

# **Aviation Investigation Final Report**

Location: SYLVANIA, Georgia Accident Number: ATL92LA171

Date & Time: September 1, 1992, 09:45 Local Registration: N9450G

Aircraft: CESSNA 188 Aircraft Damage: Substantial

**Defining Event:** 1 Minor

Flight Conducted Under: Part 137: Agricultural

### **Analysis**

THE PILOT COMPLETED A PREFLIGHT INSPECTION WHICH INCLUDED CHECKING FUEL SAMPLES FOR CONTAMINATES; NO CONTAMINATES WERE REPORTED. THE PILOT LOADED THE CHEMICALS ON THE AIRPLANE, FLEW 15 MINUTES TO THE SOYBEAN FIELD AND STARTED THE SPRAYING OPERATION. AFTER SPAYING ABOUT 100 GALLONS, THE AIRPLANE COLLIDED WITH TREES SURROUNDING THE FIELD. THE PILOT DID NOT RECALL THE EVENTS OF THE ACCIDENT, NOR WERE THERE WITNESSES TO THE ACCIDENT. HOWEVER, TWO PEOPLE NEAR THE ACCIDENT SITE, RECALLED DIFFERENT ACCOUNTS OF THE ENGINE OPERATION PRIOR TO THE COLLISION. AN EXAMINATION OF THE ENGINE REVEALED THE PRESENCE OF WATER IN THE FUEL MANIFOLD VALVE AND NUMBER 6 CYLINDER; IMPACT FORCES DAMAGED THE FUEL TANKS. THE ENGINE OPERATED NORMALLY DURING THE POST-CRASH EXAMINATION.

### **Probable Cause and Findings**

The National Transportation Safety Board determines the probable cause(s) of this accident to be: AN INADEQUATE PREFLIGHT INSPECTION BY THE PILOT WHICH RESULTED IN FUEL CONTAMINATION AND A LOSS OF ENGINE POWER.

#### **Findings**

Occurrence #1: LOSS OF ENGINE POWER(TOTAL) - NONMECHANICAL Phase of Operation: MANEUVERING - AERIAL APPLICATION

#### Findings

1. (C) FLUID, FUEL - CONTAMINATION

2. (C) FLUID, FUEL - WATER

3. (C) AIRCRAFT PREFLIGHT - INADEQUATE - PILOT IN COMMAND

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Occurrence #2: FORCED LANDING

Phase of Operation: DESCENT - EMERGENCY

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Occurrence #3: IN FLIGHT COLLISION WITH OBJECT

Phase of Operation: DESCENT - EMERGENCY

#### Findings

4. MISC EQPT/FURNISHINGS, SHOULDER HARNESS - FAILURE, TOTAL 5. MISC EQPT/FURNISHINGS, SHOULDER HARNESS - DETERIORATED

Page 2 of 6 ATL92LA171

### **Factual Information**

### **Pilot Information**

Certificate:	Commercial	Age:	23,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:	Yes
Instructor Rating(s):	Airplane multi-engine; Airplane single-engine	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medicalno waivers/lim.	Last FAA Medical Exam:	April 20, 1992
Occupational Pilot:	Yes Last Flight Review or Equivalent:		
Flight Time:	3835 hours (Total, all aircraft), 2145 hours (Total, this make and model), 3675 hours (Pilot In Command, all aircraft), 350 hours (Last 90 days, all aircraft), 175 hours (Last 30 days, all aircraft), 15 hours (Last 24 hours, all aircraft)		

Page 3 of 6 ATL92LA171

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

Aircraft Make:	CESSNA	Registration:	N9450G
Model/Series:	188 188	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Restricted (Special)	Serial Number:	18801488T
Landing Gear Type:	Tailwheel	Seats:	1
Date/Type of Last Inspection:	August 14, 1992 Annual	Certified Max Gross Wt.:	4200 lbs
Time Since Last Inspection:	99 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	4946 Hrs	Engine Manufacturer:	CONTINENTAL
ELT:	Not installed	Engine Model/Series:	10-520
Registered Owner:	HILDE, RICHARD L.	Rated Power:	285 Horsepower
Operator:	HILDE, RICHARD L.	Operating Certificate(s) Held:	
Operator Does Business As:		Operator Designator Code:	FWNG

## Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	SAV ,51 ft msl	Distance from Accident Site:	35 Nautical Miles
Observation Time:	08:50 Local	Direction from Accident Site:	145°
<b>Lowest Cloud Condition:</b>	Clear	Visibility	6 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	5 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	100°	Turbulence Severity Forecast/Actual:	1
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	31°C / 23°C
Precipitation and Obscuration:	No Obscuration; No Precipita	ation	
Departure Point:		Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	09:00 Local	Type of Airspace:	Class G

Page 4 of 6 ATL92LA171

## **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 Minor	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Minor	Latitude, Longitude:	32.749248,-81.630081(est)

Page 5 of 6 ATL92LA171

#### **Administrative Information**

Investigator In Charge (IIC):	Powell, Phillip	
Additional Participating Persons:	ROBERT E BRUCE; COLLEGE PARK, GA	
Original Publish Date:	June 21, 1993	
Last Revision Date:		
Investigation Class:	<u>Class</u>	
Note:		
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=8655	

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 ATL92LA171