



National Transportation Safety Board Aviation Accident Data Summary

Location:	ROANOKE, TX	Accident Number:	FTW96FA004
Date & Time:	10/02/1995, 1225 CDT	Registration:	N85636
Aircraft:	AERONCA 7AC	Injuries:	2 Serious
Flight Conducted Under:	Part 91: General Aviation - Personal		

Analysis

The pilot obtained two weather briefings for the cross country flight. The second briefing was obtained approximately 4 hours prior to departure. The briefings included a convective sigmet and a severe thunderstorm watch. Lines of thunderstorms (tops to 45,000) associated with a cold front were moving into the area. At the time of the second briefing the winds in the area were from the south at 8 to 12 knots. The airplane departed runway 17. The pilot stated that 'during the takeoff ground roll, at approximately the same time that the tailwheel lifted from the runway' the windsock extended from 'limp to standing straight out due to a very strong gust.' The main wheels had not lifted off the runway, when the wind 'hit,' and 'picked the airplane up like a helicopter or a kite.' The airplane crashed after lift-off. Peak surface wind shifts from southwest through northeast near the time of departure reached 70 degrees with gusts to 33 knots. Witnesses reported winds at the departure airport shifted from the south to the north with gusts to 35 knots. Pilot reports included moderate to severe turbulence below 8,000 MSL.

Probable Cause

The National Transportation Safety Board determines the probable cause(s) of this accident to be: the pilot's inadequate weather evaluation and encounter with a sudden windshift and tailwind. The wind gusts and turbulence were factors.

Findings

Occurrence #1: IN FLIGHT ENCOUNTER WITH WEATHER
Phase of Operation: TAKEOFF - ROLL/RUN

Findings

1. (C) WEATHER EVALUATION - INADEQUATE - PILOT IN COMMAND
2. (C) WEATHER CONDITION - SUDDEN WINDSHIFT
3. (C) WEATHER CONDITION - TAILWIND
4. (F) WEATHER CONDITION - GUSTS
5. (F) WEATHER CONDITION - TURBULENCE

Occurrence #2: LOSS OF CONTROL - IN FLIGHT
Phase of Operation: TAKEOFF - INITIAL CLIMB

Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation: DESCENT - UNCONTROLLED

Pilot Information

Certificate:	Commercial	Age:	24
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Instrument Rating(s):	Airplane
Other Aircraft Rating(s):	None	Instructor Rating(s):	Airplane Multi-engine; Airplane Single-engine; Instrument Airplane
Flight Time:	747 hours (Total, all aircraft), 36 hours (Total, this make and model)		

Aircraft and Owner/Operator Information

Aircraft Make:	AERONCA	Registration:	N85636
Model/Series:	7AC 7AC	Engines:	1 Reciprocating
Operator:	GRANT D. SMITH	Engine Manufacturer:	CONTINENTAL
Operating Certificate(s) Held:	None	Engine Model/Series:	C-85-12F
Flight Conducted Under:	Part 91: General Aviation - Personal		

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	AFW, 722 ft msl	Weather Information Source:	Weather Observation Facility
Lowest Ceiling:	Broken / 3300 ft agl	Wind Speed/Gusts, Direction:	25 knots / 35 knots, 310°
Temperature:	18° C	Visibility	7 Miles
Precipitation and Obscuration:			
Departure Point:	(52F)	Destination:	SHERMAN, TX (SWI)

Airport Information

Airport:	NORTHWEST REGIONAL (52F)	Runway Surface Type:	Asphalt
Runway Used:	17	Runway Surface Condition:	Dry
Runway Length/Width:	3500 ft / 40 ft		

Wreckage and Impact Information

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

Administrative Information

Investigator In Charge (IIC): JOYCE M SMITH

Adopted Date: 04/29/1996

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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