



Aviation Investigation Final Report

Location:	MAYVILLE, New York	Accident Number:	BF093LA109
Date & Time:	July 5, 1993, 15:45 Local	Registration:	N1990P
Aircraft:	PIPER PA-22	Aircraft Damage:	Destroyed
Defining Event:		Injuries:	2 Minor
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

THE PILOT ATTEMPTED A TAKEOFF WITH A PREVAILING TAILWIND ON A GRASS STRIP. HE STATED THAT HE FELT A 'MAJOR MUSH' ABOUT THREE QUARTERS OF THE WAY DOWN THE RUNWAY AND DROPPED THE NOSE TO GAIN AIRSPEED. REALIZING THAT HE WOULD NOT CLEAR OBSTACLES AT THE END OF THE RUNWAY, HE BANKED TO THE LEFT. THE AIRPLANE CONTINUED TO DESCEND DURING THE BANK AND THE LANDING GEAR IMPACTED A TREE. NO MECHANICAL MALFUNCTIONS WERE REPORTED.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: THE PILOT'S FAILURE TO SELECT THE PROPER RUNWAY FOR TAKEOFF, AND HIS FAILURE TO MAINTAIN CLEARANCE WITH TERRAIN. A FACTOR RELATED TO THE ACCIDENT WAS A PREVAILING TAILWIND.

Findings

Occurrence #1: IN FLIGHT COLLISION WITH OBJECT
Phase of Operation: TAKEOFF - INITIAL CLIMB

Findings

1. OBJECT - TREE(S)
2. (F) WEATHER CONDITION - TAILWIND
3. (C) WRONG RUNWAY - SELECTED - PILOT IN COMMAND
4. (C) CLEARANCE - NOT MAINTAINED - PILOT IN COMMAND

- 5. REMEDIAL ACTION - NOT ATTAINED - PILOT IN COMMAND
- 6. PLANNING/DECISION - INADEQUATE - PILOT IN COMMAND

Factual Information

On July 5, 1993, about 1545 hours eastern daylight time, N1990P, a Piper PA 22, registered to the Dart Airport Flying Club, Mayville, New York, was destroyed after impacting a tree during takeoff from Dart Airport in Mayville, New York. The certificated private pilot and passenger received minor injuries. Visual meteorological conditions prevailed and a flight plan was not filed. The local personal flight was conducted under 14 CFR 91.

According to the pilot.

"I . . . pulled onto runway 24 and checked wind sock again and locked the brakes, put flaps on first notch and ran engine up to full throttle [at 2500 to 2600 revolutions per minute (rpm)] and let go of brakes. The plane went along and became airborne at about 100 yards. At [approximately five eighths to three quarters] of the airstrip I noticed a major mush in the aircraft. The airspeed was showing 65 [miles per hour]. We were [approximately 50 feet] in the air so I dropped the nose to pick up more airspeed, we were at 2500 rpm, the aircraft continued to mush and the end of the runway was rapidly getting closer. I knew that we could not make the trees and house and wires at the end so I turned the aircraft to the left open field . . . at the point of doing this the aircraft dropped more . . . I banked to the left trying to miss tree but the landing gear hit the tree . . . "

According to FAA Aviation Safety Inspector Richard P. Lansill, the airplane ". . . had crashed while attempting a takeoff on runway 31 . . ." Runway 31 is a grass strip 2,750 in length. Mr. Lansill also stated that a fire had ". . . started under the engine cowling a few minutes . . ." following the impact.

Mr. Lansill also stated, "The burn pattern on the ground indicated that a strong wind in the direction of the takeoff run had been blowing at the time the fire occurred. Person present at the airport . . . stated that the wind had been blowing approximately 10 knots from east to southeast at the time of takeoff."

Mr. Lansill also reported that the airplane was loaded to about 50 pounds under the maximum gross weight at takeoff.

No mechanical malfunctions were reported.

Pilot Information

Certificate:	Private	Age:	39, 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 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	September 5, 1991
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:	91 hours (Total, all aircraft), 17 hours (Total, this make and model), 54 hours (Pilot In Command, all aircraft), 5 hours (Last 90 days, all aircraft), 5 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	PIPER	Registration:	N1990P
Model/Series:	PA-22 PA-22	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	22-2701
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:	January 2, 2000 Annual	Certified Max Gross Wt.:	1950 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	LYCOMING
ELT:	Installed	Engine Model/Series:	O-320
Registered Owner:	DART AIRPORT FLYING CLUB	Rated Power:	150 Horsepower
Operator:	DART AIRPORT FLYING CLUB	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:	Day
Observation Facility, Elevation:	JHW ,1724 ft msl	Distance from Accident Site:	15 Nautical Miles
Observation Time:	15:55 Local	Direction from Accident Site:	120°
Lowest Cloud Condition:	Scattered / 4800 ft AGL	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	8 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	190°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	33°C / 21°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:		Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	15:45 Local	Type of Airspace:	Class G

Airport Information

Airport:	DART D79	Runway Surface Type:	Grass/turf
Airport Elevation:	1330 ft msl	Runway Surface Condition:	Dry
Runway Used:	31	IFR Approach:	
Runway Length/Width:	2750 ft / 50 ft	VFR Approach/Landing:	

Wreckage and Impact Information

Crew Injuries:	1 Minor	Aircraft Damage:	Destroyed
Passenger Injuries:	1 Minor	Aircraft Fire:	On-ground
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 Minor	Latitude, Longitude:	42.250667,-79.500862(est)

Administrative Information

Investigator In Charge (IIC):	Guzzetti, Jeffrey
Additional Participating Persons:	RICHARD P LANDSILL; ROCHESTER , NY
Original Publish Date:	May 17, 1994
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=8783

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](#).