 National Transportation Safety Board FACTUAL REPORT AVIATION		NTSB ID: WPR09LA226		Aircraft Registration Number: N67FF	
		Occurrence Date: 05/01/2009		Most Critical Injury: None	
		Occurrence Type: Accident		Investigated By: NTSB	
Location/Time					
Nearest City/Place Santa Clarita		State CA	Zip Code 91321	Local Time 1515	Time Zone PDT
Airport Proximity: Off Airport/Airstrip		Distance From Landing Facility: 0			
Aircraft Information Summary					
Aircraft Manufacturer MD HELICOPTER		Model/Series 369FF		Type of Aircraft Helicopter	
Revenue Sightseeing Flight: No			Air Medical Transport Flight: No		
Narrative					
<p>Brief narrative statement of facts, conditions and circumstances pertinent to the accident/incident:</p> <p>*** Note: NTSB investigators may not have traveled in support of this investigation and used data provided by various sources to prepare this aircraft accident report. ***</p> <p>On May 1, 2009, about 1515 Pacific daylight time, a McDonnell Douglas Helicopter (MDHI) 369FF, N67FF, made a hard landing during an emergency landing near Santa Clarita, California. Summit Helicopters was operating the helicopter under the provisions of 14 Code of Federal Regulations (CFR) Part 133. The certificated commercial pilot was not injured; the helicopter sustained substantial damage to the tail boom. The local external load flight departed a helipad at Bouquet Canyon, near Santa Clarita. Visual meteorological conditions prevailed, and no flight plan had been filed.</p> <p>A Federal Aviation Administration (FAA) inspector interviewed the pilot, who stated that he had been transporting a work crew. After dropping the crew off, it was discovered that one of them had dropped a lunch pail into Bouquet Reservoir. The helicopter had a 40-foot external long-line with a four-pronged grappling hook attached to the cargo hook. The pilot attempted to use the grappling hook to snag the lunch pail, but was unsuccessful.</p> <p>The pilot went down low, about 10 feet above the reservoir surface, and tried to use the main rotor blade wash to push the floating lunch pail toward the shore. He did not disconnect the long line and grappling hook; the grappling hook was submerged below the reservoir surface. While side slipping toward the shore, the pilot felt a short vibration in the rudder pedals, and a loss of tail rotor authority. The helicopter turned twice before the throttle was reduced, and the rotations stopped. An auto rotation landing was performed on the shore line.</p> <p>The pilot submitted a written statement. He said that the helicopter was about 10 feet from the shoreline when the helicopter made a rapid and violent turn, which the pilot attributed to a loss of tail rotor thrust. He initiated emergency procedures by twisting the throttle to ground idle. He was facing the shore when the turning stopped. He maneuvered the helicopter toward the shore, and landed in an upright position on uneven terrain with the left skid on dry land and the right skid in the water. He immediately shut the helicopter down. The tail boom was twisted and bent down.</p> <p>An MD Helicopters, Inc., investigator examined the wreckage under the supervision of the FAA inspector. He noted skin wrinkling on all five main rotor blades, and no evidence of main rotor blade contact with the ground, fuselage, or tail boom. He verified control continuity for all main rotor controls. Both tail rotor blades were bent and damaged. He could not establish continuity from the main rotor transmission to the tail rotor, and discovered a torsional fracture of the tail rotor drive shaft.</p> <p>Metallurgical examination of the tail rotor drive shaft determined that the fracture mode was torsional overload, and it met hardness and conductivity specifications. Both of the tail rotor blades appeared to have made contact with another surface.</p>					
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Narrative (Continued)

However, it could not be determined what made contact with the tail rotor blades or when in the accident sequence the contact occurred.
Updated on Mar 16 2011 10:54AM

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		Occurrence Date: 05/01/2009			
		Occurrence Type: Accident			
Landing Facility/Approach Information					
Airport Name	Airport ID:	Airport Elevation Ft. MSL	Runway Used N/A	Runway Length	Runway Width
Runway Surface Type:					
Runway Surface Condition:					
Approach/Arrival Flown: NONE					
VFR Approach/Landing: Forced Landing					
Aircraft Information					
Aircraft Manufacturer MD HELICOPTER		Model/Series 369FF		Serial Number 0067FF	
Airworthiness Certificate(s): Normal					
Landing Gear Type: Skid					
Amateur Built Acft? No	Number of Seats: 4	Certified Max Gross Wt. 3100 LBS	Number of Engines: 1		
Engine Type: Turbo Shaft	Engine Manufacturer: Allison	Model/Series: C30	Rated Power: 650 HP		
- Aircraft Inspection Information					
Type of Last Inspection 100 Hour	Date of Last Inspection 04/2009	Time Since Last Inspection Hours	Airframe Total Time 1645 Hours		
- Emergency Locator Transmitter (ELT) Information					
ELT Installed?/Type Yes / Unknown	ELT Operated? No	ELT Aided in Locating Accident Site? No			
Owner/Operator Information					
Registered Aircraft Owner SUMMIT HELICOPTER INC		Street Address 12653 OSBORNE ST PMB 35			
		City PACOIMA	State CA	Zip Code 91331	
Operator of Aircraft SUMMIT HELICOPTER INC		Street Address 12653 OSBORNE ST PMB 35			
		City PACOIMA	State CA	Zip Code 91331	
Operator Does Business As:			Operator Designator Code:		
- Type of U.S. Certificate(s) Held:					
Air Carrier Operating Certificate(s):					
Operating Certificate:			Operator Certificate: Aircraft External Load		
Regulation Flight Conducted Under: Part 133: Rotorcraft Ext. Load					
Type of Flight Operation Conducted: External Load					
FACTUAL REPORT - AVIATION					

 <p>National Transportation Safety Board FACTUAL REPORT AVIATION</p>	NTSB ID: WPR09LA226
	Occurrence Date: 05/01/2009
	Occurrence Type: Accident

First Pilot Information

Name On File	City On File	State On File	Date of Birth On File	Age 64
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Sex: M	Seat Occupied: Left	Occupational Pilot? Yes	Certificate Number: On File
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Certificate(s): Flight Instructor; Commercial

Airplane Rating(s): Multi-engine Land; Single-engine Land

Rotorcraft/Glider/LTA: Helicopter

Instrument Rating(s): Airplane; Helicopter

Instructor Rating(s): Helicopter

Current Biennial Flight Review? 04/2008

Medical Cert.: Class 2	Medical Cert. Status: With Waivers/Limitations	Date of Last Medical Exam:
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- Flight Time Matrix	All A/C	This Make and Model	Airplane Single Engine	Airplane Multi-Engine	Night	Instrument		Rotorcraft	Glider	Lighter Than Air
						Actual	Simulated			
Total Time	14450	6000	470	180	5000	50	85	13800		
Pilot In Command(PIC)	13800									
Instructor	275									
Instruction Received										
Last 90 Days	180	180						180		
Last 30 Days	60	60						60		
Last 24 Hours	7	7						7		

Seatbelt Used? Yes	Shoulder Harness Used? Yes	Toxicology Performed? No	Second Pilot? No
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Flight Plan/Itinerary

Type of Flight Plan Filed: None

Departure Point Same as Accident/Incident Location	State	Airport Identifier	Departure Time	Time Zone PDT
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Destination Local Flight	State CA	Airport Identifier	
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Type of Clearance: None

Type of Airspace:

Weather Information

UAT/CA Source of Wx Information:

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Weather Information

WOF ID	Observation Time	Time Zone	WOF Elevation	WOF Distance From Accident Site	Direction From Accident Site
KBUR	1553	PDT	Ft. MSL	NM	Deg. Mag.
Sky/Lowest Cloud Condition:				Ft. AGL	Condition of Light: Day
Lowest Ceiling: Overcast			4500 Ft. AGL	Visibility: 10 SM	Altimeter: 29.97 "Hg
Temperature: 25 °C	Dew Point: 9 °C	Weather Conditions at Accident Site: Visual Conditions			
Wind Direction: 220	Wind Speed: 3	Wind Gusts:			
Visibility (RVR): Ft.	Visibility (RVV) SM				
Precip and/or Obscuration: No Obscuration; No Precipitation					

Accident Information

Aircraft Damage: Substantial	Aircraft Fire: None	Aircraft Explosion: None
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- Injury Summary Matrix	Fatal	Serious	Minor	None	TOTAL
First Pilot				1	1
Second Pilot					
Student Pilot					
Flight Instructor					
Check Pilot					
Flight Engineer					
Cabin Attendants					
Other Crew					
Passengers					
- TOTAL ABOARD -				1	1
Other Ground					
- GRAND TOTAL -				1	1

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Administrative Information

Investigator-In-Charge (IIC)

Howard D. Plagens

Additional Persons Participating in This Accident/Incident Investigation:

Frank Motter
Federal Aviation Administration
Van Nuys, CA

John Hobby
MD Helicopters, Inc.
Mesa, AZ