National Transportation Safety Board
Aviation Accident Final Report

Location:	Bulverde, TX	**Accident Number:**	FTW01LA191
Date & Time:	08/23/2001, 1641 CDT	**Registration:**	N4362A
Aircraft:	Piper PA-46-310P	**Aircraft Damage:**	Destroyed
Defining Event:		**Injuries:**	1 Fatal, 1 Serious
Flight Conducted Under:	Part 91: General Aviation - Personal		

Analysis

The airplane's fuel tanks were fueled from a self serve fuel pump with 63 gallons of fuel prior to departure. The pilot initiated the takeoff roll from runway 30 with a 10 knot tailwind. The airplane was reported to have used the entire length of the runway during the takeoff roll. The airplane became airborne, attained a height approximately 100 feet agl, entered a descent, and subsequently, impacted the ground. A post accident fire consumed the airplane. Immediately following the accident, the pilot reported to local authorities that "he was leaving the airstrip and the plane stalled due to lack of airspeed." The 3,000-foot runway rises rapidly at its north end, such that the departure end of runway 30 was 50 feet higher than the approach end. At the time of the accident, the wind was from 130 degrees at 10 knots and the density altitude was 4,136 feet. Examination of the engine did not reveal any anomalies that would have precluded its operation prior to the accident.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: the pilot's failure to obtain airspeed after rotation, which resulted in a stall/mush. Contributing factors were the tailwind condition, high density altitude, and upsloping runway.

Findings

Occurrence #1: IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation: TAKEOFF - INITIAL CLIMB

Findings
1. (C) AIRSPEED - NOT OBTAINED/MAINTAINED - PILOT IN COMMAND
2. STALL/MUSH - ENCOUNTERED - PILOT IN COMMAND
3. (F) WEATHER CONDITION - TAILWIND
4. (F) WEATHER CONDITION - HIGH DENSITY ALTITUDE
5. (F) AIRPORT FACILITIES,RUNWAY/LANDING AREA CONDITION - UPHILL
6. OBJECT - TREE(S)

Factual Information

On August 23, 2001, approximately 1641 central daylight time, a Piper PA-46-310P single-engine airplane, N4362A, was substantially damaged when it impacted terrain during the initial takeoff climb from the Kestrel Airpark Airport, Bulverde, Texas. The airplane was registered to Klinck Store No 3, Inc., of McAllen, Texas, and operated by two private individuals who were the co-owners and pilots. The private pilot sustained serious injuries and his pilot-rated passenger, who co-owned the airplane, was fatally injured. Visual meteorological conditions prevailed, and no flight plan was filed for the 14 Code of Federal Regulations Part 91 flight. The personal flight was originating at the time of the accident.

According to witnesses, prior to departure the airplane was fueled from a self-serve fuel pump with 63 gallons of fuel. The 3,100-hour pilot initiated the takeoff roll from runway 30. The airplane was observed to utilize the entire length of the runway during the takeoff roll. The airplane became airborne and attained a height approximately 100 feet agl before it entered a descent and impacted the ground. A fire erupted and both occupants were extracted from the airplane by local residents. According to the Texas Department of Public Safety in New Braunfels, Texas, prior to being transported to the hospital, the pilot reported that "he was leaving the airstrip and the plane stalled due to lack of airspeed." The fire consumed the entire airplane, except for the engine and propeller. On August 31, 2001, the passenger succumbed to his injuries. As of the date of this report, the pilot was undergoing rehabilitative treatment for his injuries and was not available for an interview.

FAA inspectors examined the airplane and the accident site. They reported that the 3,000-foot runway contained an upward slope, and that the departure end of runway 30 was 50 feet higher than the approach end. According to airport information, runway 30 "rises rapidly at the north end." The FAA inspectors also stated that the airplane's energy path was approximately 1/3 mile long, along which they located damaged trees with "well-defined cuts that a propeller under power would have made." The propeller blades were bent toward the cambered side and one blade exhibited an "S" type bend. The entire fuselage, from the cockpit aft to the vertical stabilizer, was consumed by the fire. The airplane's maintenance records were not located during the investigation.

At 1653, the weather observation facility at the San Antonio International Airport, San Antonio, Texas, (located 20 miles south of the accident site) reported a few clouds at 9,000 feet, scattered clouds at 25,000 feet, visibility 10 miles, temperature 99 degrees Fahrenheit, dew point 61 degrees Fahrenheit, wind from 130 degrees at 10 knots, and an altimeter setting of 29.94 inches of mercury. The density altitude was calculated to be 4,136 feet.

On September 6, 2001, the Teledyne Continental Motors (TCM) TSIO-550-C engine was examined under supervision of the NTSB Investigator-In-Charge. The engine was intact, displayed no signs of catastrophic failure, and all of the accessories were attached; however, it did display fire damage. The top spark plugs and oil pump cover were removed and the crankshaft was rotated by hand. Crankshaft continuity was confirmed from the propeller to each of the cylinders and to the accessory drive gears. A thumb compression check was performed and according to the TCM representative, "good hand compression was confirmed on all cylinders." The left magneto produced a spark at each terminal when its drive was rotated, and the right magneto sparked at 4 terminals when its drive was rotated. The right magneto was disassembled and its distributor was partially melted. The fuel pump, fuel

manifold, fuel control unit, and oil filter were disassembled and examined. The components did not display any anomalies that could not be attributed to the post accident fire. The left and right turbochargers were disassembled and examined. Rotational scoring was observed on both turbocharger compressor shrouds.

Pilot Information

Certificate:	Private	**Age:**	57, Male
Airplane Rating(s):	Single-engine Land	**Seat Occupied:**	Left
Other Aircraft Rating(s):	None	**Restraint Used:**	Seatbelt, Shoulder harness
Instrument Rating(s):	Airplane	**Second Pilot Present:**	Yes
Instructor Rating(s):	None	**Toxicology Performed:**	No
Medical Certification:	Class 3 Valid Medical--w/ waivers/lim.	**Last FAA Medical Exam:**	11/15/2000
Occupational Pilot:		**Last Flight Review or Equivalent:**	
Flight Time:	3100 hours (Total, all aircraft)		

Other Flight Crew Information

Certificate:	Private	**Age:**	49, Male
Airplane Rating(s):	Multi-engine Land; Single-engine Land	**Seat Occupied:**	Right
Other Aircraft Rating(s):	Helicopter	**Restraint Used:**	Seatbelt, Shoulder harness
Instrument Rating(s):	Airplane	**Second Pilot Present:**	Yes
Instructor Rating(s):	None	**Toxicology Performed:**	No
Medical Certification:	Class 3 Valid Medical--w/ waivers/lim.	**Last FAA Medical Exam:**	08/14/2000
Occupational Pilot:		**Last Flight Review or Equivalent:**	
Flight Time:	2360 hours (Total, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Piper	**Registration:**	N4362A
Model/Series:	PA-46-310P	**Aircraft Category:**	Airplane
Year of Manufacture:		**Amateur Built:**	No
Airworthiness Certificate:	Normal	**Serial Number:**	46-8408053
Landing Gear Type:	Retractable - Tricycle	**Seats:**	6
Date/Type of Last Inspection:	Unknown	**Certified Max Gross Wt.:**	4118 lbs
Time Since Last Inspection:		**Engines:**	1 Reciprocating
Airframe Total Time:		**Engine Manufacturer:**	Continental
ELT:	Installed, not activated	**Engine Model/Series:**	TSIO-550-C(1)
Registered Owner:	Klinck Store No 3 Inc.	**Rated Power:**	310 hp
Operator:	Mr. Jan M. Klinck & Mr. Gary K. Klinck	**Operating Certificate(s) Held:**	None
Operator Does Business As:	N/A	**Operator Designator Code:**	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	**Condition of Light:**	Day
Observation Facility, Elevation:	SAT, 818 ft msl	**Distance from Accident Site:**	20 Nautical Miles
Observation Time:	1653 CDT	**Direction from Accident Site:**	180°
Lowest Cloud Condition:	Few / 9500 ft agl	**Visibility**	10 Miles
Lowest Ceiling:	None	**Visibility (RVR):**	
Wind Speed/Gusts:	10 knots /	**Turbulence Type Forecast/Actual:**	/
Wind Direction:	130°	**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:	29.94 inches Hg	**Temperature/Dew Point:**	37°C / 16°C
Precipitation and Obscuration:			
Departure Point:	Bulvarde, TX (1T7)	**Type of Flight Plan Filed:**	None
Destination:	Unknown	**Type of Clearance:**	Unknown
Departure Time:	1641 CDT	**Type of Airspace:**	Class E

Airport Information

Airport:	Kestrel Airpark (1T7)	**Runway Surface Type:**	Asphalt
Airport Elevation:	1250 ft	**Runway Surface Condition:**	Dry
Runway Used:	30	**IFR Approach:**	Unknown
Runway Length/Width:	3000 ft / 40 ft	**VFR Approach/Landing:**	Unknown

Wreckage and Impact Information

Crew Injuries:	1 Serious	**Aircraft Damage:**	Destroyed
Passenger Injuries:	1 Fatal	**Aircraft Fire:**	On-Ground
Ground Injuries:	N/A	**Aircraft Explosion:**	None
Total Injuries:	1 Fatal, 1 Serious	**Latitude, Longitude:**	

Administrative Information

Investigator In Charge (IIC):	Jason A Ragogna	**Report Date:**	07/15/2002
Additional Participating Persons:	Gary E Stamper; Federal Aviation Administartion; San Antonio, TX Michael McClure; The New Piper Aircraft, Inc; Arlington, TX John T Kent; Teledyne Continental Motors; Seagoville, 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.ntsb.gov/pubdms/.		