



Aviation Investigation Final Report

Location:	BECKET, Massachusetts	Accident Number:	NYC90LA122
Date & Time:	May 31, 1990, 09:45 Local	Registration:	N39268
Aircraft:	BELL 47G-3B1	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

THE HELICOPTER ENGINE LOST POWER AND THE PILOT AUTOROTATED INTO UNSUITABLE TERRAIN. THE CAUSE OF THE POWER LOSS WAS A OIL CHANNEL WHICH WAS BLOCKED WITH DEBRIS AND LED TO THE FAILURE OF THE NUMBER 4 BEARING AND CONNECTING ROD. THE ENGINE HAD BEEN OVERHAULED 6 YEARS AND 228.5 HOURS PRIOR TO THE ACCIDENT. LYCOMING SAID THEIR POST CRASH EXAMINATION OF THE ENGINE SHOWED THE OVERHAUL HAD NOT BEEN CONDUCTED IN ACCORDANCE WITH THEIR DIRECTIVES.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: A POWER LOSS DUE TO OIL STARVATION, AFTER MAINTENANCE PERSONNEL FAILED TO COMPLY WITH LYCOMING DIRECTIVES DURING THE ENGINE OVERHAUL. FACTORS RELATED TO THE ACCIDENT WERE: IMPROPER ADJUSTMENT OF THE ENGINE OIL PRESSURE BY MAINTENANCE PERSONNEL AND UNSUITABLE TERRAIN.

Findings

Occurrence #1: LOSS OF ENGINE POWER(TOTAL) - MECH FAILURE/MALF
Phase of Operation: CRUISE - NORMAL

Findings

1. (C) MAINTENANCE,OVERHAUL,MAJOR - IMPROPER - OTHER MAINTENANCE PERSONNEL
2. (C) MAINTENANCE,ADJUSTMENT - IMPROPER - OTHER MAINTENANCE PERSONNEL

- 3. (C) LUBRICATING SYSTEM,OIL PORT/PASSAGE,INTERNAL - BLOCKED(TOTAL)
- 4. (C) ENGINE ASSEMBLY,CONNECTING ROD - FAILURE,TOTAL

Occurrence #2: FORCED LANDING
Phase of Operation: DESCENT - EMERGENCY

Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings

- 5. (F) TERRAIN CONDITION - ROUGH/UNEVEN

Factual Information

Pilot Information

Certificate:	Private	Age:	49, Male
Airplane Rating(s):	None	Seat Occupied:	Left
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 3 Valid Medical-w/ waivers/lim	Last FAA Medical Exam:	December 14, 1988
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:	245 hours (Total, all aircraft), 186 hours (Total, this make and model), 81 hours (Pilot In Command, all aircraft), 43 hours (Last 90 days, all aircraft), 15 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	BELL	Registration:	N39268
Model/Series:	47G-3B1 47G-3B1	Aircraft Category:	Helicopter
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	2957
Landing Gear Type:	Skid	Seats:	3
Date/Type of Last Inspection:	May 15, 1990 100 hour	Certified Max Gross Wt.:	2950 lbs
Time Since Last Inspection:	11 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	5720 Hrs	Engine Manufacturer:	LYCOMING
ELT:	Not installed	Engine Model/Series:	VO-435-A1
Registered Owner:	THOMAS MAZZEO	Rated Power:	240 Horsepower
Operator:	THOMAS M. MAZZEO	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:	Scattered	Visibility	7 miles
Lowest Ceiling:	Unknown	Visibility (RVR):	
Wind Speed/Gusts:	18 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	310°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	13°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	PITTSFIELD , MA (PSF)	Type of Flight Plan Filed:	None
Destination:	WESTFIELD , MA (BAF)	Type of Clearance:	None
Departure Time:	09:30 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:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	

Administrative Information

Investigator In Charge (IIC): Twine jr., Chauncey

Additional Participating Persons:

Original Publish Date: December 14, 1992

Last Revision Date:

Investigation Class: [Class](#)

Note:

Investigation Docket: <https://data.nts.gov/Docket?ProjectID=36655>

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