



Aviation Investigation Final Report

Location:	IAEGER, West Virginia	Accident Number:	BF091DOA01
Date & Time:	July 1, 1991, 11:30 Local	Registration:	N91348
Aircraft:	BELL UH-1B	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 Minor
Flight Conducted Under:	Part 137: Agricultural		

Analysis

THE PILOT WAS DOING AN AERIAL SPRAY OF A WOODED AREA WHEN THE LOW RPM WARNING SOUNDED. HE THEN NOTICED THE ROTOR/ENGINE RPM READING WAS DECREASING RAPIDLY. THE PILOT DID AN AUTOROTATION DESCENT. DURING THE LANDING THE ACFT STRUCK TREES AND THEN IMPACTED THE GROUND. THE ACFT CAME TO REST ON ITS LEFT SIDE. THE EXAMINATION OF THE ACFT DID NOT DISCLOSE EVIDENCE OF MECHANICAL MALFUNCTION.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: THE LOSS OF ENGINE POWER FOR UNDETERMINED REASONS, WHILE OPERATING OVER UNSUITABLE TERRAIN.

Findings

Occurrence #1: LOSS OF ENGINE POWER
Phase of Operation: MANEUVERING - AERIAL APPLICATION

Findings
1. (C) REASON FOR OCCURRENCE UNDETERMINED

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

Occurrence #3: ON GROUND/WATER COLLISION WITH OBJECT
Phase of Operation: LANDING

Findings

2. OBJECT - TREE(S)
3. TERRAIN CONDITION - NONE SUITABLE

Factual Information

Pilot Information

Certificate:	Commercial	Age:	25, 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:	None Valid Medical--no waivers/lim.	Last FAA Medical Exam:	August 31, 1990
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	420 hours (Total, all aircraft), 280 hours (Total, this make and model)		

Aircraft and Owner/Operator Information

Aircraft Make:	BELL	Registration:	N91348
Model/Series:	UH-1B UH-1B	Aircraft Category:	Helicopter
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Restricted (Special)	Serial Number:	60-3588
Landing Gear Type:	Skid	Seats:	2
Date/Type of Last Inspection:	June 1, 1991 100 hour	Certified Max Gross Wt.:	8500 lbs
Time Since Last Inspection:	26 Hrs	Engines:	1 Turbo shaft
Airframe Total Time:	5569 Hrs	Engine Manufacturer:	LYCOMING
ELT:	Not installed	Engine Model/Series:	T53-L-11-D
Registered Owner:	RANGER HELICOPTER SERVICE, INC	Rated Power:	1100 Horsepower
Operator:	RANGER HELICOPTER SERVICE, INC	Operating Certificate(s) Held:	
Operator Does Business As:		Operator Designator Code:	KWRG

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	WELC,1980 ft msl	Distance from Accident Site:	11 Nautical Miles
Observation Time:	11:00 Local	Direction from Accident Site:	110°
Lowest Cloud Condition:	Unknown / 6 ft AGL	Visibility	5 miles
Lowest Ceiling:	Broken / 1900 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/
Wind Direction:	250°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	25°C / -17°C
Precipitation and Obscuration:	N/A - None - Haze		
Departure Point:		Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	11:15 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:	
Runway Length/Width:	0 ft / 0 ft	VFR Approach/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:	37.460712,-81.810623(est)

Administrative Information

Investigator In Charge (IIC): Leighton, Kenneth

Additional Participating Persons:

Original Publish Date: March 31, 1993

Last Revision Date:

Investigation Class: [Class](#)

Note:

Investigation Docket: <https://data.nts.gov/Docket?ProjectID=11620>

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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](#).