



# **Aviation Investigation Final Report**

Location: NEW CASTLE, Delaware Accident Number: BFO91LA044

Date & Time: April 10, 1991, 15:00 Local Registration: N2535N

Aircraft: PIPER PA-38-112 Aircraft Damage: Substantial

**Defining Event:** 2 None

Flight Conducted Under: Part 91: General aviation - Personal

### **Analysis**

THE PILOT REPORTED THAT WHEN HE WAS CLEARED FOR TAKEOFF BY THE CONTROL TOWER, HE WAS TOLD THAT THE WIND WAS 320 DEGREES AT 20 KNOTS. HE STATED THAT DURING THE TAKEOFF ROLL, THE AIRCRAFT VEERED LEFT. HE TOOK CORRECTIVE ACTION BY APPLYING RIGHT AILERON AND RIGHT RUDDER, BUT HE WAS UNSUCCESSFUL. THE AIRCRAFT WENT OFF THE LEFT SIDE OF THE RUNWAY WHERE IT STRUCK A TAXIWAY SIGN. THE PILOT STATED THAT THE ACCIDENT COULD HAVE BEEN PREVENTED IF HE HAD MORE INSTRUCTION AND PRACTICE IN CROSSWIND AND GUST CONDITIONS.

### **Probable Cause and Findings**

The National Transportation Safety Board determines the probable cause(s) of this accident to be: THE PILOT'S FAILURE TO MAINTAIN DIRECTIONAL CONTROL DURING THE TAKEOFF ROLL. CONTRIBUTING TO THE ACCIDENT WAS THE UNFAVORABLE WIND CONDITION.

### **Findings**

Occurrence #1: LOSS OF CONTROL - ON GROUND/WATER

Phase of Operation: TAKEOFF - ROLL/RUN

#### **Findings**

1. (F) WEATHER CONDITION - UNFAVORABLE WIND

2. (C) DIRECTIONAL CONTROL - NOT MAINTAINED - PILOT IN COMMAND

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Occurrence #2: ON GROUND/WATER COLLISION WITH OBJECT

Phase of Operation: TAKEOFF - ROLL/RUN

Findings
3. AIRPORT FACILITIES, TAXIWAY MARKING

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## **Factual Information**

#### **Pilot Information**

Certificate:	Private	Age:	22,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 1 Valid Medicalno waivers/lim.	Last FAA Medical Exam:	June 19, 1990
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:	80 hours (Total, all aircraft), 65 hours (Total, this make and model), 8 hours (Pilot In Command, all aircraft), 19 hours (Last 90 days, all aircraft), 12 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

## Aircraft and Owner/Operator Information

Aircraft Make:	PIPER	Registration:	N2535N
Model/Series:	PA-38-112 PA-38-112	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal; Utility	Serial Number:	38-79A0904
Landing Gear Type:	Tricycle	Seats:	2
Date/Type of Last Inspection:	April 4, 1991 100 hour	Certified Max Gross Wt.:	1670 lbs
Time Since Last Inspection:	30 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	3741 Hrs	Engine Manufacturer:	LYCOMING
ELT:	Installed, not activated	Engine Model/Series:	0-235-L2C
Registered Owner:	DAWN AERONAUTICS, INC	Rated Power:	112 Horsepower
Operator:	DAWN AERONAUTICS, INC	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:	ILG ,80 ft msl	Distance from Accident Site:	
Observation Time:	14:52 Local	Direction from Accident Site:	
<b>Lowest Cloud Condition:</b>	Scattered / 8000 ft AGL	Visibility	15 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	20 knots / 29 knots	Turbulence Type Forecast/Actual:	/
Wind Direction:	260°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	22°C / 1°C
Precipitation and Obscuration:	No Obscuration; No Precipita	ation	
Departure Point:		Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	15:00 Local	Type of Airspace:	

## **Airport Information**

Airport:	NEW CASTLE COUNTY ILG	Runway Surface Type:	Asphalt
Airport Elevation:	80 ft msl	<b>Runway Surface Condition:</b>	Dry
Runway Used:	32	IFR Approach:	None
Runway Length/Width:	4594 ft / 150 ft	VFR Approach/Landing:	None

## **Wreckage and Impact Information**

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	1 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 None	Latitude, Longitude:	39.659484,-75.569549(est)

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#### **Administrative Information**

Investigator In Charge (IIC):

Additional Participating
Persons:

Original Publish Date:

March 31, 1993

Last Revision Date:

Investigation Class:

Class

Note:

Investigation Docket:

https://data.ntsb.gov/Docket?ProjectID=11673

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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