



Aviation Investigation Final Report

Location: MILTON-FREEWTR, Oregon Accident Number: SEA89LA076

Date & Time: April 29, 1989, 10:30 Local Registration: N4072G

Aircraft: Bell 47G3B2 Aircraft Damage: Substantial

Defining Event: 1 Minor

Flight Conducted Under: Part 137: Agricultural

Analysis

THE PLT STATED THAT THE ENG LOST POWER DURING A PROCEDURE TURN-AROUND & THAT INSUFFICIENT SPEED & ALTITUDE WERE AVAILABLE TO PREVENT A HARD AUTOROTATIVE LANDING. DURING TOUCHDOWN, THE MAIN ROTOR SEVERED THE TAILBOOM. ONLY ABOUT 1/2 GAL OF FUEL WAS REMAINING IN THE INTACT FUEL SYSTEM.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: IMPROPER PLANNING/DECISION BY THE PILOT, WHICH RESULTED IN FUEL EXHAUSTION FROM AN INADEQUATE SUPPLY OF FUEL.

Findings

Occurrence #1: LOSS OF ENGINE POWER(TOTAL) - NONMECHANICAL

Phase of Operation: MANEUVERING - AERIAL APPLICATION

Findings

1. (C) PLANNING/DECISION - IMPROPER - PILOT IN COMMAND

2. (C) FLUID, FUEL - EXHAUSTION

3. (C) FUEL SUPPLY - INADEQUATE - PILOT IN COMMAND

Occurrence #2: FORCED LANDING

Phase of Operation: MANEUVERING - TURN TO LANDING AREA (EMERGENCY)

Findings 4. AUTOROTATION

Occurrence #3: HARD LANDING Phase of Operation: LANDING

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Factual Information

Pilot Information

Certificate:	Commercial	Age:	42,Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	Helicopter	Restraint Used:	
Instrument Rating(s):	Helicopter	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medicalno waivers/lim.	Last FAA Medical Exam:	March 2, 1989
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	7800 hours (Total, all aircraft), 450 hours (Total, this make and model), 7400 hours (Pilot In Command, all aircraft), 85 hours (Last 90 days, all aircraft), 70 hours (Last 30 days, all aircraft), 7 hours (Last 24 hours, all aircraft)		

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Aircraft and Owner/Operator Information

Aircraft Make:	Bell	Registration:	N4072G
Model/Series:	47G3B2 47G3B2	Aircraft Category:	Helicopter
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Restricted (Special)	Serial Number:	6702
Landing Gear Type:	Skid	Seats:	3
Date/Type of Last Inspection:	November 12, 1988 Annual	Certified Max Gross Wt.:	3200 lbs
Time Since Last Inspection:	106 Hrs	Engines:	1 Turbo shaft
Airframe Total Time:	6516 Hrs	Engine Manufacturer:	ALLISON
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	250-C20
Registered Owner:	GARY KNIGHT	Rated Power:	400 Horsepower
Operator:		Operating Certificate(s) Held:	
Operator Does Business As:	BLUE MOUNTAIN HELICOPTERS	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	20 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	3 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	180°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	18°C / -18°C
Precipitation and Obscuration:	No Obscuration; No Precipita	ation	
Departure Point:		Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	00:00 Local	Type of Airspace:	Class G

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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 Minor	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Minor	Latitude, Longitude:	45.900913,-118.340179(est)

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Administrative Information

Investigator In Charge (IIC):	Daily, H	
Additional Participating Persons:	LEWIS SANDERS; HILLSBORO , OR	
Original Publish Date:	January 22, 1991	
Last Revision Date:		
Investigation Class:	Class	
Note:		
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=41002	

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.

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