



Aviation Investigation Final Report

Location:	GRANBY, Colorado	Accident Number:	DEN84LA177
Date & Time:	June 11, 1984, 07:00 Local	Registration:	N504HA
Aircraft:	HILLER UH-12E	Aircraft Damage:	Substantial
Defining Event:		Injuries:	2 None
Flight Conducted Under:	Part 91: General aviation - Other work use		

Analysis

THE HELICOPTER PLT WAS ON A RECONNAISSANCE FLT TO SURVEY A HILLTOP LANDING SITE IN MOUNTAINOUS TERRAIN. WHEN HE ARRIVED, HE MADE A HIGH RECONNAISSANCE PASS, THEN BEGAN A LOW RECONNAISSANCE APCH. HE ESTIMATED THE WIND WAS FROM 210 DEG AT 10 TO 15 KTS WITH LIGHT TURBULENCE. HIS APCH WAS MADE ON A HEADING OF 200 DEG. HE BEGAN HIS APCH AT APRX 40 KTS & WITH A DESCENT RATE OF 200 FT/MIN. WHEN THE HELICOPTER WAS ABOUT 150 FT FROM THE HILLTOP & APRX 50 FT ABOVE IT, THE AIRSPEED DROPPED TO ZERO & THE RATE OF DESCENT INCREASED. THE PLT APPLIED FULL POWER & TURNED DOWN A VALLEY TO THE RIGHT, BUT COULD NOT STOP THE DESCENT. THE HELICOPTER THEN HIT A TREE, TOUCHED DOWN ON SLOPING TERRAIN & ROLLED OVER. THE ELEVATION & DENSITY ALT WERE ABOUT 9200 & 10,040 FT, RESPECTIVELY. THE HELICOPTER'S HOVER CEILING OUT OF GROUND EFFECT WAS ABOUT 8500 FT; IN GROUND EFFECT, THE HOVER CEILING WAS APRX 11,800 FT.

Probable Cause and Findings

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

Findings

Occurrence #1: LOSS OF CONTROL - IN FLIGHT
Phase of Operation: APPROACH - VFR PATTERN - FINAL APPROACH

Findings

1. (C) IN-FLIGHT PLANNING/DECISION - IMPROPER - PILOT IN COMMAND
2. (F) TERRAIN CONDITION - MOUNTAINOUS/HILLY
3. (F) WEATHER CONDITION - HIGH DENSITY ALTITUDE
4. (F) WEATHER CONDITION - UNFAVORABLE WIND
5. AIRSPEED - REDUCED - PILOT IN COMMAND
6. LEVEL OFF - NOT POSSIBLE
7. DESCENT - UNCONTROLLED - PILOT IN COMMAND

Occurrence #2: IN FLIGHT COLLISION WITH OBJECT
Phase of Operation: DESCENT - UNCONTROLLED

Findings

8. (F) OBJECT - TREE(S)

Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation: DESCENT - UNCONTROLLED

Findings

9. (F) TERRAIN CONDITION - ROUGH/UNEVEN

Occurrence #4: ROLL OVER
Phase of Operation: LANDING

Factual Information

Pilot Information

Certificate:	Airline transport; Flight instructor	Age:	25, Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Center
Other Aircraft Rating(s):	Helicopter	Restraint Used:	
Instrument Rating(s):	Airplane; Helicopter	Second Pilot Present:	No
Instructor Rating(s):	Airplane multi-engine; Airplane single-engine; Helicopter	Toxicology Performed:	No
Medical Certification:	Class 1 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	December 15, 1983
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	4100 hours (Total, all aircraft), 150 hours (Total, this make and model), 3350 hours (Pilot In Command, all aircraft), 200 hours (Last 90 days, all aircraft), 4 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	HILLER	Registration:	N504HA
Model/Series:	UH-12E UH-12E	Aircraft Category:	Helicopter
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	
Landing Gear Type:	Skid	Seats:	3
Date/Type of Last Inspection:	May 23, 1984 100 hour	Certified Max Gross Wt.:	2800 lbs
Time Since Last Inspection:	60 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	1700 Hrs	Engine Manufacturer:	LYCOMING
ELT:	Not installed	Engine Model/Series:	VO-540-C2A
Registered Owner:	HOFFMAN PILOT CENTER, INC.	Rated Power:	305 Horsepower
Operator:		Operating Certificate(s) Held:	On-demand air taxi (135)
Operator Does Business As:		Operator Designator Code:	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:		Distance from Accident Site:	
Observation Time:	06:30 Local	Direction from Accident Site:	
Lowest Cloud Condition:	Scattered / 14000 ft AGL	Visibility	40 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	15 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	210°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	3°C / -18°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	GRANBY , CO	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	08:45 Local	Type of Airspace:	Class G

Airport Information

Airport:		Runway Surface Type:	
Airport Elevation:		Runway Surface Condition:	
Runway Used:	0	IFR Approach:	
Runway Length/Width:		VFR Approach/Landing:	Forced landing

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	1 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 None	Latitude, Longitude:	40.08002,-105.929313(est)

Administrative Information

Investigator In Charge (IIC): Winningham, Fred

**Additional Participating
Persons:**

Original Publish Date:

Last Revision Date:

Investigation Class: [Class](#)

Note:

Investigation Docket: <https://data.nts.gov/Docket?ProjectID=16398>

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The NTSB does not assign fault or blame for an accident or incident; rather, as specified by NTSB regulation, “accident/incident investigations are fact-finding proceedings with no formal issues and no adverse parties ... and are not conducted for the purpose of determining the rights or liabilities of any person” (Title 49 *Code of Federal Regulations* section 831.4). Assignment of fault or legal liability is not relevant to the NTSB’s statutory mission to improve transportation safety by investigating accidents and incidents and issuing safety recommendations. In addition, statutory language prohibits the admission into evidence or use of any part of an NTSB report related to an accident in a civil action for damages resulting from a matter mentioned in the report (Title 49 *United States Code* section 1154(b)). A factual report that may be admissible under 49 *United States Code* section 1154(b) is available [here](#).