



# **Aviation Investigation Final Report**

Location: MOULTRIE, Georgia Accident Number: ATL83LA387

Date & Time: September 27, 1983, 18:00 Local Registration: N8751F

Aircraft: HUGHES 269A Aircraft Damage: Substantial

**Defining Event:** 1 None

Flight Conducted Under: Part 137: Agricultural

### **Analysis**

THE ACFT LANDED HARD DURING AN AUTOROTATIONAL FORCED LANDING AFTER ENGINE STOPPAGE. THIS WAS AN AERIAL APPLICATION FLT IN VMC WEATHER. REPORTEDLY THE ENGINE QUIT AT 100 FT AGL OVER TREES WHILE THE PLT WAS TRYING TO LAND TO RELOAD. AFTER THE POWER LOSS A HARD LANDING WAS MADE. THE PILOT SAID HE HAD ADDED 10 GALLONS OF FUEL TO THE ACFT JUST 30 MINUTES PRIORTO THE ENGINE STOPPAGE. THE ACFT LOADER SAID THERE WAS NO FUEL ON THE ACFT AFTER THE ACCIDENT. THE PLT WHEN QUESTIONED LATER SAID HE THOUGHT THE ENGINE FAILED FROM FUEL EXHAUSTION.

### **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(TOTAL) - NONMECHANICAL Phase of Operation: APPROACH - VFR PATTERN - FINAL APPROACH

#### **Findings**

- 1. (F) FLUID, FUEL EXHAUSTION
- 2. (C) FUEL CONSUMPTION CALCULATIONS IMPROPER PILOT IN COMMAND
- 3. (C) FUEL SUPPLY INADEQUATE PILOT IN COMMAND

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Occurrence #2: FORCED LANDING

Phase of Operation: LANDING - FLARE/TOUCHDOWN

**Findings** 

4. (C) AUTOROTATION - IMPROPER - PILOT IN COMMAND

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Occurrence #3: HARD LANDING

Phase of Operation: LANDING - FLARE/TOUCHDOWN

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# **Factual Information**

### **Pilot Information**

Certificate:	Commercial	Age:	28,Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	Helicopter	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):		Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medicalno waivers/lim.	Last FAA Medical Exam:	January 21, 1983
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	1160 hours (Total, all aircraft), 190 hours (Total, this make and model), 1160 hours (Pilot In Command, all aircraft), 60 hours (Last 90 days, all aircraft)		

### **Aircraft and Owner/Operator Information**

Aircraft Make:	HUGHES	Registration:	N8751F
Model/Series:	269A 269A	Aircraft Category:	Helicopter
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Restricted (Special)	Serial Number:	52-0073
Landing Gear Type:	Retractable - Tricycle	Seats:	2
Date/Type of Last Inspection:	March 1, 1983 Annual	Certified Max Gross Wt.:	1550 lbs
Time Since Last Inspection:	90 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	30 Hrs	Engine Manufacturer:	AVCO LYCOMING
ELT:	Not installed	Engine Model/Series:	0-360
Registered Owner:	TIM BROCK	Rated Power:	180 Horsepower
Operator:		Operating Certificate(s) Held:	
Operator Does Business As:		Operator Designator Code:	

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**Meteorological Information and Flight Plan** 

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:		Distance from Accident Site:	
Observation Time:		Direction from Accident Site:	
<b>Lowest Cloud Condition:</b>	Clear	Visibility	7 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	5 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	90°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	27°C
Precipitation and Obscuration:	No Obscuration; No Precipita	ation	
Departure Point:		Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	00:00 Local	Type of Airspace:	Class G

## **Airport Information**

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

## **Wreckage and Impact Information**

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	31.160123,-83.770599(est)

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#### **Administrative Information**

Investigator In Charge (IIC):	Shipman, Richard
Additional Participating Persons:	
Original Publish Date:	
Last Revision Date:	
Investigation Class:	<u>Class</u>
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=6219

The National Transportation Safety Board (NTSB) is an independent federal agency charged by Congress with investigating every civil aviation accident in the United States and significant events in other modes of transportation—railroad, transit, highway, marine, pipeline, and commercial space. We determine the probable causes of the accidents and events we investigate, and issue safety recommendations aimed at preventing future occurrences. In addition, we conduct transportation safety research studies and offer information and other assistance to family members and survivors for each accident or event we investigate. We also serve as the appellate authority for enforcement actions involving aviation and mariner certificates issued by the Federal Aviation Administration (FAA) and US Coast Guard, and we adjudicate appeals of civil penalty actions taken by the FAA.

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.

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