 National Transportation Safety Board <b>FACTUAL REPORT</b> <b>AVIATION</b>		NTSB ID: LAX01FA252		Aircraft Registration Number: N769BB	
		Occurrence Date: 07/21/2001		Most Critical Injury: Minor	
		Occurrence Type: Accident		Investigated By: NTSB	
Location/Time					
Nearest City/Place Los Angeles		State CA	Zip Code 90095	Local Time 0049	Time Zone PDT
Airport Proximity: On Airport/Airstrip		Distance From Landing Facility:			
Aircraft Information Summary					
Aircraft Manufacturer Sikorsky		Model/Series S-76A		Type of Aircraft Helicopter	
Revenue Sightseeing Flight: No			Air Medical Transport Flight:		
Narrative					
Brief narrative statement of facts, conditions and circumstances pertinent to the accident/incident:					
HISTORY OF FLIGHT					
<p>On July 21, 2001, at 0049 hours Pacific daylight time, a Sikorsky S-76A, N769BB, yawed to the left and rolled onto its right side while standing unmanned with both engines operating and rotors turning at the University of California, Los Angeles (UCLA), Medical Center helipad in Los Angeles, California. The certificated airline transport pilot, the sole occupant, received minor injuries and the helicopter was substantially damaged. The repositioning flight was operated by Helinet Aviation, Inc., under 14 CFR Part 91, and was departing for Van Nuys, California. The flight was operating on a company VFR flight plan. Night visual meteorological conditions prevailed.</p> <p>The pilot was interviewed in the hospital emergency room about 3 hours after the accident. He reported he flew an organ harvesting (medical) team to Fresno and returned them to UCLA immediately before the accident, arriving just after midnight. On the inbound landing he approached the helipad from the southeast and made a hovering pedal turn to a westerly heading, landing in the center of the helipad. He recalled he set the parking brake before landing. He deplaned his five passengers through the right-hand door with the engines operating and the main rotor in motion. He had previously briefed the passengers for the standard (company) procedure to be used to deplane with the engines operating.</p> <p>After his passengers had gone inside the hospital, he returned to the cockpit and was preparing to depart when he noticed a door unsecured indication on the instrument panel for the left cabin door. The passengers had deplaned through the right-hand door and the left door annunciation had not been on during the inbound flight. He thought one of the passengers might have released the left door latch inadvertently while preparing to deplane. He idled the engines and exited the cockpit to check the door. He reclosed the door and returned to the cockpit; however, the door open annunciation came on again. He recalled leaving the cockpit "2 or 3 times" to deal with the door and said he was "frustrated with it." He did not recall retarding the engine power control levers to ground idle before leaving the cockpit the final time. While out of the cockpit, the wheel-equipped helicopter started to move as he was returning to the cockpit. He recalled it was moving toward the edge of the helipad. He returned to the cockpit; however, before "belting in" and before he could regain control, there was a confusing sequence of events and the next thing he knew the helicopter was on its side.</p> <p>After the events ceased, he recalled he was loose inside the cockpit and was not restrained by his seat belts. He was disoriented in the darkness and had trouble finding the fuel shutoff levers, and didn't know how he got out of the helicopter. He recalled trying to kick out the windshield and being concerned that the helicopter would either catch fire or roll off the [elevated] helipad.</p> <p>The pilot reported there were no mechanical discrepancies with the helicopter up to the time of the event. He remarked that it was very light [weight] with no one else on board.</p>					
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## Narrative (Continued)

In his written report, in the block titled "Person At Controls At Time Of Accident" the pilot checked "No One," and in the boxes titled "Seat Belt Used" and "Shoulder Harness Used" he checked "No."

A medical center employee witnessed the accident from the seventh floor of the hospital about 350-feet distant. He reported: . . . "During many years of working here I observed takeoffs and landings often. I am familiar with the sounds that accompany increased rpm's during a maintained "throttle up" just before takeoff. On that night I heard a total of three throttle ups. During the first two I was working at my desk. The times are approximations but the first lasted 30 seconds and was followed by a throttle down. After 2 or 3 minutes there was another throttle up lasting 30-60 seconds, again followed by a throttle down. Two minutes later there was the third throttle up. This was a unique sequence of events to me so I left my desk and walked a short distance to the window to observe. I observed for 1 minute during the third throttle up. A person was outside the aircraft, moving quickly. He opened and closed a small door to the rear of the craft and moved about diligently. The distance and ambient lighting conditions prevented me from seeing exactly all activity outside the aircraft. I briefly lost sight of the pilot due to these conditions. At this time the helicopter made a 1/4 turn in a counterclockwise direction across the helipad. It then quickly turned on its right side and the main propeller [disintegrated]. During the 1/4 turn it was easy [to] observe the pilot clinging to the [outside] of the helicopter close to the front door. It was difficult to tell if the door was open or closed but I remember seeing all four of the pilot's extremities. He wore a dark jumpsuit. There was a flash from the point where the propeller meets the main body of the helicopter on top. I left the window from fear of flying propeller debris and a possible explosion. When I returned [approximately] 5 seconds later the pilot was walking around the nose of the helicopter towards the hospital doorway . . ."

## PERSONNEL INFORMATION

During his interview, the pilot stated he had flown off this heliport at night numerous times. He said he was not fatigued. He rested well Thursday night and awoke at 0830 or 0900 on Friday morning. He reported for work about 1330.

According to duty time records provided by the operator (attached), the pilot had worked each of the 8 preceding days. His duty time was between 8 and 13 hours each day. His total flight time for the 8-day period was 14.6 hours. The pilot reported for duty on Friday, July 20, 2001, at 1330, after a 17.5-hour rest period.

## WRECKAGE AND IMPACT INFORMATION

The accident site was on the private heliport immediately adjacent to the UCLA Medical Center, which is on the UCLA main campus in the Westwood district of the city of Los Angeles, California.

The heliport was on the roof of a 3-story structure and was marked to accommodate a single helicopter. In the center of the helipad was a red square about 30-feet on each side, and within the red square was a white "cross" symbol. Within the white "cross" symbol was a single red "H" symbol with the "up" direction oriented east or west. While standing at the center of the "H" symbol, facing west toward the fuselage, the Safety Board investigator noted, about 4 feet to his left, a dark black spot on the surface of the helipad resembling a tire pivot location. To his right an equal distance was an arcing, gray/black, skid mark resembling the tire tread pattern of the helicopter. The distance on the surface of the helipad from the pivot mark to the arcing skid mark was equal to the tread distance of the helicopter main landing gear. The arc extended through about 90 degrees from the investigator's right, counterclockwise, and ended in front of him and slightly to his left. Near the end of the arc (in front of the investigator), the outboard edge of the arc exhibited a darker black shoulder. Near the end of the arc and about a 60-degree angle to the arc, was a second, dark black, linear skid mark resembling that made by a tire being dragged

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## Narrative (Continued)

sidewise across the deck. The dark black skid mark was about 3 inches wide and 6 feet long, irregular in density, and ended near the right main landing gear wheel of the overturned helicopter.

The fuselage of the helicopter was lying on its right side (about 110 degrees right roll angle) at the western perimeter of the red square area with the nose pointed south and the underside of the fuselage to the east. The landing gear was extended. On the underside of the tail stinger was a pattern of red paint scrape marks extending from right-rear to left-front. The red color resembled that of the helipad center area. The tail rotor assembly was undamaged. The left horizontal stabilizer was undamaged and the right stabilizer was broken from the fuselage at the inboard (attachment) end and was lying on the helipad beneath the tailboom and about 3 feet forward of its attachment location.

All four main rotor blades were separated from the hub at the root shaft end, and only one blade grip (root end) was present on the heliport in a perimeter recess. The remainder of the main rotor blades were located off the helipad, over an area of about a 300-foot radius from northwest through southwest to southeast of the helipad on the campus and the automotive parking lots below. The blades were recovered in small pieces, typically less than 6 feet long.


In the cockpit the parking brake handle was pulled and locked. About 3 inches of shiny shaft was visible on the parking brake handle shaft. When turned by hand about 3 hours after the accident by the investigator and with the helicopter still lying on its side, the main landing gear wheels turned freely; however, when rotated again about 3 hours after exposure to the morning sunlight, the brakes were dragging on the wheel rotation. When tested after uprighting the helicopter, the parking brake locked, and the helicopter could not be moved by three men attempting to push it.


The engine power control levers were in the "fly" position and the fuel shutoff valves were in the "off" position. The collective control was in the down position and the cyclic was centered. The three "stick trim" switches (collective, cyclic, and yaw) were each in the "on" position. Additional cockpit documentation information is attached.

## ADDITIONAL INFORMATION

According to a California Department of Transportation, Division of Aeronautics, Aviation Safety Officer, the helicopter exceeded permissible size limits for the heliport. The heliport held a State of California Heliport Permit and was designed to accommodate a single helicopter with a maximum overall length of 43.33 feet. The accident helicopter exceeded this length by more than 10 feet.

The helicopter wreckage was released to Mr. Rob Cheek, adjuster for Universal Loss Management, on August 13, 2001.

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<b>Landing Facility/Approach Information</b>						
Airport Name		Airport ID:	Airport Elevation	Runway Used	Runway Length	Runway Width
UCLA Medical Center Heliport			Ft. MSL			
Runway Surface Type: Concrete						
Runway Surface Condition: Dry						
Approach/Arrival Flown: Unknown						
VFR Approach/Landing: Unknown						
<b>Aircraft Information</b>						
Aircraft Manufacturer		Model/Series		Serial Number		
Sikorsky		S-76A		760294		
Airworthiness Certificate(s): Normal						
Landing Gear Type: Retractable - Tricycle						
Amateur Built Acft? No		Number of Seats: 7	Certified Max Gross Wt. 10500 LBS		Number of Engines: 2	
Engine Type:		Engine Manufacturer:		Model/Series:	Rated Power:	
Turbo Shaft		Turbomeca		Arriel 1	701 HP	
- Aircraft Inspection Information						
Type of Last Inspection		Date of Last Inspection	Time Since Last Inspection		Airframe Total Time	
100 Hour		05/2001	44 Hours		1095 Hours	
- Emergency Locator Transmitter (ELT) Information						
ELT Installed?/Type No		ELT Operated? No	ELT Aided in Locating Accident Site? No			
<b>Owner/Operator Information</b>						
Registered Aircraft Owner		Street Address				
		9130 W. Sunset Blvd.				
Yucaipa Companies LLC		City		State	Zip Code	
		Los Angeles		CA	90069	
Operator of Aircraft		Street Address				
		16425 Hart St.				
Helinet Aviation		City		State	Zip Code	
		Van Nuys		CA	91406	
Operator Does Business As:				Operator Designator Code: HOCA		
- Type of U.S. Certificate(s) Held:						
Air Carrier Operating Certificate(s): On-demand Air Taxi						
Operating Certificate:			Operator Certificate:			
Regulation Flight Conducted Under: Part 91: General Aviation						
Type of Flight Operation Conducted: Positioning						

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**First Pilot Information**

Name On File	City On File	State On File	Date of Birth On File	Age 34
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Sex: M	Seat Occupied: Right	Occupational Pilot? Yes	Certificate Number: On File
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Certificate(s): Airline Transport; Flight Instructor

Airplane Rating(s): None

Rotorcraft/Glider/LTA: Helicopter

Instrument Rating(s): Helicopter

Instructor Rating(s): Helicopter; Instrument Helicopter

Current Biennial Flight Review? 01/2001

Medical Cert.: Class 2	Medical Cert. Status: Valid Medical--no waivers/lim.	Date of Last Medical Exam: 02/2001
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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	5595	215	38		347	62	87	5557		
Pilot In Command(PIC)	5426	214	1		344	57	62	5426		
Instructor	3325				150	15		3525		
Instruction Received										
Last 90 Days	110	68			15	14		110		
Last 30 Days	32	23			5			32		
Last 24 Hours	2	2			1			2		

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

Type of Flight Plan Filed: Company VFR

Departure Point Same as Accident/Incident Location	State	Airport Identifier	Departure Time 0049	Time Zone PDT
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Destination Van Nuys	State CA	Airport Identifier VNY	
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Type of Clearance: None

Type of Airspace: Class G

**Weather Information**

Source of Wx Information:

Unknown

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<b>Weather Information</b>					
WOF ID	Observation Time	Time Zone	WOF Elevation	WOF Distance From Accident Site	Direction From Accident Site
SMO	0051	PDT	175 Ft. MSL	3 NM	178 Deg. Mag.
Sky/Lowest Cloud Condition: Clear			Ft. AGL	Condition of Light: Night	
Lowest Ceiling: None		Ft. AGL	Visibility: 10	SM	Altimeter: 29.96 "Hg
Temperature: 16 °C	Dew Point: 14 °C	Weather Conditions at Accident Site: Visual Conditions			
Wind Direction:		Wind Speed: Calm		Wind Gusts:	
Visibility (RVR): Ft.		Visibility (RVV): SM			
Precip and/or Obscuration: No Obscuration; No Precipitation					

<b>Accident Information</b>		
Aircraft Damage: Substantial	Aircraft Fire: None	Aircraft Explosion: None

- 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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**FACTUAL REPORT**

**AVIATION**



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Occurrence Date: 07/21/2001

Occurrence Type: Accident

Administrative Information

Investigator-In-Charge (IIC)

RICHARD B. PARKER

Additional Persons Participating in This Accident/Incident Investigation:

STEVE NIELSEN  
FAA Flight Stnds Dist Office  
Los Angeles, CA