



National Transportation Safety Board Aviation Accident Final Report

Location:	MESQUITE, TX	Accident Number:	FTW94LA286
Date & Time:	09/01/1994, 1916 CDT	Registration:	N66322
Aircraft:	CESSNA 150M	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 None

Flight Conducted Under: Part 91: General Aviation - Instructional

Analysis

DURING A SERIES OF TOUCH AND GO LANDINGS THE STUDENT PILOT OBSERVED A STORM APPROACHING FROM THE SOUTH SO HE ELECTED TO MAKE THE NEXT APPROACH TO A FULL STOP. DURING FINAL APPROACH THE STUDENT PILOT HAD TROUBLE MAINTAINING CONTROL WHEN THE WIND 'SUDDENLY SHIFTED AND THE AIRPLANE REACTED VIOLENTLY TO THE TURBULENCE.' THE PILOT WAS ABLE TO LAND BUT THE AIRPLANE DEPARTED THE RUNWAY AND NOSED OVER. AN INSTRUCTOR PILOT/WITNESS CONFIRMED THE SUDDEN SHIFT IN THE WIND. THE APPROACHING STORM AND CHANGE IN WIND CONDITIONS WERE UNFORCASTED.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: THE UNFAVORABLE GUSTING WINDS. A FACTOR WAS THE PILOT'S FAILURE TO MAINTAIN DIRECTIONAL CONTROL.

Findings

Occurrence #1: LOSS OF CONTROL - ON GROUND/WATER
Phase of Operation: LANDING - ROLL

Findings

1. (F) DIRECTIONAL CONTROL - NOT MAINTAINED - PILOT IN COMMAND
2. WEATHER CONDITION - TURBULENCE
3. (C) WEATHER CONDITION - UNFAVORABLE WIND
4. WEATHER CONDITION - GUSTS

Occurrence #2: NOSE OVER
Phase of Operation: LANDING - ROLL

Factual Information

On September 1, 1994, at 1916 central daylight time, a Cessna 150M, N66322, was substantially damaged when it nosed over during landing at Mesquite, Texas. The solo student pilot was not injured. Visual meteorological conditions prevailed.

The following is based on the pilot/operator report. The pilot was practicing touch and go landings when he observed a storm approaching from the south. He decided to make his next approach to a full stop. He described his final approach as "normal until the wind shifted suddenly" and "the plane reacted violently to the turbulence." The pilot said he was able to land but "the wind blew me off the runway" and the airplane nosed over. He said a flight instructor/witness had told him the "wind had changed suddenly while he was on final approach, and it appeared he had encountered wind shear." The abrupt weather changes were not forecasted.

Pilot Information

Certificate:	Student	Age:	55, Male
Airplane Rating(s):	None	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt, Shoulder harness
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:	06/14/1994
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	20 hours (Total, all aircraft), 19 hours (Total, this make and model), 1 hours (Pilot In Command, all aircraft), 20 hours (Last 90 days, all aircraft), 13 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	CESSNA	Registration:	N66322
Model/Series:	150M 150M	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	15075986
Landing Gear Type:	Tricycle	Seats:	2
Date/Type of Last Inspection:	08/09/1994, 100 Hour	Certified Max Gross Wt.:	1600 lbs
Time Since Last Inspection:	42 Hours	Engines:	1 Reciprocating
Airframe Total Time:	4814 Hours	Engine Manufacturer:	CONTINENTAL
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	O-200-A
Registered Owner:	COPE, MARK J.	Rated Power:	100 hp
Operator:	PRECISION AVIATION	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	, 0 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	0000	Direction from Accident Site:	0°
Lowest Cloud Condition:	Unknown / 0 ft agl	Visibility	25 Miles
Lowest Ceiling:	Overcast / 10000 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/
Wind Direction:		Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	32° C
Precipitation and Obscuration:			
Departure Point:		Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	1845 CDT	Type of Airspace:	Class G

Airport Information

Airport:	PHIL L. HUDSON (HQZ)	Runway Surface Type:	Concrete
Airport Elevation:	445 ft	Runway Surface Condition:	Dry
Runway Used:	35	IFR Approach:	None
Runway Length/Width:	5006 ft / 75 ft	VFR Approach/Landing:	Traffic Pattern

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	

Administrative Information

Investigator In Charge (IIC):	ARNOLD W SCOTT,	Report Date:	12/07/1994
Additional Participating Persons:	HAROLD D CHURCHMAN; DALLAS, TX		
Publish Date:			
Investigation Docket:	NTSB accident and incident dockets serve as permanent archival information for the NTSB's investigations. Dockets released prior to June 1, 2009 are publicly available from the NTSB's Record Management Division at pubinq@ntsb.gov , or at 800-877-6799. Dockets released after this date are available at http://dms.ntsbt.gov/pubdms/ .		

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The Independent Safety Board Act, as codified at 49 U.S.C. Section 1154(b), precludes the admission into evidence or use of any part of an NTSB report related to an incident or accident in a civil action for damages resulting from a matter mentioned in the report. A factual report that may be admissible under 49 U.S.C. § 1154(b) is available [here](#).