



# Aviation Investigation Final Report

<b>Location:</b>	BROOKNEAL, Virginia	<b>Accident Number:</b>	BF090LA041
<b>Date &amp; Time:</b>	May 1, 1990, 13:30 Local	<b>Registration:</b>	N4034Z
<b>Aircraft:</b>	HILLER UH-12ET	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	2 None
<b>Flight Conducted Under:</b>	Part 91: General aviation		

## Analysis

AFTER RUNNING OUT OF FUEL, THE HELICOPTER WAS AUTOROTATED INTO A WOODED AREA, RESULTING IN SUBSTANTIAL DAMAGE. THE PILOT STATED THAT LACK OF SUFFICIENT REST CONTRIBUTED TO FAILING TO RECOGNIZE THAT THE FUEL TANK COULD NOT BE COMPLETELY REFUELED BECAUSE THE AIRCRAFT WAS PARKED ON A SLOPE DURING REFUELING. HE ALSO STATED THAT FATIGUE MAY HAVE CONTRIBUTED TO HIS DECISION TO TRY TO MAKE IT TO THE AIRPORT EVEN THOUGH HE KNEW HE WAS RUNNING OUT OF FUEL.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: THE PILOT'S IMPROPER PREFLIGHT AND IMPROPER IN-FLIGHT PLANNING/DECISION. PILOT FATIGUE WAS A RELATED FACTOR.

## Findings

Occurrence #1: LOSS OF ENGINE POWER(TOTAL) - NONMECHANICAL  
Phase of Operation: CRUISE

### Findings

1. REFUELING - INADEQUATE
2. (C) AIRCRAFT PREFLIGHT - IMPROPER - PILOT IN COMMAND
3. (F) FATIGUE(LACK OF SLEEP) - PILOT IN COMMAND
4. (C) IN-FLIGHT PLANNING/DECISION - IMPROPER - 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

Findings

5. (F) OBJECT - TREE(S)

## Factual Information

### Pilot Information

<b>Certificate:</b>	Commercial	<b>Age:</b>	36, Male
<b>Airplane Rating(s):</b>	None	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>	Helicopter	<b>Restraint Used:</b>	
<b>Instrument Rating(s):</b>	Helicopter	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	Airplane single-engine	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 2 Valid Medical—no waivers/lim.	<b>Last FAA Medical Exam:</b>	July 26, 1989
<b>Occupational Pilot:</b>	Yes	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	6245 hours (Total, all aircraft), 2174 hours (Total, this make and model), 5825 hours (Pilot In Command, all aircraft), 118 hours (Last 90 days, all aircraft), 5 hours (Last 24 hours, all aircraft)		

### Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	HILLER	<b>Registration:</b>	N4034Z
<b>Model/Series:</b>	UH-12ET UH-12ET	<b>Aircraft Category:</b>	Helicopter
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Utility	<b>Serial Number:</b>	5196
<b>Landing Gear Type:</b>	Skid	<b>Seats:</b>	3
<b>Date/Type of Last Inspection:</b>	February 22, 1990 100 hour	<b>Certified Max Gross Wt.:</b>	3100 lbs
<b>Time Since Last Inspection:</b>	89 Hrs	<b>Engines:</b>	1 Turbo shaft
<b>Airframe Total Time:</b>	2824 Hrs	<b>Engine Manufacturer:</b>	ALLISON
<b>ELT:</b>	Not installed	<b>Engine Model/Series:</b>	250-C20B
<b>Registered Owner:</b>	SUMMIT HELICOPTERS, INC	<b>Rated Power:</b>	305 Horsepower
<b>Operator:</b>	SUMMIT HELICOPTERS, INC	<b>Operating Certificate(s) Held:</b>	None
<b>Operator Does Business As:</b>		<b>Operator Designator Code:</b>	BHHG

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual (VMC)	<b>Condition of Light:</b>	Day
<b>Observation Facility, Elevation:</b>	LYH, 938 ft msl	<b>Distance from Accident Site:</b>	1 Nautical Miles
<b>Observation Time:</b>	13:54 Local	<b>Direction from Accident Site:</b>	315°
<b>Lowest Cloud Condition:</b>	Unknown	<b>Visibility</b>	8 miles
<b>Lowest Ceiling:</b>	Broken / 12000 ft AGL	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	7 knots /	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	220°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>	29 inches Hg	<b>Temperature/Dew Point:</b>	25°C / 17°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	MT LAUREL, VA	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>	BROOKNEAL, VA (OV4)	<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	00:00 Local	<b>Type of Airspace:</b>	Airport advisory area

## Airport Information

<b>Airport:</b>	BROOKNEAL/CAMPBELL COUNTY OV4	<b>Runway Surface Type:</b>	Asphalt
<b>Airport Elevation:</b>	597 ft msl	<b>Runway Surface Condition:</b>	Dry
<b>Runway Used:</b>	24	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>	3800 ft / 60 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>	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>	37.050712,-78.940216(est)

## Administrative Information

**Investigator In Charge (IIC):** Dickinson, Alfred

**Additional Participating Persons:**

**Original Publish Date:** September 4, 1992

**Last Revision Date:**

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

**Note:**

**Investigation Docket:** <https://data.nts.gov/Docket?ProjectID=11590>

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