



Aviation Investigation Final Report

Location:	LINCOLN, New Hampshire	Accident Number:	NYC84FNC10
Date & Time:	September 30, 1984, 13:03 Local	Registration:	N8588F
Aircraft:	BELL 47G-3B1	Aircraft Damage:	Substantial
Defining Event:		Injuries:	3 Serious
Flight Conducted Under:	Part 91: General aviation - Aerial observation		

Analysis

THE ACFT WAS BEING USED IN A PASSENGER SIGHTSEEING OPERATION WHEN SHORTLY AFTER TAKEOFF THE ENG CEASED TO OPERATE & THE ACFT CRASHED INTO TREES. BOTH PASSENGERS ABOARD THE HELICOPTER OBSERVED THAT THE FUEL GAGE INDICATED EMPTY PRIOR TO THE ENG STOPAGE. EXAM OF THE WRECKAGE AT THE ACCIDENT SITE REVEALED LESS THAN 2 GALLONS OF FUEL IN THE FUEL TANKS.

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: CRUISE - NORMAL

Findings

1. (C) FLUID,FUEL - EXHAUSTION
 2. (C) FUEL CONSUMPTION CALCULATIONS - INACCURATE - PILOT IN COMMAND
 3. (C) REFUELING - NOT PERFORMED - PILOT IN COMMAND
 4. (F) COMPLACENCY - PILOT IN COMMAND
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Occurrence #2: FORCED LANDING

Phase of Operation: DESCENT - EMERGENCY

Findings

5. AUTOROTATION - PERFORMED - PILOT IN COMMAND

Occurrence #3: IN FLIGHT COLLISION WITH OBJECT

Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings

6. OBJECT - TREE(S)

Occurrence #4: IN FLIGHT COLLISION WITH TERRAIN/WATER

Phase of Operation: DESCENT - UNCONTROLLED

Factual Information

Pilot Information

Certificate:	Commercial	Age:	44, Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	Helicopter	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	Helicopter	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	December 2, 1983
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	1527 hours (Total, all aircraft), 793 hours (Total, this make and model), 1452 hours (Pilot In Command, all aircraft), 110 hours (Last 90 days, all aircraft), 7 hours (Last 30 days, all aircraft), 30 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	BELL	Registration:	N8588F
Model/Series:	47G-3B1 47G-3B1	Aircraft Category:	Helicopter
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	6528
Landing Gear Type:	Retractable - Tricycle	Seats:	3
Date/Type of Last Inspection:	September 1, 1984 100 hour	Certified Max Gross Wt.:	2950 lbs
Time Since Last Inspection:	384 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	4288 Hrs	Engine Manufacturer:	LYCOMING
ELT:	Not installed	Engine Model/Series:	TVO-435-B1A
Registered Owner:	GREEN RIVER AVIATION, INC.	Rated Power:	270 Horsepower
Operator:	JAMES H. SHIPPEE	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:	13:00 Local	Direction from Accident Site:	
Lowest Cloud Condition:	Unknown / 5000 ft AGL	Visibility	20 miles
Lowest Ceiling:	Overcast / 5000 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	5 knots / 7 knots	Turbulence Type Forecast/Actual:	/
Wind Direction:	180°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	18°C / 9°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	LINCOLN , NH	Type of Flight Plan Filed:	None
Destination:	LINCOLN , NH	Type of Clearance:	None
Departure Time:	00:00 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 Serious	Aircraft Damage:	Substantial
Passenger Injuries:	2 Serious	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	3 Serious	Latitude, Longitude:	

Administrative Information

Investigator In Charge (IIC): Johnson, Edward

Additional Participating Persons:

Original Publish Date:

Last Revision Date:

Investigation Class: [Class](#)

Note:

Investigation Docket: <https://data.nts.gov/Docket?ProjectID=35420>

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](#).