

# **Aviation Investigation Final Report**

Location:	La Porte, Texas	Accident Number:	DFW06CA133
Date & Time:	May 19, 2006, 16:40 Local	Registration:	N2378K
Aircraft:	Piper PA-38-112	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 Minor
Flight Conducted Under:	Part 91: General aviation - Personal		

## Analysis

The 150-hour solo student pilot lost control of the single-engine airplane while attempting a short field takeoff from runway 30 with a prevailing 15 knot tailwind. According to the owner/operator of the airplane, the pilot reported that he was following another aircraft to runway 30 for takeoff. The operator added that the pilot performed an intersection takeoff instead of using all available runway because the aircraft he was following blocked his access. During an interview with a Federal Aviation Administration (FAA) inspector, the student pilot stated that after takeoff he allowed his airspeed to deteriorate and the stall horn activated. The pilot added that he elected to "crash" straight ahead after he realized that the airplane could not accelerate or climb. Investigation of the accident site by the FAA inspector revealed that the airplane touched down in the wings level attitude, about 76 feet from the departure end of the runway and impacted a chain link fence before coming to rest in the inverted position approximately 340 feet from the departure end of runway 30. According to evewitnesses interviewed by the FAA inspector, the windsock was indicating a surface wind of at least 15 knots from approximately 160 degrees when the aircraft departed the 4,165-foot long by 75-foot wide runway. The nearest weather reporting station, located approximately 7 nautical miles southwest of the accident site, reported winds from 130 degrees at 10 knots. Another weather reporting station, located approximately 12 miles west of the accident site reported winds from 170 degrees at 11 knots. The student pilot failed to return a completed NTSB Form 6120.1 to the Investigator in Change (IIC).

### **Probable Cause and Findings**

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The student pilot's inadequate weather evaluation and his failure to maintain airspeed which resulted in a stall. A contributing factor was the prevailing tailwind.

#### **Findings**

Occurrence #1: LOSS OF CONTROL - IN FLIGHT Phase of Operation: TAKEOFF - INITIAL CLIMB

Findings

(F) WEATHER CONDITION - TAILWIND
(C) WEATHER EVALUATION - IMPROPER - PILOT IN COMMAND
(C) AIRSPEED - NOT MAINTAINED - PILOT IN COMMAND
STALL - INADVERTENT - PILOT IN COMMAND

Occurrence #2: IN FLIGHT COLLISION WITH TERRAIN/WATER Phase of Operation: DESCENT - UNCONTROLLED

Findings

5. OBJECT - FENCE

6. TERRAIN CONDITION - GROUND

### **Factual Information**

The 150-hour solo student pilot lost control of the single-engine airplane while attempting a short field takeoff from runway 30 with a prevailing 15 knot tailwind. According to the owner/operator of the airplane, the pilot reported that he was following another aircraft to runway 30 for takeoff. The operator added that the pilot performed an intersection takeoff instead of using all available runway because the aircraft he was following blocked his access. During an interview with a Federal Aviation Administration (FAA) inspector, the student pilot stated that after takeoff he allowed his airspeed to deteriorate and the stall horn activated. The pilot added that he elected to "crash" straight ahead after he realized that the airplane could not accelerate or climb. Investigation of the accident site by the FAA inspector revealed that the airplane touched down in the wings level attitude, about 76 feet from the departure end of the runway and impacted a chain link fence before coming to rest in the inverted position approximately 340 feet from the departure end of runway 30. According to evewitnesses interviewed by the FAA inspector, the windsock was indicating a surface wind of at least 15 knots from approximately 160 degrees when the aircraft departed the 4,165-foot long by 75-foot wide runway. The nearest weather reporting station, located approximately 7 nautical miles southwest of the accident site, reported winds from 130 degrees at 10 knots. Another weather reporting station, located approximately 12 miles west of the accident site reported winds from 170 degrees at 11 knots. The student pilot failed to return a completed NTSB Form 6120.1 to the Investigator in Change (IIC).

Certificate:	Student	Age:	18,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	Last FAA Medical Exam:	
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	150 hours (Total, all aircraft), 121 ho all aircraft)	urs (Total, this make and model), 15 h	ours (Last 90 days,

#### Student pilot Information

### Aircraft and Owner/Operator Information

Aircraft Make:	Piper	Registration:	N2378K
Model/Series:	PA-38-112	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	38-79A0601
Landing Gear Type:	Tricycle	Seats:	2
Date/Type of Last Inspection:		Certified Max Gross Wt.:	
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	Lycoming
ELT:	Installed	Engine Model/Series:	0-235-L2A
Registered Owner:	Ascent Aviation LLC	Rated Power:	115 Horsepower
Operator:		Operating Certificate(s) Held:	None

## Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
<b>Observation Facility, Elevation:</b>	HOU,45 ft msl	Distance from Accident Site:	12 Nautical Miles
Observation Time:	16:53 Local	Direction from Accident Site:	
Lowest Cloud Condition:	Few / 5000 ft AGL	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	11 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	170°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.89 inches Hg	Temperature/Dew Point:	30°C / 17°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	La Porte, TX (T41 )	Type of Flight Plan Filed:	None
Destination:	La Porte, TX (T41 )	Type of Clearance:	None
Departure Time:		Type of Airspace:	

### **Airport Information**

Airport:	La Porte Municipal Airport T41	Runway Surface Type:	Asphalt
Airport Elevation:	25 ft msl	Runway Surface Condition:	Dry
Runway Used:	30	IFR Approach:	None
Runway Length/Width:	4165 ft / 75 ft	VFR Approach/Landing:	None

## 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:	29.669166,-95.064163

#### **Administrative Information**

Investigator In Charge (IIC):	Hatch, Craig
Additional Participating Persons:	Tom Latson; Houston, Texas
Original Publish Date:	October 3, 2006
Last Revision Date:	
Investigation Class:	<u>Class</u>
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=63718

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.