



National Transportation Safety Board Aviation Accident Final Report

Location:	Stephenville, TX	Accident Number:	FTW03LA069
Date & Time:	01/01/2003, 1555 CST	Registration:	N335BW
Aircraft:	Wood Thorp T-18	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 Serious, 1 Minor
Flight Conducted Under:	Part 91: General Aviation - Personal		

Analysis

The pilot of a tailwheel-equipped homebuilt airplane lost control of the aircraft during the takeoff roll from the 4,200-foot long by 75-foot wide asphalt Runway 32. The 647-hour instrument-rated private pilot stated that he applied full power slowly, holding back pressure on the controls until the airplane became airborne. During the transition from back pressure to forward pressure a gust of wind came from the west. The pilot was unable to compensate for the wind in a timely fashion to maintain directional control of the airplane. The airplane became airborne after cresting the top of a berm on the east side of the runway, and landed hard on the far side of the berm, spraying the landing gear. The nearest weather reporting station, which is located 34-nautical miles north of the accident site, reported winds from 290 degrees at 17 knots, gusting to 24 knots. The peak winds were reported from 270 degrees at 27 knots.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's loss of directional control as result of his failure to compensate for the prevailing wind conditions. A contributing factor was the gusty crosswinds.

Findings

Occurrence #1: LOSS OF CONTROL - ON GROUND/WATER

Phase of Operation: TAKEOFF - ROLL/RUN

Findings

1. WEATHER CONDITION - HIGH WIND
2. (F) WEATHER CONDITION - GUSTS
3. (F) WEATHER CONDITION - CROSSWIND
4. (C) COMPENSATION FOR WIND CONDITIONS - NOT MAINTAINED - PILOT IN COMMAND
5. (C) DIRECTIONAL CONTROL - NOT MAINTAINED - PILOT IN COMMAND

Occurrence #2: IN FLIGHT COLLISION WITH TERRAIN/WATER

Phase of Operation: TAKEOFF - ROLL/RUN

Findings

6. TERRAIN CONDITION - BERM

Occurrence #3: NOSE OVER

Phase of Operation: TAKEOFF

Factual Information

On January 1, 2003, at 1555 central standard time, a Wood Thorp T-18 tailwheel-equipped homebuilt airplane, N335BW, was substantially damaged upon collision with terrain following a loss of control while attempting to takeoff from the Clark Field Municipal Airport (SEP), near Stephenville, Texas. The instrument-rated private pilot sustained serious injuries and his pilot-rated passenger received minor injuries. The airplane was owned and operated by the pilot, who was also the builder of the airplane. Visual meteorological conditions prevailed for the 14 Code of Federal Regulations Part 91 personal flight for which a flight plan was not filed. The 220-nautical mile cross-country flight was originating at the time of the accident, and was destined for the Baytown Airport (HPY) near Baytown, Texas.

In the Pilot/Operator Aircraft Accident Report (NTSB Form 6120.1/2), the 647-hour pilot, 292 hours of which were in the accident airplane, reported that he applied full power slowly, holding back pressure on the controls until the airplane became airborne. During the transition from back pressure to forward pressure a gust of wind came from the west. The pilot was unable to compensate for the left crosswind in a timely manner to maintain directional control of the airplane. The airplane became airborne after cresting the top of a berm on the east side of the runway, and landed hard on the far side of the berm, spreading the landing gear. The landing gear pointed toward each wing tip, but the airplane was still progressing forward, dragging the landing gear. The landing gear "hung up" on with the ground and the airplane came to a sudden stop, nosed over, and came to rest in the inverted position.

The pilot's sister witnessed the accident, summoned for help, and was the first responder to the accident site. Local fire department and EMS personnel arrived at the accident site. Airbags were used to lift the airplane and the canopy was removed to facilitate the extraction of the two injured occupants.

According to witnesses at the airport, the pilot lost directional control of the airplane during the initial takeoff roll from Runway 32. Runway 32 was reported to be a 4,200 feet long by 75 feet wide asphalt runway.

An FAA inspector, who responded to the accident site, reported that the canopy was crushed, the propeller was damaged, and both wings sustained structural damage. No anomalies were noted with the airframe or the 160-horsepower Lycoming IO-320-B1A engine.

The nearest weather reporting station is located at the Mineral Wells Airport (MWS), which is located 34-nautical miles north of SEP. At 1453 the weather station at MWS reported winds from 290 degrees at 17 knots, gusting to 24 knots. The peak winds were reported from 270 degrees at 27 knots.

Pilot Information

Certificate:	Private	Age:	63, 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:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 Valid Medical--w/ waivers/lim.	Last FAA Medical Exam:	08/14/2002
Occupational Pilot:		Last Flight Review or Equivalent:	11/09/2002
Flight Time:	647 hours (Total, all aircraft), 292 hours (Total, this make and model), 4 hours (Last 90 days, all aircraft), 4 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Wood	Registration:	N335BW
Model/Series:	Thorp T-18	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	Yes
Airworthiness Certificate:	Experimental	Serial Number:	720
Landing Gear Type:	Tailwheel	Seats:	2
Date/Type of Last Inspection:	12/07/2002, Continuous Airworthiness	Certified Max Gross Wt.:	1585 lbs
Time Since Last Inspection:	4 Hours	Engines:	1 Reciprocating
Airframe Total Time:	365 Hours at time of accident	Engine Manufacturer:	Lycoming
ELT:	Installed, not activated	Engine Model/Series:	IO-320-BIA
Registered Owner:	Robert L. Wood	Rated Power:	160 hp
Operator:	Robert L. Wood	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	MWL, 1300 ft msl	Distance from Accident Site:	34 Nautical Miles
Observation Time:	1453 CST	Direction from Accident Site:	180°
Lowest Cloud Condition:	Clear	Visibility	10 Miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	17 knots / 24 knots	Turbulence Type Forecast/Actual:	/
Wind Direction:	290°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.7 inches Hg	Temperature/Dew Point:	19° C / 2° C
Precipitation and Obscuration:			
Departure Point:	Stephenville, TX (SEP)	Type of Flight Plan Filed:	None
Destination:	Baytown, TX (HPY)	Type of Clearance:	None
Departure Time:	1555 CST	Type of Airspace:	Class G

Airport Information

Airport:	Clark Field (SEP)	Runway Surface Type:	Asphalt
Airport Elevation:	1320 ft	Runway Surface Condition:	Dry
Runway Used:	32	IFR Approach:	Unknown
Runway Length/Width:	4200 ft / 75 ft	VFR Approach/Landing:	Unknown

Wreckage and Impact Information

Crew Injuries:	1 Serious	Aircraft Damage:	Substantial
Passenger Injuries:	1 Minor	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Serious, 1 Minor	Latitude, Longitude:	32.215278, -98.177500

Administrative Information

Investigator In Charge (IIC):	Hector R Casanova	Report Date:	06/30/2004
Additional Participating Persons:	Gary F Worthy; Federal Aviation Administration; Fort Worth, 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.nts.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](#).