



National Transportation Safety Board Aviation Accident Final Report

Location:	BROOKNEAL, VA	Accident Number:	BFO90LA041
Date & Time:	05/01/1990, 1330 EDT	Registration:	N4034Z
Aircraft:	HILLER UH-12ET	Aircraft Damage:	Substantial
Defining Event:		Injuries:	2 None
Flight Conducted Under:	Part 91: General Aviation - Business		

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

Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation: LANDING

Findings

5. (F) OBJECT - TREE(S)

Factual Information

Pilot Information

Certificate:	Commercial	Age:	36, Male
Airplane Rating(s):	None	Seat Occupied:	Left
Other Aircraft Rating(s):	Helicopter	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	Helicopter	Second Pilot Present:	No
Instructor Rating(s):	Airplane Single-engine	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	07/26/1989
Occupational Pilot:	Last Flight Review or Equivalent:		
Flight Time:	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

Aircraft Make:	HILLER	Registration:	N4034Z
Model/Series:	UH-12ET UH-12ET	Aircraft Category:	Helicopter
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Utility	Serial Number:	5196
Landing Gear Type:	Skid	Seats:	3
Date/Type of Last Inspection:	02/22/1990, 100 Hour	Certified Max Gross Wt.:	3100 lbs
Time Since Last Inspection:	89 Hours	Engines:	1 Turbo Shaft
Airframe Total Time:	2824 Hours	Engine Manufacturer:	ALLISON
ELT:	Not installed	Engine Model/Series:	250-C20B
Registered Owner:	SUMMIT HELICOPTERS, INC	Rated Power:	305 hp
Operator:	SUMMIT HELICOPTERS, INC	Operating Certificate(s) Held:	None
Operator Does Business As:		Operator Designator Code:	BHHG

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	LYH, 938 ft msl	Distance from Accident Site:	1 Nautical Miles
Observation Time:	1354 EDT	Direction from Accident Site:	315°
Lowest Cloud Condition:	Unknown / 0 ft agl	Visibility	8 Miles
Lowest Ceiling:	Broken / 12000 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	7 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	220°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	25° C / 17° C
Precipitation and Obscuration:			
Departure Point:	MT LAUREL, VA	Type of Flight Plan Filed:	None
Destination:	BROOKNEAL, VA (OV4)	Type of Clearance:	None
Departure Time:	0000	Type of Airspace:	Airport Advisory Area

Airport Information

Airport:	BROOKNEAL/CAMPBELL COUNTY (OV4)	Runway Surface Type:	Asphalt
Airport Elevation:	597 ft	Runway Surface Condition:	Dry
Runway Used:	24	IFR Approach:	None
Runway Length/Width:	3800 ft / 60 ft	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:	

Administrative Information

Investigator In Charge (IIC):	ALFRED W DICKINSON	Report Date:	09/04/1992
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.nts.gov/pubdms/ .		

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The Independent Safety Board Act, as codified at 49 U.S.C. Section 1154(b), precludes the admission into evidence or use of any part of an NTSB report related to an incident or accident in a civil action for damages resulting from a matter mentioned in the report. A factual report that may be admissible under 49 U.S.C. § 1154(b) is available [here](#).