



National Transportation Safety Board Aviation Accident Final Report

Location:	IDAHO CITY, ID	Accident Number:	SEA99LA016
Date & Time:	11/29/1998, 1756 MST	Registration:	N977LF
Aircraft:	McDonnell Douglas MD-900	Aircraft Damage:	Substantial
Defining Event:		Injuries:	4 None
Flight Conducted Under:	Part 135: Air Taxi & Commuter - Non-scheduled - Air Medical (Medical Emergency)		

Analysis

The McDonnell Douglas MD-900 medevac helicopter was dispatched to a car accident at a site characterized by high terrain and high trees. Prior to landing, the pilot requested information about wires and was advised by ground personnel that 'there were none.' Subsequent to landing, the pilot examined the landing site and proposed departure route for wires, and reportedly observed none. The departure from the site was conducted under dusk to dark night conditions. While climbing out vertically due to the narrow canyon conditions at the site, the helicopter struck unmarked transmission lines approximately 150 feet above ground. The pilot then determined that the helicopter was controllable and displayed no unusual flight characteristics, and chose to proceed to his destination. Post-flight examination revealed crazing of the windscreen and damage to four of the five main rotor blades requiring major repair/replacement.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot-in-command's not obtaining/maintaining clearance with the unmarked transmission lines. Contributing factors were environmental (dusk) conditions, the transmission lines, and both the pilot-in-command and the ground personnel not identifying the existence of the hazardous condition (high wires).

Findings

Occurrence #1: IN FLIGHT COLLISION WITH OBJECT

Phase of Operation: CLIMB - TO CRUISE

Findings

1. (F) LIGHT CONDITION - DUSK
2. (F) OBJECT - WIRE, TRANSMISSION
3. (F) UNSAFE/HAZARDOUS CONDITION WARNING - NOT IDENTIFIED - PILOT IN COMMAND
4. TERRAIN CONDITION - HIGH TERRAIN
5. (F) UNSAFE/HAZARDOUS CONDITION WARNING - NOT IDENTIFIED - GROUND PERSONNEL
6. OBJECT - TREE(S)
7. (C) CLEARANCE - NOT OBTAINED/MAINTAINED - PILOT IN COMMAND

Factual Information

On November 29, 1998, approximately 1756 mountain standard time, a McDonnell Douglas MD-900 helicopter, N977LF, registered to Alvac, Inc., operated by Idaho Helicopters, Inc., and being flown by a commercial pilot, sustained substantial damage when it collided with unmarked transmission lines. The collision occurred during the initial climb immediately following takeoff approximately eight miles south-southwest of Idaho City, Idaho (refer to CHART I). The pilot, nurse, EMT, and patient were uninjured. Visual meteorological dusk to dark night conditions prevailed, and a company flight plan was in effect. The flight, which was an unscheduled medevac pickup of a car accident victim, was to have been operated under 14CFR135, and was destined for the St. Alphonsus hospital heliport, Boise, Idaho.

The pilot reported that the helicopter was dispatched to the accident site and "prior to landing the ground crew was asked about wires and the[y] said there were none" and "no wires were observed by the front passenger crew member, pilot or ground personnel." He also reported that the approach to the landing site was steep with high trees and terrain, and that after landing he "took [a] flashlight and surveyed obstructions and looked for wires ahead in [the] direction of takeoff" with "none seen other than trees."

He further reported that he "elected to do a vertical takeoff since due to the narrowness of the canyon" and that "the vertical takeoff was initiated and at approximately 150' I rotated forward and at approx[imately] 20 kts a loud noise similar to equipment falling in the back and a bright white light flashed."

The pilot assessed the controllability of the helicopter and determined that there were no unusual vibrations or instrument readings, and an onboard crew member reported that "he had seen or thought we had hit wires."

"Due to no adverse flight characteristics and all instruments reading normal and no safe landing area available" the pilot elected to continue to his destination.

Post-flight examination revealed crazing of the windscreen and damage to four of the five main rotor blades requiring major repair/replacement.

Pilot Information

Certificate:	Flight Instructor; Commercial	Age:	63, Male
Airplane Rating(s):	Single-engine Land	Seat Occupied:	Right
Other Aircraft Rating(s):	Helicopter	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	Helicopter	Toxicology Performed:	No
Medical Certification:	Class 1 Valid Medical--w/ waivers/lim.	Last Medical Exam:	10/19/1998
Occupational Pilot:	Last Flight Review or Equivalent:		
Flight Time:	19275 hours (Total, all aircraft), 498 hours (Total, this make and model), 19000 hours (Pilot In Command, all aircraft), 105 hours (Last 90 days, all aircraft), 29 hours (Last 30 days, all aircraft), 3 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Manufacturer:	McDonnell Douglas	Registration:	N977LF
Model/Series:	MD-900 MD-900	Aircraft Category:	Helicopter
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	900-00027
Landing Gear Type:	Skid	Seats:	4
Date/Type of Last Inspection:	11/16/1998, Continuous Airworthiness	Certified Max Gross Wt.:	6250 lbs
Time Since Last Inspection:	22 Hours	Engines:	2 Turbo Shaft
Airframe Total Time:	1752 Hours	Engine Manufacturer:	P&W
ELT:	Installed, not activated	Engine Model/Series:	206A
Registered Owner:	ALVAC, INC.	Rated Power:	629 hp
Operator:	IDAHO HELICOPTERS, INC.	Air Carrier Operating Certificate:	On-demand Air Taxi (135)
Operator Does Business As:		Operator Designator Code:	GAKA

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Dusk
Observation Facility, Elevation:	BOI, 2868 ft msl	Observation Time:	1856 MST
Distance from Accident Site:	0 Nautical Miles	Direction from Accident Site:	0°
Lowest Cloud Condition:	Clear / 0 ft agl	Temperature/Dew Point:	6° C / 4° C
Lowest Ceiling:	Unknown / 0 ft agl	Visibility	10 Miles
Wind Speed/Gusts, Direction:	14 knots, 100°	Visibility (RVR):	0 ft
Altimeter Setting:	29 inches Hg	Visibility (RVV):	0 Miles
Precipitation and Obscuration:			
Departure Point:		Type of Flight Plan Filed:	Company VFR
Destination:	BOISE, ID (U56)	Type of Clearance:	None
Departure Time:	1756 MST	Type of Airspace:	Class G

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	3 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	4 None	Latitude, Longitude:	

Administrative Information

Investigator In Charge (IIC):	STEVEN A MCCREARY	Adopted Date:	01/11/2000
Additional Participating Persons:	MIKE MIZNIK; BOISE, ID		
Publish Date:			
Investigation Docket:	NTSB accident and incident dockets serve as permanent archival information for the NTSB's investigations. Dockets released prior to June 1, 2009 are publicly available from the NTSB's Record Management Division at pubin@ntsb.gov , or at 800-877-6799. Dockets released after this date are available at http://dms.nts.gov/pubdms/ .		

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