



# **Aviation Investigation Final Report**

Location: JEFFERSONVILLE, Indiana Accident Number: CHI00LA303

Date & Time: September 20, 2000, 19:30 Local Registration: N63706

Aircraft: Piper PA-31-325 Aircraft Damage: Substantial

**Defining Event:** 1 Minor

Flight Conducted Under: Part 91: General aviation

### **Analysis**

The pilot said that he 'landed properly' on the runway, touching down at about 700 feet from the approach end. He said that he 'applied brakes, which had no effect, ran out of runway, and turned to the right to avoid trees. [The] Grassy field should have worked out, except for the drainage ditch.' The pilot said that later he was told that there was a tail wind estimated at 45 knots, when he landed. Examination of the airplane revealed no anomalies. Approximately 34 minutes before the accident, the weather observation at Louisville, Kentucky, 11 miles south of the accident site, reported winds of 320 degrees at 16 knots, with gusts to 20 knots.

### **Probable Cause and Findings**

The National Transportation Safety Board determines the probable cause(s) of this accident to be: the pilot's inadequate normal braking and the pilot's inability to stop the airplane on the runway. Factors relating to this accident were the hydroplaning conditions, wet runway, the tailwind, the trees, and the ravine.

### **Findings**

Occurrence #1: OVERRUN

Phase of Operation: LANDING - ROLL

#### **Findings**

1. (F) AIRCRAFT PERFORMANCE, HYDROPLANING CONDITION

(C) BRAKES(NORMAL) - INADEQUATE - PILOT IN COMMAND

- 3. (F) WEATHER CONDITION TAILWIND
- 4. (F) AIRPORT FACILITIES, RUNWAY/LANDING AREA CONDITION WET
- 5. (C) DISTANCE EXCEEDED PILOT IN COMMAND

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Occurrence #2: ON GROUND/WATER ENCOUNTER WITH TERRAIN/WATER

Phase of Operation: LANDING - ROLL

#### Findings

6. (F) TERRAIN CONDITION - RAVINE

7. (F) OBJECT - TREE(S)

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#### **Factual Information**

On September 20, 2000, at 1930 eastern daylight time (edt), a Piper PA-31-325, N63706, operated by a private pilot, sustained substantial damage when it ran off the end of runway 14 (3,899 feet by 75 feet, wet asphalt) at the Clark County Airport, Jeffersonville, Indiana, went down a ravine, and impacted the terrain. Visual meteorological conditions prevailed at the time of the accident. The personal flight was being conducted under 14 CFR Part 91. A VFR flight plan was on file. The pilot reported minor injuries. The cross-country flight originated at Elizabethtown, Kentucky, at 1900 edt, and was en route to Jeffersonville, Indiana.

In his written statement, the pilot said that he "landed properly on [runway] 14, touching down at about 700 feet from the beginning of the runway, applied brakes, which had no effect, ran out of runway, and turned to the right to avoid trees. [The] Grassy field should have worked out, except for the drainage ditch." The pilot said that later he was told that there was a tail wind estimated at 45 knots, when he landed.

The airplane was examined by a Federal Aviation Administration inspector at the accident site. The nose of the airplane, aft to the windscreen was crushed aft. The engine nacelles, propellers, engines, and left wing were bent aft. The nose gear and main landing gear were broken off. Flight control continuity was confirmed. Examination of the engine, engine controls, and other airplane systems revealed no anomalies.

At 1856 edt, the weather observation at the Louisville International Airport, Louisville, Kentucky, 11 miles south of the accident site, was ceilings 1,900 feet broken, 3,600 feet 8,000 feet overcast, 4 miles visibility with thunderstorms, rain, and mist, temperature 65 degrees F, dew point 63 degrees F, winds 320 degrees at 16 knots, gusts to 20 knots, and altimeter 29.78 inches of Mercury.

The Pilot's Operating Manual provides a Short Field Accelerate/Stop Distance Chart, based on a dry, paved, level runway. Conditions require an acceleration to 85 miles per hour calibrated airspeed and wing flaps at 15 degrees. For a 6,500 pound airplane, a temperature of 65 degrees F, a pressure altitude of 500 feet, and no headwind, the accelerate stop distance would be approximately 2,100 feet.

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### **Pilot Information**

Certificate:	Private	Age:	52,Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Left
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:	November 8, 2000
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	2117 hours (Total, all aircraft), 889 hours (Total, this make and model)		

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

Aircraft Make:	Piper	Registration:	N63706
Model/Series:	PA-31-325 PA-31-325	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	31-7712035
Landing Gear Type:	Retractable - Tricycle	Seats:	7
Date/Type of Last Inspection:	February 4, 2000 Annual	Certified Max Gross Wt.:	6500 lbs
Time Since Last Inspection:	40 Hrs	Engines:	2 Reciprocating
Airframe Total Time:	3910 Hrs	Engine Manufacturer:	Lycoming
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	TIO-540-F2B2
Registered Owner:	ENTERTAINMENT ENGINEERING INC.	Rated Power:	325 Horsepower
Operator:		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:	SDF,481 ft msl	Distance from Accident Site:	11 Nautical Miles
Observation Time:	18:56 Local	Direction from Accident Site:	175°
<b>Lowest Cloud Condition:</b>	Unknown	Visibility	10 miles
Lowest Ceiling:	Broken / 1900 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	14 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	220°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	18°C / 17°C
Precipitation and Obscuration:	N/A - None - Rain		
Departure Point:	ELIZABETHTOWN (EKX)	Type of Flight Plan Filed:	None
Destination:	(JVY)	Type of Clearance:	None
Departure Time:	19:00 Local	Type of Airspace:	Class D

## **Airport Information**

Airport:	CLARK COUNTY AIRPORT JVY	Runway Surface Type:	Asphalt
Airport Elevation:	474 ft msl	<b>Runway Surface Condition:</b>	Wet
Runway Used:	14	IFR Approach:	None
Runway Length/Width:	3899 ft / 75 ft	VFR Approach/Landing:	Full stop;Traffic pattern

## 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:	38.2999,-85.72052(est)

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#### **Administrative Information**

Investigator In Charge (IIC):	Bowling, David	
Additional Participating Persons:	JIMMIE STANLEY; INDIANAPOLIS , IN	
Original Publish Date:	July 2, 2001	
Last Revision Date:		
Investigation Class:	<u>Class</u>	
Note:	The NTSB traveled to the scene of this accident.	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=50319	

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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