

Aviation Investigation Factual Report

Location:	FRANKLINTON, Louisiana		Accident Number:	FTW99LA113
Date & Time:	April 9, 1999, 09:00 Local		Registration:	N6673Q
Aircraft:	Grumman-Schweizer 164B	G-	Aircraft Damage:	Destroyed
Defining Event:			Injuries:	1 None
Flight Conducted Under:	Part 137: Agricultural			

Factual Information

On April 9, 1999, at 0900 central daylight time, a Grumman-Schweizer G-164B agricultural airplane, N6673Q, was destroyed following impact with trees and terrain during the takeoff/initial climb near Franklinton, Louisiana. The airplane was registered to and operated by Paynes Flying Service, Inc., of Brandon, Mississippi, under Code of Federal Regulations (CFR) Part 137. The commercial pilot, sole occupant of the airplane, was not injured. Visual meteorological conditions prevailed for the local aerial application flight for which a flight plan was not filed. The flight was originating from runway 17 at the Franklinton Municipal Airport at the time of the accident.

The operator and the pilot reported that the airplane was loaded with 3,500 pounds of fertilizer and the fuel tanks topped for the first flight of the day. Low clouds at 2,000 feet had started to break up, the winds were light and variable, with a temperature of approximately 73 degrees Fahrenheit. The pilot taxied the airplane for departure to the south. The pilot stated that "the aircraft lifted off about 2/3 of the way down the runway [3,000 feet long], and did not accelerate." The pilot further stated that the "engine sound did not change."

The pilot started dumping the load of fertilizer, leveled the airplane, and turned into the wind for the forced landing. He stated that the airplane "did not have enough airspeed to stay up [and] then went down into the trees" 1/4 mile south of the airport.

The FAA inspector and the operator examined the aircraft and found structural damage throughout the airframe.

The fuel control unit and the fuel pump were removed from the Garrett TPE-331-6-252M turbine engine and forwarded to the respective manufacturers for examination under the surveillance of a FAA inspector. Functional testing of the fuel pump showed the low rpm, low-pressure flow was zero. The pump ran on the test bench "without any unusual noises or fluctuations." According to the manufacturer, "the fuel pump was capable of putting out sufficient pressure and flow at normal operating rpm to properly provide fuel to the fuel control unit to operate" the engine. The manufacturer further stated that the no flow at low rpm "was probably due to the broken carbon bearing which is typical of a prop[eller] strike." See the enclosed report for additional details. The FAA inspector concurred that the "pump had no fuel discharge at the minimum RPM."

Damaged precluded a functional test of the fuel control unit; therefore, the unit was disassembled. Examination of the fuel control diaphragm revealed two holes. According to the manufacturer, the teardown examination revealed "that the damage to the fuel control is the result of impact damage. See the enclosed report for additional details. The FAA coordinator stated that "a tear in the diaphragm could cause a loss of power."

A review of the maintenance records revealed that the last annual inspection was performed on October 20, 1998. The engine was removed in June 1998 due to metal in the chip detector and oil filter. Following an oil and filter change, the engine was run in a test cell and then reinstalled on the airframe. The firewall fuel filters and fuel pump inlet filter were replaced on April 3, 1999. The overhauled flow divider, installed in February 1999, was also replaced on April 3, 1999. An oil sample was taken for analysis; however, data of the analysis was never made available to the NTSB investigator-in-charge. In March 1999, the fuel control was replaced with unit serial number 1294294 with 3,719.9 hours.

Pilot Information

Certificate:	Commercial	Age:	42,Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Center
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medicalw/ waivers/lim	Last FAA Medical Exam:	March 24, 1999
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	10000 hours (Total, all aircraft), 60 hours (Total, this make and model), 10000 hours (Pilot In Command, all aircraft), 60 hours (Last 90 days, all aircraft), 40 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Grumman-Schweizer	Registration:	N6673Q
Model/Series:	G-164B G-164B	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Restricted (Special)	Serial Number:	195B
Landing Gear Type:	Tailwheel	Seats:	
Date/Type of Last Inspection:	October 20, 1998 Annual	Certified Max Gross Wt.:	
Time Since Last Inspection:	865 Hrs	Engines:	1 Turbo prop
Airframe Total Time:	7524 Hrs	Engine Manufacturer:	Garrett
ELT:		Engine Model/Series:	TPE-331-6252M
Registered Owner:	PAYNES FLYING SERVICE, INC.	Rated Power:	715 Horsepower
Operator:		Operating Certificate(s) Held:	
Operator Does Business As:		Operator Designator Code:	

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:	Scattered / 3000 ft AGL	Visibility	10 miles
Lowest Ceiling:	Unknown	Visibility (RVR):	
Wind Speed/Gusts:	6 knots / None	Turbulence Type Forecast/Actual:	/
Wind Direction:	180°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	23°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	(2R7)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	
Departure Time:	09:00 Local	Type of Airspace:	Class G

Airport Information

Airport:	FRANKLINTON MUNICIPAL 2R7	Runway Surface Type:	Asphalt
Airport Elevation:	175 ft msl	Runway Surface Condition:	
Runway Used:	17	IFR Approach:	
Runway Length/Width:	3000 ft / 75 ft	VFR Approach/Landing:	

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Destroyed
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	30.83971,-90.140571(est)

Administrative Information

Investigator In Charge (IIC):	Roach, Joyce		
Additional Participating Persons:	JIM COPPITT; BATON ROUGE , LA		
Report Date:	September 13, 1999		
Last Revision Date:			
Investigation Class:	<u>Class</u>		
Note:			
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=46051		

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 <u>here</u>.