



# Aviation Investigation Final Report

<b>Location:</b>	CARRIZO SPRINGS, Texas	<b>Accident Number:</b>	FTW96LA121
<b>Date &amp; Time:</b>	February 16, 1996, 10:15 Local	<b>Registration:</b>	N67065
<b>Aircraft:</b>	Hiller UH-12D	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	2 None
<b>Flight Conducted Under:</b>	Part 91: General aviation - Aerial observation		

## Analysis

The helicopter departed the ranch's office on a local flight to spot deer. 'While cruising at about 50 feet and about 40 knots indicated airspeed and after making a 360 degree turn, the engine either lost power or for some other reason would not maintain adequate rotor RPM.' The pilot lowered the collective in an attempt to increase rotor RPM, 'but, the RPM would not reach the minimum required to fly.' Subsequently, he landed the helicopter hard, and 'the main rotor blade struck the tailboom, severing the boom and 3 feet of blade.' The helicopter came to rest on its side. Examination of the airframe and engine did not reveal any premishap discrepancies. The reason for the loss of engine and rotor RPM could not be determined.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: a loss of engine power for undetermined reasons, and the pilot's improper touchdown.

### Findings

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

#### Findings

1. (C) REASON FOR OCCURRENCE UNDETERMINED

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Occurrence #2: FORCED LANDING

Phase of Operation: EMERGENCY DESCENT/LANDING  
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Occurrence #3: HARD LANDING  
Phase of Operation: EMERGENCY DESCENT/LANDING

Findings  
2. (C) TOUCHDOWN - IMPROPER - PILOT IN COMMAND

## Factual Information

On February 16, 1996, at 1015 central standard time, a Hiller UH-12D helicopter, N67065, registered to, and operated by T.M. Davis Construction Inc., as a Title 14 CFR Part 91 aerial observation flight, was substantially damaged following a loss of control while maneuvering near Carrizo Springs, Texas. The private pilot and his passenger were not injured. Visual meteorological conditions prevailed for the personal flight for which a flight plan was not filed. The flight originated at the ranch office at approximately 0830.

The pilot reported that the helicopter departed the Windship Ranch for a local flight to spot deer. "While cruising at about 50 feet and about 40 knots indicated airspeed and after making a 360 degree turn, the engine either lost power or for some other reason would not maintain adequate rotor RPM." The pilot further reported that he lowered the collective in an attempt to increase rotor RPM, "but, the RPM would not reach the minimum required to fly." Subsequently, he landed the helicopter hard, and "the main rotor blade struck the tailboom, severing the boom and 3 feet of blade." The helicopter came to rest on its side.

Examination of the airframe and engine by the FAA inspector did not reveal any pre-mishap discrepancies. The reason for the loss of engine power and rotor RPM could not be determined.

### Pilot Information

<b>Certificate:</b>	Private	<b>Age:</b>	51, Male
<b>Airplane Rating(s):</b>	Single-engine land	<b>Seat Occupied:</b>	Left
<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 3 Valid Medical--no waivers/lim.	<b>Last FAA Medical Exam:</b>	October 17, 1994
<b>Occupational Pilot:</b>	UNK	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	672 hours (Total, all aircraft), 223 hours (Total, this make and model), 557 hours (Pilot In Command, all aircraft), 5 hours (Last 90 days, all aircraft), 3 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>	N67065
<b>Model/Series:</b>	UH-12D UH-12D	<b>Aircraft Category:</b>	Helicopter
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	1023
<b>Landing Gear Type:</b>	Skid	<b>Seats:</b>	3
<b>Date/Type of Last Inspection:</b>	September 20, 1996 Annual	<b>Certified Max Gross Wt.:</b>	2750 lbs
<b>Time Since Last Inspection:</b>	44 Hrs	<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	6576 Hrs	<b>Engine Manufacturer:</b>	Lycoming
<b>ELT:</b>		<b>Engine Model/Series:</b>	VO-435-A1C
<b>Registered Owner:</b>	T.M. DAVIS CONSTRUCTION INC.	<b>Rated Power:</b>	250 Horsepower
<b>Operator:</b>		<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>	20 miles
<b>Lowest Ceiling:</b>	None	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	10 knots / 15 knots	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	45°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>		<b>Temperature/Dew Point:</b>	21°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	(NONE)	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>		<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	08:30 Local	<b>Type of Airspace:</b>	Class G

## Airport Information

<b>Airport:</b>		<b>Runway Surface Type:</b>	
<b>Airport Elevation:</b>		<b>Runway Surface Condition:</b>	
<b>Runway Used:</b>	0	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>		<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>	1 None	<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	2 None	<b>Latitude, Longitude:</b>	28.520851,-99.850059(est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Gamble, William
<b>Additional Participating Persons:</b>	DESIDERIO S AGUILAR; SAN ANTONIO , TX
<b>Original Publish Date:</b>	November 25, 1996
<b>Last Revision Date:</b>	
<b>Investigation Class:</b>	<a href="#">Class</a>
<b>Note:</b>	
<b>Investigation Docket:</b>	<a href="https://data.ntsb.gov/Docket?ProjectID=19762">https://data.ntsb.gov/Docket?ProjectID=19762</a>

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