



Aviation Investigation Final Report

Location:	DENTON, Texas	Accident Number:	FTW94LA045
Date & Time:	December 5, 1993, 10:15 Local	Registration:	N2360A
Aircraft:	PIPER PA-38-112	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 None
Flight Conducted Under:	Part 91: General aviation - Instructional		

Analysis

THE STUDENT PILOT WAS CLEARED FOR A SUPERVISED CROSS COUNTRY SOLO FLIGHT. THE PILOT ENCOUNTERED TURBULENCE AND HE ABORTED THE CROSS COUNTRY FLIGHT AND ELECTED TO LAND AT ANOTHER AIRPORT; DURING APPROACH TO THE INTENDED LANDING POINT, HE ENCOUNTERED TURBULENCE THAT MADE AIRCRAFT CONTROL DIFFICULT. JUST PRIOR TO CROSSING THE RUNWAY THRESHOLD, THE PILOT LOST CONTROL AND IMPACTED THE GROUND 7 FEET SHORT OF THE RUNWAY.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: THE CAUSE WAS THE PILOT'S FAILURE TO COMPENSATE FOR EXISTING WIND CONDITIONS. A FACTOR WAS THE TURBULENT WEATHER.

Findings

Occurrence #1: UNDERSHOOT
Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings

1. (F) WEATHER CONDITION - TURBULENCE
2. (C) COMPENSATION FOR WIND CONDITIONS - INADEQUATE - PILOT IN COMMAND

Factual Information

On December 5, 1993, at 1015 central standard time, a Piper PA-38-112, N2360A, was substantially damaged while landing at the Denton Municipal Airport, near Denton, Texas. The student pilot was not injured. Visual meteorological conditions prevailed for the solo instructional flight.

According to the operator, the student pilot had been cleared to conduct a cross country flight from Addison, Texas, to Durant, Oklahoma. The student pilot stated that after becoming airborne, he contacted the flight service station to open his visual flight rules (VFR) flight plan. At that point the pilot was informed that moderate turbulence had been reported for his route of flight ahead of his present position.

The student pilot aborted his cross country flight and elected to land at the Denton Municipal Airport. He further reported that while en route to the intended airport the turbulence increased and he had difficulty controlling the airplane.

An inspection of the accident site by a Federal Aviation Administration inspector revealed that the airplane impacted the ground 7 feet short of the runway.

Damage to the airplane consisted of structural damage to the right wing, as well as the collapsing of the nose and right main landing gear. The structural support for the right landing gear attaching point was fractured.

Pilot Information

Certificate:	Student	Age:	Male
Airplane Rating(s):	None	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--w/ waivers/lim	Last FAA Medical Exam:	October 4, 1993
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	30 hours (Total, all aircraft), 30 hours (Total, this make and model), 9 hours (Pilot In Command, all aircraft), 24 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:	PIPER	Registration:	N2360A
Model/Series:	PA-38-112 PA-38-112	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	38-78A0653
Landing Gear Type:	Tricycle	Seats:	2
Date/Type of Last Inspection:	August 9, 1993 100 hour	Certified Max Gross Wt.:	3600 lbs
Time Since Last Inspection:	56 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	3983 Hrs	Engine Manufacturer:	LYCOMING
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	O-235-L2C
Registered Owner:	NORTH DALLAS FLIGHT SCHOOL	Rated Power:	112 Horsepower
Operator:		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:		Distance from Accident Site:	
Observation Time:		Direction from Accident Site:	
Lowest Cloud Condition:	Clear	Visibility	20 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/
Wind Direction:	200°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	ADDISON , TX (ADS)	Type of Flight Plan Filed:	VFR
Destination:	DURANT , OK (DUA)	Type of Clearance:	VFR
Departure Time:	09:30 Local	Type of Airspace:	Class G

Airport Information

Airport:	DENTON MUNICIPAL AIRPORT DTO	Runway Surface Type:	Asphalt
Airport Elevation:	640 ft msl	Runway Surface Condition:	Dry
Runway Used:	17	IFR Approach:	None
Runway Length/Width:	5000 ft / 150 ft	VFR Approach/Landing:	Straight-in

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:	33.209651,-97.130393(est)

Administrative Information

Investigator In Charge (IIC):	Ellis, Matthew
Additional Participating Persons:	C. MAHAFFEY; FORT WORTH , TX
Original Publish Date:	August 1, 1994
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=18974

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