



Aviation Investigation Final Report

Location:	Sheridan, Arkansas	Accident Number:	DFW06CA142
Date & Time:	May 30, 2006, 17:35 Local	Registration:	N4086C
Aircraft:	Bell 47G-4A	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 Serious
Flight Conducted Under:	Part 137: Agricultural		

Analysis

The 15,000-hour commercial pilot reported in a telephone interview that he departed a timber tract with 15 gallons of fuel on-board en route to another tract located about 13 miles away. When the turbine-powered helicopter was approximately three miles short of his destination, while at an altitude of 600 feet above ground level (AGL), the engine lost power. The pilot entered an autorotation for a forced landing to an open field. Examination of the aerial application helicopter at the accident site revealed that no fuel was found in the fuel nozzle and less than three gallons of fuel was found in the fuel tanks. The turbine engine was removed from the helicopter and shipped to the factory for a detailed examination and test run. A written statement provided by the supervising FAA inspector, who witnessed the engine examination and test run, stated that the engine started and ran for an hour and twenty minutes with no discrepancies noted.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's inadequate fuel management, which resulted in fuel exhaustion and a subsequent loss of engine power. A contributing factor was the lack of suitable terrain for the forced landing.

Findings

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

Findings

1. FLUID,FUEL - STARVATION
2. (C) FUEL MANAGEMENT - INADEQUATE - PILOT IN COMMAND

Occurrence #2: FORCED LANDING

Phase of Operation: EMERGENCY DESCENT/LANDING

Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER

Phase of Operation: EMERGENCY LANDING

Findings

3. (F) TERRAIN CONDITION - NONE SUITABLE

Factual Information

The 15,000-hour commercial pilot reported in a telephone interview that he departed a timber tract with 15 gallons of fuel on-board enroute to another tract located about 13 miles away. When the turbine -powered helicopter was approximately three miles short of his destination, while at an altitude of 600 feet above ground level (AGL), the engine lost power. The pilot entered an autorotation for a forced landing to an open field. Examination of the aerial application helicopter at the accident site revealed that no fuel was found in the fuel nozzle and less than three gallons of fuel was found in the fuel tanks. The turbine engine was removed from the helicopter and shipped to the factory for a detailed examination and test run. A written statement provided by the supervising FAA inspector, who witnessed the engine examination and test run, stated that the engine started and ran for an hour and twenty minutes with no discrepancies noted.

Pilot Information

Certificate:	Commercial	Age:	42, Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	Helicopter	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 2	Last FAA Medical Exam:	August 1, 2005
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	January 1, 2005
Flight Time:	15000 hours (Total, all aircraft), 1900 hours (Total, this make and model), 98 hours (Last 90 days, all aircraft), 40 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Bell	Registration:	N4086C
Model/Series:	47G-4A	Aircraft Category:	Helicopter
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	7727
Landing Gear Type:	Skid	Seats:	3
Date/Type of Last Inspection:	Annual	Certified Max Gross Wt.:	
Time Since Last Inspection:		Engines:	1 Turbo shaft
Airframe Total Time:		Engine Manufacturer:	Allison
ELT:		Engine Model/Series:	250
Registered Owner:	Holcomb Aerial Services Inc	Rated Power:	250 Horsepower
Operator:		Operating Certificate(s) Held:	None

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:	
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/
Wind Direction:		Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	33°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Sheridan, AR	Type of Flight Plan Filed:	Unknown
Destination:		Type of Clearance:	Unknown
Departure Time:	17:20 Local	Type of Airspace:	

Wreckage and Impact Information

Crew Injuries:	1 Serious	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Serious	Latitude, Longitude:	34.328334,-92.35083

Administrative Information

Investigator In Charge (IIC):	Hatch, Craig
Additional Participating Persons:	Jimmie L Sager; Little Rock, Arkansas
Original Publish Date:	October 3, 2006
Last Revision Date:	
Investigation Class:	Class
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=63779

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