



# **Aviation Investigation Final Report**

Location: CHALFONT, Pennsylvania Accident Number: NYC89LA218

Date & Time: July 30, 1989, 09:00 Local Registration: N5209G

Aircraft: CESSNA 305A Aircraft Damage: Substantial

**Defining Event:** 1 None

Flight Conducted Under: Part 91: General aviation - Personal

### **Analysis**

SHORTLY AFTER TAKEOFF FROM A PRIVATE FIELD, THE AIRCRAFT ENGINE LOST POWER, AND THE AIRCRAFT WAS LANDED IN A SOY BEAN FIELD WHERE IT NOSED OVER. AN ENGINE CHECK WAS MADE AND NO MECHANICAL DISCREPANCIES WERE FOUND. THE PHILADELPHIA TEMPERATURE AND DEW POINT WERE 72 DEGREES AND 59 DEGREES, RESPECTIVELY.

### **Probable Cause and Findings**

The National Transportation Safety Board determines the probable cause(s) of this accident to be: THE PILOT'S IMPROPER USE OF CARBURETOR HEAT, WHICH RESULTED IN A POWER LOSS DUE TO CARBURETOR ICE. FACTORS RELATED TO THE ACCIDENT WERE: CARBURETOR ICING CONDITIONS AND ROUGH/UNEVEN TERAIN IN THE EMERGENCY LANDING AREA.

#### **Findings**

Occurrence #1: LOSS OF ENGINE POWER(TOTAL) - NONMECHANICAL Phase of Operation: TAKEOFF - INITIAL CLIMB

#### **Findings**

- 1. (F) WEATHER CONDITION CARBURETOR ICING CONDITIONS
- 2. (C) FUEL SYSTEM, CARBURETOR ICE
- 3. (C) CARBURETOR HEAT IMPROPER USE OF 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 TERRAIN/WATER

Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings

4. (F) TERRAIN CONDITION - ROUGH/UNEVEN

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Occurrence #4: NOSE OVER Phase of Operation: OTHER

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## **Factual Information**

### **Pilot Information**

Certificate:	Private	Age:	58,Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Front
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 Valid Medicalw/ waivers/lim	Last FAA Medical Exam:	February 2, 1989
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:	750 hours (Total, all aircraft), 90 hours (Total, this make and model), 675 hours (Pilot In Command, all aircraft), 25 hours (Last 90 days, all aircraft), 9 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

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

Aircraft Make:	CESSNA	Registration:	N5209G
Model/Series:	305A 305A	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:		Serial Number:	21811
Landing Gear Type:	Tailwheel	Seats:	2
Date/Type of Last Inspection:	September 2, 1988 Annual	Certified Max Gross Wt.:	2300 lbs
Time Since Last Inspection:	17 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	8253 Hrs	Engine Manufacturer:	CONTINENTAL
ELT:	Installed	Engine Model/Series:	O-470-11B
Registered Owner:	BROAD AXE EQUIPMENT CO.	Rated Power:	213 Horsepower
Operator:	JOSEPH E. HEFFERMAN, JR.	Operating Certificate(s) Held:	None
Operator Does Business As:		Operator Designator Code:	

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### **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:	
<b>Lowest Cloud Condition:</b>	Unknown	Visibility	3 miles
Lowest Ceiling:	Overcast / 1500 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/
Wind Direction:	0°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	21°C / -18°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:	

## **Airport Information**

Airport:	MOYER	Runway Surface Type:	Grass/turf
Airport Elevation:	310 ft msl	<b>Runway Surface Condition:</b>	Dry
Runway Used:	13	IFR Approach:	None
Runway Length/Width:	2800 ft / 80 ft	VFR Approach/Landing:	Forced 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:	40.280952,-75.199333(est)

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#### **Administrative Information**

Investigator In Charge (IIC): Twinejr., Chauncey  Additional Participating Persons:  Original Publish Date: July 29, 1992  Last Revision Date:  Investigation Class: Class  Note:		
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Investigation Class: Class	Original Publish Date:	July 29, 1992
-	Last Revision Date:	
Note:	Investigation Class:	Class
	Note:	
Investigation Docket: <a href="https://data.ntsb.gov/Docket?ProjectID=36483">https://data.ntsb.gov/Docket?ProjectID=36483</a>	Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=36483

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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