

Aviation Investigation Final Report

Location: Powhatan, Arkansas Accident Number: FTW01LA136

Date & Time: June 6, 2001, 14:30 Local Registration: N48721

Aircraft: Grumman-Schweizer G-164B Aircraft Damage: Destroyed

Defining Event: 1 Fatal

Flight Conducted Under: Part 137: Agricultural

Analysis

Prior to departing for the 10 minute flight from the base of operation to the staging strip, the agricultural airplane's fuel tanks were topped off. After arriving at the staging strip, the airplane was loaded with 2,300 pounds of fertilizer. The airplane took off from the 2,900-foot dirt strip to the west with a right quartering tailwind (3-4 knots). After takeoff, while the airplane was turning left, its left wing struck trees. Subsequently, the airplane impacted the ground in a near inverted, nose low attitude, approximately 3,900 feet from the east end of the air strip. The airplane came to rest upright and was consumed by the ensuing fire. A witness reported observing the accident airplane as it was taking off to the west; however, he did not witness the accident. The witness reported that "the only thing that might have been odd about the takeoff was a slightly longer than normal [roll] out before he broke ground. But not enough concern for me to turn and watch his departure [to the] south." The operator reported that the normal south departure procedure when taking off west was to turn south prior to the trees and go under a set of power lines. The FAA inspector who examined the airplane wreckage, established flight control continuity. An autopsy on the pilot did not reveal evidence of any preexisting disease that could have contributed to the accident, and toxicological tests were negative for carbon monoxide, cyanide, alcohol, and drugs.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: the pilot's failure to maintain obstacle clearance while maneuvering after takeoff.

Findings

Occurrence #1: IN FLIGHT COLLISION WITH OBJECT

Phase of Operation: MANEUVERING

Findings

1. OBJECT - TREE(S)

2. (C) CLEARANCE - NOT MAINTAINED - PILOT IN COMMAND

Occurrence #2: IN FLIGHT COLLISION WITH TERRAIN/WATER

Phase of Operation: DESCENT - UNCONTROLLED

Findings

3. TERRAIN CONDITION - GROUND

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Factual Information

On June 6, 2001, approximately 1430 central daylight time, a Grumman-Schweizer G-164B agricultural airplane, N48721, was destroyed when it impacted terrain while maneuvering after takeoff near Powhatan, Arkansas. The airplane was registered to Hicks Farms, Inc. and operated by Hoxie Flying Service, both of Walnut Ridge, Arkansas. The commercial pilot, sole occupant of the airplane, was fatally injured. Visual meteorological conditions prevailed, and a flight plan was not filed for the 14 Code of Federal Regulations Part 137 aerial application flight. The local flight was originating from the Cavenaugh Farm staging strip, Powhatan, when the accident occurred.

According to the operator, prior to departing for the 10 minute flight from the Hoxie Flying Service's base of operation to the staging strip, the accident airplane's fuel tanks were topped off. After arriving at the staging strip, the airplane was loaded with 2,300 pounds of fertilizer. The airplane took off from the 2,900-foot dirt strip to the west with a right quartering tailwind (3-4 knots). After takeoff, while the airplane was turning left, its left wing struck trees, located along the east side of the Black River. Subsequently, the airplane impacted the ground in a near inverted, nose low attitude, approximately 3,900 feet from the east end of the air strip. The airplane came to rest upright and was consumed by the ensuing fire.

A witness, the pilot of another airplane that was inbound to the staging strip from the south, reported observing the accident airplane as it was taking off to the west. As the accident airplane broke ground and turned to the south, the witness turned final to land to the east. Because of the dust hanging in the air over the dirt strip, the witness made a quick circle to the north to let the dust clear; therefore, he did not witness the accident. The witness further reported that "the only thing that might have been odd about the takeoff was a slightly longer than normal [roll] out before he broke ground. But not enough concern for me to turn and watch his departure [to the] south."

The operator reported that the normal south departure procedure when taking off west was to turn south prior to the trees and go under a set of power lines. The pilot had previously flown from the staging strip.

Examination of the airplane wreckage, by the FAA inspector who responded to the accident site, revealed that the fuselage and right wing were consumed by fire. The engine was separated from the fuselage, and the propeller was separated from the engine. All three propeller blades remained attached to the propeller hub. One blade exhibited twisting and was bent aft, and the tips of the other two blades were bent aft. Flight control continuity was established.

The Arkansas State Crime Laboratory performed an autopsy on the pilot. There was no

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evidence found of any preexisting disease that could have contributed to the accident.

Toxicological tests performed by the FAA's Toxicology and Accident Research Laboratory were negative for carbon monoxide, cyanide, alcohol, and drugs.

Pilot Information

Certificate:	Commercial	Age:	53,Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Center
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	Yes
Medical Certification:	Class 2 Valid Medicalw/ waivers/lim	Last FAA Medical Exam:	February 23, 2001
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	February 2, 2000
Flight Time:	5799 hours (Total, all aircraft), 350 hours (Total, this make and model), 5749 hours (Pilot In Command, all aircraft), 250 hours (Last 90 days, all aircraft), 141 hours (Last 30 days, all aircraft), 10 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Grumman-Schweizer	Registration:	N48721
Model/Series:	G-164B	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Restricted (Special)	Serial Number:	122B
Landing Gear Type:	Tailwheel	Seats:	1
Date/Type of Last Inspection:	January 4, 2001 Annual	Certified Max Gross Wt.:	6075 lbs
Time Since Last Inspection:	247.7 Hrs	Engines:	1 Turbo prop
Airframe Total Time:	8726.7 Hrs at time of accident	Engine Manufacturer:	Garrett
ELT:	Not installed	Engine Model/Series:	TPE-331-1-15A
Registered Owner:	Hicks Farms, Inc.	Rated Power:	665 Horsepower
Operator:	Hoxie Flying Service, Inc.	Operating Certificate(s) Held:	
Operator Does Business As:		Operator Designator Code:	WDYG

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Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	JBR,262 ft msl	Distance from Accident Site:	26 Nautical Miles
Observation Time:	14:53 Local	Direction from Accident Site:	117°
Lowest Cloud Condition:	Few / 7000 ft AGL	Visibility	10 miles
Lowest Ceiling:	Broken / 12000 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	9 knots / None	Turbulence Type Forecast/Actual:	/
Wind Direction:	130°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.98 inches Hg	Temperature/Dew Point:	28°C / 18°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Powhatan, AR (NONE)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	14:30 Local	Type of Airspace:	Class G

Airport Information

Airport:	Cavenaugh Air Strip NONE	Runway Surface Type:	Dirt
Airport Elevation:		Runway Surface Condition:	Dry
Runway Used:	27	IFR Approach:	None
Runway Length/Width:	3000 ft	VFR Approach/Landing:	None

Wreckage and Impact Information

Crew Injuries:	1 Fatal	Aircraft Damage:	Destroyed
Passenger Injuries:		Aircraft Fire:	On-ground
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Fatal	Latitude, Longitude:	36.089397,-91.07061(est)

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Administrative Information

Investigator In Charge (IIC):	Wigington, Douglas
Additional Participating Persons:	Rick D'Angelo; FAA FSDO; Little Rock, AR
Original Publish Date:	June 3, 2002
Last Revision Date:	
Investigation Class:	Class
Note:	The NTSB traveled to the scene of this accident.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=52430

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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