



National Transportation Safety Board Aviation Accident Data Summary

Location:	LAKE ELMO, MN	Accident Number:	CHI98LA003
Date & Time:	10/02/1997, 0605 CDT	Registration:	N916TM
Aircraft:	Beech E18S	Injuries:	2 None
Flight Conducted Under:	Part 91: General Aviation - Positioning		

Analysis

The pilot reported that the airplane lifted off at 70 knots. After accelerating in ground effect the airplane became 'unstable in the roll axis' so he added power. He reported that the left wing tip contacted the runway approximately 3/4 the way down the runway. The pilot then added additional power at which point the left wing contacted the grass off the left side of the departure end of the runway. The pilot then reduced the power to idle and landed the airplane in the grass collapsing the landing gear. The pilot reported that the engines sounded normal throughout the accident sequence. Investigation revealed another Beech 18 had taken off on the same runway, but in the opposite direction of N916TM less than one minute prior to the accident.

Probable Cause

The National Transportation Safety Board determines the probable cause(s) of this accident to be: the pilot's failure identify the unsafe condition (vortex turbulence) which existed due to departing airplane and his subsequent inability to control the airplane once encountering the turbulence.

Findings

Occurrence #1: VORTEX TURBULENCE ENCOUNTERED

Phase of Operation: TAKEOFF - INITIAL CLIMB

Findings

1. (C) UNSAFE/HAZARDOUS CONDITION - NOT IDENTIFIED - PILOT IN COMMAND
2. (C) AIRCRAFT CONTROL - NOT POSSIBLE - PILOT IN COMMAND

Occurrence #2: DRAGGED WING, ROTOR, POD, FLOAT OR TAIL/SKID

Phase of Operation: TAKEOFF - INITIAL CLIMB

Findings

3. TERRAIN CONDITION - GRASS

Occurrence #3: MAIN GEAR COLLAPSED

Phase of Operation: TAKEOFF - ABORTED

Pilot Information

Certificate:	Airline Transport	Age:	29
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Instrument Rating(s):	Airplane; Helicopter
Other Aircraft Rating(s):	Helicopter	Instructor Rating(s):	None
Flight Time:	4450 hours (Total, all aircraft), 350 hours (Total, this make and model), 3800 hours (Pilot In Command, all aircraft), 200 hours (Last 90 days, all aircraft), 50 hours (Last 30 days, all aircraft), 3 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Beech	Registration:	N916TM
Model/Series:	E185 E185	Engines:	2 Reciprocating
Operator:	MAY AIR XPRESS	Engine Manufacturer:	P&W
Operating Certificate(s) Held:	On-demand Air Taxi (135)	Engine Model/Series:	R-985
Flight Conducted Under:	Part 91: General Aviation - Positioning		

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Night/Dark
Observation Facility, Elevation:	STP, 705 ft msl	Weather Information Source:	Weather Observation Facility
Lowest Ceiling:	None / 0 ft agl	Wind Speed/Gusts, Direction:	5 knots / , 140°
Temperature:	12° C	Visibility	10 Miles
Precipitation and Obscuration:			
Departure Point:	(21D)	Destination:	MINNEAPOLIS, MN (MSP)

Airport Information

Airport:	LAKE ELMO (21D)	Runway Surface Type:	Macadam
Runway Used:	31	Runway Surface Condition:	Dry
Runway Length/Width:	3250 ft / 75 ft		

Wreckage and Impact Information

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

Administrative Information

Investigator In Charge (IIC): PAMELA S SULLIVAN Adopted Date: 04/24/1998

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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