

# **Aviation Investigation Final Report**

Location:	JOLIET, Illinois		Accident Number:	CHI91LA248
Date & Time:	August 2, 1991, 21	:00 Local	<b>Registration:</b>	N5715P
Aircraft:	PIPER	PA-24-180	Aircraft Damage:	Substantial
Defining Event:			Injuries:	4 None
Flight Conducted Under:	Part 91: General aviation - Personal			

### **Analysis**

THE PILOT SAID THAT SHORTLY AFTER LIFTOFF HE FELT A LACK OF ENGINE POWER AND A POSITIVE CLIMB RATE WAS NOT ATTAINED. THE ACFT SETTLED BACK TO THE TERRAIN, JUST BEYOND THE RUNWAY'S END. POST ACCIDENT INVESTIGATION FAILED TO REVEAL ANY POWER RELATED SYSTEM MALFUNCTION.

### **Probable Cause and Findings**

The National Transportation Safety Board determines the probable cause(s) of this accident to be: A PROPER CLIMB RATE WAS NOT ATTAINED WHICH RESULTED IN A MUSH/STALL BY THE PILOT. FACTORS RELATED TO THE ACCIDENT WERE PERFORMANCE DATA MIS-JUDGED DUE TO LACK OF FAMILIARITY WITH THE AIRCRAFT, AND OVER CONFIDENCE IN AIRCRAFT'S ABILITY.

#### Findings

Occurrence #1: LOSS OF CONTROL - IN FLIGHT Phase of Operation: TAKEOFF - INITIAL CLIMB

Findings

1. (C) PROPER CLIMB RATE - NOT ATTAINED - PILOT IN COMMAND

2. (F) OVERCONFIDENCE IN AIRCRAFT'S ABILITY - PILOT IN COMMAND

3. (C) STALL/MUSH - INADVERTENT - PILOT IN COMMAND

4. (F) LACK OF FAMILIARITY WITH AIRCRAFT - PILOT IN COMMAND

Occurrence #2: IN FLIGHT COLLISION WITH TERRAIN/WATER Phase of Operation: DESCENT - UNCONTROLLED

# **Factual Information**

#### **Pilot Information**

Certificate:	Private	Age:	26,Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 Unknown	Last FAA Medical Exam:	September 28, 1990
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:	234 hours (Total, all aircraft), 3 hour aircraft)	s (Total, this make and model), 6 hour	rs (Last 90 days, all

#### Aircraft and Owner/Operator Information

Aircraft Make:	PIPER	Registration:	N5715P
Model/Series:	PA-24-180 PA-24-180	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	24-789
Landing Gear Type:	Retractable - Tricycle	Seats:	4
Date/Type of Last Inspection:	June 6, 1991 Annual	Certified Max Gross Wt.:	2550 lbs
Time Since Last Inspection:	20 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	3594 Hrs	Engine Manufacturer:	LYCOMING
ELT:	Installed, not activated	Engine Model/Series:	0-360-A1A
Registered Owner:		Rated Power:	180 Horsepower
Operator:	COMMUTER FLYING CLUB, INC.	Operating Certificate(s) Held:	None
Operator Does Business As:		Operator Designator Code:	

## Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Night/bright
Observation Facility, Elevation:	ARR ,706 ft msl	Distance from Accident Site:	20 Nautical Miles
Observation Time:	21:45 Local	Direction from Accident Site:	330°
Lowest Cloud Condition:	Unknown / 20000 ft AGL	Visibility	7 miles
Lowest Ceiling:	Broken / 20000 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	7 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	320°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	
Precipitation and Obscuration:	No Obscuration; No Precipita	ation	
Departure Point:		Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	21:00 Local	Type of Airspace:	Class G

## **Airport Information**

Airport:	JOLIET JOT	Runway Surface Type:	Asphalt
Airport Elevation:	582 ft msl	Runway Surface Condition:	Dry
Runway Used:	3	IFR Approach:	None
Runway Length/Width:	2970 ft / 100 ft	VFR Approach/Landing:	None

## Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	3 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	4 None	Latitude, Longitude:	41.520065,-88.119934(est)

#### **Administrative Information**

Investigator In Charge (IIC):	Hruban, John	
Additional Participating Persons:	THOMAS SOERENS;	
Original Publish Date:	February 8, 1993	
Last Revision Date:		
Investigation Class:	<u>Class</u>	
Note:		
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=15145	

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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>.