



Aviation Investigation Final Report

Location: SPRINGFIELD, Georgia Accident Number: ATL00LA038

Date & Time: March 24, 2000, 11:50 Local Registration: N230US

Aircraft: Aerospatiale SA315B Aircraft Damage: Substantial

Defining Event: 1 None

Flight Conducted Under: Part 137: Agricultural

Analysis

The pilot was conducting an aerial application of fertilizer on a pine tree forest. He departed with 60 gallons of fuel, which equates to 45 minutes of useable fuel, and had been airborne for approximately 50 minutes. As the helicopter hovered 30 ft. over the loading crews, the engine lost power and began to settle. The pilot released the external load and maneuvered away from the crews on the ground. The helicopter collided with the ground along a narrow forest road. The operations manager stated that there were no mechanical malfunctions with the engine. No evidence of fuel was observed at the accident site, and no fuel was recovered from the helicopter's fuel system.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's inadequate preflight planning resulting in fuel exhaustion.

Findings

Occurrence #1: LOSS OF ENGINE POWER(TOTAL) - NONMECHANICAL

Phase of Operation: MANEUVERING

Findings

1. (C) FLUID, FUEL - EXHAUSTION

2. (C) PREFLIGHT PLANNING/PREPARATION - INADEQUATE - PILOT IN COMMAND

.

Occurrence #2: IN FLIGHT COLLISION WITH TERRAIN/WATER

Phase of Operation: DESCENT - EMERGENCY

Findings
3. TERRAIN CONDITION - ROADWAY/HIGHWAY

Page 2 of 6 ATL00LA038

Factual Information

On March 24, 2000, approximately 1150 eastern standard time, an Aerospatiale SA315B helicopter, N230US, operated by Southern States Cooperative Forestry Unit, collided with the ground following a loss of engine power while performing an aerial application 10 miles west of Springfield, Georgia. The commercial pilot, the sole occupant aboard, was not injured. Visual meteorological conditions prevailed, and no flight plan was filed for the local agricultural application flight being conducted under Title 14 CFR Part 137. The flight originated from Guyton, Georgia, at 1100.

According to an operations manager with Southern States Cooperative Forestry Unit, the purpose of the flight was to conduct an aerial application of fertilizer on a pine tree forest. The pilot departed with 60 gallons of fuel, which is approximately 45 minutes of useable fuel, and had been airborne for approximately 50 minutes. As the helicopter hovered 30 feet above ground level over the loading crews, the engine lost power and the helicopter began to settle. The pilot released the external load and maneuvered away from the crews on the ground. The main rotor blades began striking the trees approximately 18 feet above the ground. The helicopter collided with the ground along a narrow forest road, sustaining damage to the right skid, main and tail rotor blades, and right side of the cabin.

According to the company's operations manager, there were no mechanical malfunctions with the engine at the time the accident occurred. According to an FAA inspector present at the accident scene, no evidence of fuel was observed at the accident site, and no fuel was recovered from the helicopter's fuel system.

Pilot Information

Certificate:	Commercial	Age:	54,Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Right
Other Aircraft Rating(s):	Helicopter	Restraint Used:	
Instrument Rating(s):	Helicopter	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medicalno waivers/lim.	Last FAA Medical Exam:	July 1, 1999
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	14483 hours (Total, all aircraft), 10 hours (Total, this make and model), 14483 hours (Pilot In Command, all aircraft), 135 hours (Last 90 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Page 3 of 6 ATL00LA038

Aircraft and Owner/Operator Information

Aircraft Make:	Aerospatiale	Registration:	N230US
Model/Series:	SA315B SA315B	Aircraft Category:	Helicopter
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	2638
Landing Gear Type:	Skid	Seats:	1
Date/Type of Last Inspection:	February 21, 2000 100 hour	Certified Max Gross Wt.:	5070 lbs
Time Since Last Inspection:	39 Hrs	Engines:	1 Turbo shaft
Airframe Total Time:	5913 Hrs	Engine Manufacturer:	Turbomeca
ELT:		Engine Model/Series:	ARTOUSTE IIIB
Registered Owner:	ROBERTS AIRCRAFT CO.	Rated Power:	625 Horsepower
Operator:	SOUTHERN STATES COOPERATIVE	Operating Certificate(s) Held:	
Operator Does Business As:		Operator Designator Code:	Z1SG

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VM	C)	Condition of Light:	Day
Observation Facility, Elevation:	SAV ,50 ft n	nsl	Distance from Accident Site:	25 Nautical Miles
Observation Time:	11:53 Local		Direction from Accident Site:	170°
Lowest Cloud Condition:	Clear		Visibility	10 miles
Lowest Ceiling:	None		Visibility (RVR):	
Wind Speed/Gusts:	4 knots /		Turbulence Type Forecast/Actual:	/
Wind Direction:	0°		Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches H	lg	Temperature/Dew Point:	19°C / 4°C
Precipitation and Obscuration:	No Obscuration; No Precipitation			
Departure Point:	GUYTON	, GA (NONE)	Type of Flight Plan Filed:	None
Destination:			Type of Clearance:	None
Departure Time:	11:00 Local		Type of Airspace:	Class G

Page 4 of 6 ATL00LA038

Airport Information

Airport:		Runway Surface Type:
Airport Elevation:		Runway Surface Condition:
Runway Used:	0	IFR Approach:
Runway Length/Width:		VFR Approach/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:	32.359134,-81.299217(est)

Page 5 of 6 ATL00LA038

Administrative Information

Investigator In Charge (IIC):	Scott, B. beach	
Additional Participating Persons:	ROBERT WEST; ATLANTA , GA	
Original Publish Date:	December 4, 2001	
Last Revision Date:		
Investigation Class:	<u>Class</u>	
Note:		
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=51033	

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.

Page 6 of 6 ATL00LA038