



# Aviation Investigation Final Report

<b>Location:</b>	GARBERVILLE, California	<b>Accident Number:</b>	LAX86LA277
<b>Date &amp; Time:</b>	July 2, 1986, 15:30 Local	<b>Registration:</b>	N26186
<b>Aircraft:</b>	HILLER UH-12C	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	1 None
<b>Flight Conducted Under:</b>	Part 91: General aviation - Instructional		

## Analysis

THE STUDENT PLT HAD JUST TAKEN OFF ON A TRAINING X-COUNTRY FLT WHEN THE MAIN ROTOR TACHOMETER NEEDLE DECREASED BELOW THE ENGINE TACHOMETER NEEDLE. HE TURNED THE HELICOPTER TO RETURN TO THE ARPT BUT WAS UNABLE TO MAINTAIN ALTITUDE AND LANDED HARD IN ROUGH TERRAIN. AFTER THE ACCIDENT THE STUDENT PLT STATED THAT HE HAD OBSERVED OIL LEAKING IN THE VICINITY OF THE CENTRIFUGAL, DRY CLUTCH DURING THIS AND PREVIOUS PREFLIGHT INSPECTIONS.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be:

### Findings

Occurrence #1: LOSS OF ENGINE POWER  
Phase of Operation: CRUISE - NORMAL

#### Findings

1. (C) ROTOR DRIVE SYSTEM,CLUTCH ASSEMBLY - FAILURE,PARTIAL
  2. (F) ENGINE ASSEMBLY,CRANKCASE - LEAK
  3. (F) FLUID,OIL - LEAK
  4. (C) OPERATION WITH KNOWN DEFICIENCIES IN EQUIPMENT - ATTEMPTED - PILOT IN COMMAND
  5. (F) LACK OF FAMILIARITY WITH AIRCRAFT - PILOT IN COMMAND
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Occurrence #2: FORCED LANDING  
Phase of Operation: DESCENT - EMERGENCY  
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Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER  
Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings

6. (F) TERRAIN CONDITION - ROUGH/UNEVEN

## Factual Information

### Pilot Information

<b>Certificate:</b>	Student	<b>Age:</b>	37, Male
<b>Airplane Rating(s):</b>	None	<b>Seat Occupied:</b>	Center
<b>Other Aircraft Rating(s):</b>	Helicopter	<b>Restraint Used:</b>	
<b>Instrument Rating(s):</b>	None	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 2 Valid Medical--no waivers/lim.	<b>Last FAA Medical Exam:</b>	February 14, 1986
<b>Occupational Pilot:</b>	UNK	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	39 hours (Total, all aircraft), 39 hours (Total, this make and model), 12 hours (Pilot In Command, all aircraft), 39 hours (Last 90 days, all aircraft), 19 hours (Last 30 days, all aircraft), 3 hours (Last 24 hours, all aircraft)		

### Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	HILLER	<b>Registration:</b>	N26186
<b>Model/Series:</b>	UH-12C UH-12C	<b>Aircraft Category:</b>	Helicopter
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	AN002
<b>Landing Gear Type:</b>	Skid	<b>Seats:</b>	3
<b>Date/Type of Last Inspection:</b>	March 27, 1986 Annual	<b>Certified Max Gross Wt.:</b>	2400 lbs
<b>Time Since Last Inspection:</b>	48 Hrs	<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	1799 Hrs	<b>Engine Manufacturer:</b>	FRANKLIN
<b>ELT:</b>	Not installed	<b>Engine Model/Series:</b>	VO-335-5D
<b>Registered Owner:</b>	PETERSEN, DANE A.	<b>Rated Power:</b>	210 Horsepower
<b>Operator:</b>	DANE A. PETERSON	<b>Operating Certificate(s) Held:</b>	None
<b>Operator Does Business As:</b>		<b>Operator Designator Code:</b>	

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual (VMC)	<b>Condition of Light:</b>	Day
<b>Observation Facility, Elevation:</b>		<b>Distance from Accident Site:</b>	
<b>Observation Time:</b>		<b>Direction from Accident Site:</b>	
<b>Lowest Cloud Condition:</b>	Clear	<b>Visibility</b>	25 miles
<b>Lowest Ceiling:</b>	None	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	5 knots / 5 knots	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	330°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>		<b>Temperature/Dew Point:</b>	29°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	GARBERVILLE , CA (016 )	<b>Type of Flight Plan Filed:</b>	VFR
<b>Destination:</b>	(028 )	<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	15:25 Local	<b>Type of Airspace:</b>	Class G

## Airport Information

<b>Airport:</b>	GARBERVILLE	<b>Runway Surface Type:</b>	Dirt
<b>Airport Elevation:</b>	0 ft msl	<b>Runway Surface Condition:</b>	Rough
<b>Runway Used:</b>	0	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>	0 ft / 0 ft	<b>VFR Approach/Landing:</b>	Forced landing

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 None	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>		<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	1 None	<b>Latitude, Longitude:</b>	

## Administrative Information

**Investigator In Charge (IIC):** Wall, J.

**Additional Participating Persons:** JIM FORD; OAKLAND , CA

**Original Publish Date:**

**Last Revision Date:**

**Investigation Class:** [Class](#)

**Note:**

**Investigation Docket:** <https://data.nts.gov/Docket?ProjectID=25203>

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