00 Local	Registration:	N8670F
Aircraft:	HUGHES 369D	Aircraft Damage:	Substantial
Defining Event:		Injuries:	3 None
Flight Conducted Under:	Part 91: General aviation		

Analysis

THE ACFT WAS BEING FLOWN ON A MAINTENANCE CHECK FLT. AS THE PLT WAS RETURNING TO LAND, THE ENG LOST POWER FROM FUEL EXHAUSTION. DURING AN AUTOROTATIVE LANDING, THE MAIN ROTOR BLADES & TAIL BOOM WERE EXTENSIVELY DAMAGED. THE PLT RPRTD THE FUEL QUANTITY GAGE INDICATED THAT 120 LBS OF FUEL WAS REMAINING WHEN THE ENG LOST POWER. AN EXAM OF THE FUEL FLOAT ARM, PN 369D296303-3, REVEALED IT WAS BENT & WAS BINDING ON THE INTERNAL FUEL PUMP HOUSING.

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: APPROACH

Findings

1. (C) PLANNING/DECISION - IMPROPER - PILOT IN COMMAND
2. (F) ENGINE INSTRUMENTS,FUEL QUANTITY GAGE - BENT
3. (F) ENGINE INSTRUMENTS,FUEL QUANTITY GAGE - FALSE INDICATION
4. (C) FLUID,FUEL - EXHAUSTION
5. (C) FUEL SUPPLY - MISJUDGED - PILOT IN COMMAND

Occurrence #2: FORCED LANDING
Phase of Operation: LANDING

Findings

6. AUTOROTATION - PERFORMED

Occurrence #3: HARD LANDING
Phase of Operation: LANDING - FLARE/TOUCHDOWN

Factual Information

Pilot Information

Certificate:	Private	Age:	61, Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	Helicopter	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	June 7, 1985
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	2400 hours (Total, all aircraft), 1200 hours (Total, this make and model), 2300 hours (Pilot In Command, all aircraft), 30 hours (Last 90 days, all aircraft), 20 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	HUGHES	Registration:	N8670F
Model/Series:	369D 369D	Aircraft Category:	Helicopter
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	168
Landing Gear Type:	Skid	Seats:	4
Date/Type of Last Inspection:	September 21, 1986 Annual	Certified Max Gross Wt.:	3000 lbs
Time Since Last Inspection:	10 Hrs	Engines:	1 Turbo shaft
Airframe Total Time:	8000 Hrs	Engine Manufacturer:	ALLISON
ELT:	Not installed	Engine Model/Series:	250-C20B
Registered Owner:	HENRY CORBIN	Rated Power:	400 Horsepower
Operator:		Operating Certificate(s) Held:	None
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	7 miles
Lowest Ceiling:	Unknown / 5000 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/
Wind Direction:	0°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	16°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:		Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	13:45 Local	Type of Airspace:	Class G

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:	Forced landing

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	2 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	3 None	Latitude, Longitude:	39.710159,-75.740348(est)

Administrative Information

Investigator In Charge (IIC): Wieand, Jeffrey

Additional Participating Persons: ED REYNOLDS;

Original Publish Date:

Last Revision Date:

Investigation Class: [Class](#)

Note:

Investigation Docket: <https://data.nts.gov/Docket?ProjectID=11261>

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](#).