National Transportation Safety Board
Aviation Accident Final Report

Location:	GEORGETOWN, CA	**Accident Number:**	LAX96LA217
Date & Time:	06/01/1996, 0948 PDT	**Registration:**	N9332F
Aircraft:	Hughes 269B	**Aircraft Damage:**	Substantial
Defining Event:		**Injuries:**	2 None
Flight Conducted Under:	Part 91: General Aviation - Instructional		

Analysis

During a dual instructional lesson, the CFI initiated a practice autorotation from 1,000 feet above ground level (agl) while in the traffic pattern. The CFI reported that as the helicopter descended through 800 feet agl, all engine power was suddenly lost and the practice maneuver turned into a forced landing. Just prior to experiencing the engine power loss, all instruments had been in the green. The CFI further stated that the helicopter touched down softly at the approach end of the runway with a forward speed between 2 and 3 miles per hour. Thereafter, the helicopter tipped forward, shook violently, and the main rotor blade contacted the airframe which resulted in substantial damage.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: loss of engine power for undetermined reason(s), while practicing an autorotation, which resulted in a forced landing; and the flight instructor's misjudged landing flare during the emergency autorotation/landing.

Findings

Occurrence #1: LOSS OF ENGINE POWER
Phase of Operation: APPROACH

Findings
1. (C) REASON FOR OCCURRENCE UNDETERMINED

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

Findings
2. AUTOROTATION - PERFORMED - PILOT IN COMMAND(CFI)

Occurrence #3: HARD LANDING
Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings
3. (C) FLARE - MISJUDGED - PILOT IN COMMAND(CFI)

Factual Information

On June 1, 1996, at 0948 hours Pacific daylight time, the pilot of a Hughes 269B, N9332F, initiated a practice autorotation from 1,000 feet above ground level (agl) while in the traffic pattern at the Georgetown Airport, Georgetown, California. At the time, the certified flight instructor (CFI) was providing dual instruction to his student. The aircraft was substantially damaged and there were no injuries. The flight originated at 0920 from private property in Foresthill, California.

The CFI reported that as the helicopter descended through 800 feet agl, all engine power was suddenly lost and the practice maneuver turned into a forced landing. Just prior to experiencing the engine power loss, all instruments had been "in the green." The CFI further stated that the helicopter touched down softly at the approach end of the runway with a forward speed between 2 and 3 miles per hour. Thereafter, the helicopter tipped forward, shook violently, and the main rotor blade contacted the airframe which resulted in substantial damage.

Pilot Information

Certificate:	Flight Instructor; Commercial	**Age:**	25, 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:**	Yes
Instructor Rating(s):	Helicopter	**Toxicology Performed:**	No
Medical Certification:	Class 2 Valid Medical--no waivers/lim.	**Last FAA Medical Exam:**	06/07/1995
Occupational Pilot:		**Last Flight Review or Equivalent:**	
Flight Time:	1433 hours (Total, all aircraft), 53 hours (Total, this make and model), 53 hours (Pilot In Command, all aircraft), 53 hours (Last 90 days, all aircraft), 15 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Hughes	**Registration:**	N9332F
Model/Series:	269B 269B	**Aircraft Category:**	Helicopter
Year of Manufacture:		**Amateur Built:**	No
Airworthiness Certificate:	Normal	**Serial Number:**	690039
Landing Gear Type:	Skid	**Seats:**	2
Date/Type of Last Inspection:	06/01/1996, Annual	**Certified Max Gross Wt.:**	1670 lbs
Time Since Last Inspection:	70 Hours	**Engines:**	1 Reciprocating
Airframe Total Time:	3200 Hours	**Engine Manufacturer:**	Lycoming
ELT:		**Engine Model/Series:**	HIO-360-A1A
Registered Owner:	RICK PATTERSON, INC.	**Rated Power:**	180 hp
Operator:	ERIK VANDAGRIFF	**Operating Certificate(s) Held:**	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	**Condition of Light:**	Day
Observation Facility, Elevation:	, 0 ft msl	**Distance from Accident Site:**	0 Nautical Miles
Observation Time:	0000	**Direction from Accident Site:**	0°
Lowest Cloud Condition:	Clear / 0 ft agl	**Visibility**	150 Miles
Lowest Ceiling:	None / 0 ft agl	**Visibility (RVR):**	0 ft
Wind Speed/Gusts:	Calm /	**Turbulence Type Forecast/Actual:**	/
Wind Direction:		**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:		**Temperature/Dew Point:**	24°C
Precipitation and Obscuration:			
Departure Point:	FORESTHILL, CA (Q61)	**Type of Flight Plan Filed:**	None
Destination:	, CA (Q61)	**Type of Clearance:**	None
Departure Time:	0920 PDT	**Type of Airspace:**	Class G

Airport Information

Airport:	GEORGETOWN (Q61)	**Runway Surface Type:**	Asphalt
Airport Elevation:	2623 ft	**Runway Surface Condition:**	Dry
Runway Used:	16	**IFR Approach:**	None
Runway Length/Width:	2980 ft / 60 ft	**VFR Approach/Landing:**	Simulated Forced Landing; Traffic Pattern

Wreckage and Impact Information

Crew Injuries:	2 None	**Aircraft Damage:**	Substantial
Passenger Injuries:	N/A	**Aircraft Fire:**	None
Ground Injuries:	N/A	**Aircraft Explosion:**	None
Total Injuries:	2 None	**Latitude, Longitude:**	

Administrative Information

Investigator In Charge (IIC):	WAYNE POLLACK	**Report Date:**	01/08/1997
Additional Participating Persons:			
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 pubinq@ntsb.gov, or at 800-877-6799. Dockets released after this date are available at http://dms.ntsb.gov/pubdms/.		