



Aviation Investigation Final Report

Location: Medford, Oregon Accident Number: SEA04LA114

Date & Time: June 23, 2004, 09:00 Local **Registration:** N73909

Aircraft: Bell 47G-3B-1 Aircraft Damage: Substantial

Defining Event: 1 Serious

Flight Conducted Under: Part 137: Agricultural

Analysis

The pilot reported that while flying over mountainous terrain with a slight slope on the last pass of aerial application spraying, the helicopter struck a snag (dead tree). The engine lost power and the helicopter collided with the terrain.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's failure to maintain clearance from a tree while maneuvering. Trees were a factor.

Findings

Occurrence #1: IN FLIGHT COLLISION WITH OBJECT

Phase of Operation: MANEUVERING

Findings

1. (F) OBJECT - TREE(S)

2. (C) CLEARANCE - NOT MAINTAINED - PILOT IN COMMAND

Factual Information

On June 23, 2004, about 0900 Pacific daylight time, a Bell 47G-3B-1, N73909, registered to DSM Inc., operated by Pacific Air Research as a 14 CFR Part 137 aerial application flight, collided with trees and terrain located about 14 nautical miles southwest of Medford, Oregon. Visual meteorological conditions prevailed at the time and no flight plan was filed. The helicopter was substantially damaged by impact damage and post-crash fire. The commercial pilot, the sole occupant, was seriously injured.

Company personnel reported that the pilot had been dispensing a herbicide in the area for about one hour and 20 minutes prior to the accident. Witnesses in the area reported that the helicopter was returning to the staging area for another load of herbicide when they heard the crash.

In a written statement, the pilot reported that while flying over mountainous terrain with a slight slope on the last pass, the helicopter struck a snag (dead tree). The engine lost power and the helicopter collided with the terrain.

Pilot Information

Certificate:	Commercial	Age:	48,Male
Airplane Rating(s):	Single-engine land; Multi-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 Medicalno waivers/lim.	Last FAA Medical Exam:	February 4, 2004
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	March 10, 2004
Flight Time:	9435 hours (Total, all aircraft)		

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Aircraft and Owner/Operator Information

Aircraft Make:	Bell	Registration:	N73909
Model/Series:	47G-3B-1	Aircraft Category:	Helicopter
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Restricted (Special)	Serial Number:	2797
Landing Gear Type:	Skid	Seats:	3
Date/Type of Last Inspection:	February 5, 2004 100 hour	Certified Max Gross Wt.:	2950 lbs
Time Since Last Inspection:	69 Hrs	Engines:	1 Turbo shaft
Airframe Total Time:	6575 Hrs at time of accident	Engine Manufacturer:	Allison
ELT:	Not installed	Engine Model/Series:	C-20B
Registered Owner:	DSM Inc.	Rated Power:	420 Horsepower
Operator:	Pacific Air Research	Operating Certificate(s) Held:	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	MFR,1335 ft msl	Distance from Accident Site:	10 Nautical Miles
Observation Time:	08:53 Local	Direction from Accident Site:	10°
Lowest Cloud Condition:		Visibility	10 miles
Lowest Ceiling:	Overcast / 1900 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/
Wind Direction:		Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.98 inches Hg	Temperature/Dew Point:	16°C / 12°C
Precipitation and Obscuration:	No Obscuration; No Precipit	ation	
Departure Point:	Medford, OR	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:		Type of Airspace:	Class E

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Wreckage and Impact Information

Crew Injuries:	1 Serious	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	On-ground
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Serious	Latitude, Longitude:	42.224723,-122.966667

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Administrative Information

Investigator In Charge (IIC):	Eckrote, Debra
Additional Participating Persons:	David Jourdan; FAA-FSDO; Hillsboro, OR
Original Publish Date:	October 28, 2004
Last Revision Date:	
Investigation Class:	<u>Class</u>
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=59499

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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