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 eyewitnesses 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
1. (F) WEATHER CONDITION - TAILWIND
2. (C) WEATHER EVALUATION - IMPROPER - PILOT IN COMMAND
3. (C) AIRSPEED - NOT MAINTAINED - PILOT IN COMMAND
4. 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 eyewitnesses 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).

Student pilot Information

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 hours (Total, this make and model), 15 hours (Last 90 days, all aircraft)		

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:**	O-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
Observation Facility, Elevation:	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:	Class
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