



National Transportation Safety Board Aviation Accident Final Report

Location:	APPLETON, WI	Accident Number:	CHI90FA065
Date & Time:	01/16/1990, 2038 CST	Registration:	N87163
Aircraft:	CESSNA 402B	Aircraft Damage:	Destroyed
Defining Event:		Injuries:	1 Fatal
Flight Conducted Under:	Part 135: Air Taxi & Commuter - Non-scheduled		

Analysis

THE PILOT RECEIVED NUMEROUS WEATHER BRIEFINGS/UPDATES BEFORE TAKEOFF, WHICH INCLUDED TWO PILOT REPORTS OF WINDSHEAR BY AIRCRAFT ON THE APPROACH INTO APPLETON. SHORTLY AFTER TAKEOFF CONVECTIVE SIGMET 1E WAS TRANSMITTED BY THE RADAR CONTROLLER ON THE SAME FREQUENCY HE WAS WORKING N87163. THIS SIGMET CALLED FOR EMBEDDED THUNDERSTORMS. ABOUT 10 MIN LATER, WHILE BEING VECTORED FOR THE APPROACH INTO APPLETON, THE PILOT WAS GIVEN HEADING DEVIATIONS BECAUSE OF WEATHER. THE AIRCRAFT CRASHED 1/2 MI FROM THE APPROACH END OF THE RUNWAY. A WITNESS WHOSE RESIDENCE IS LOCATED BETWEEN THE OM AND MM FOR THE ILS APPROACH REPORTED A 'HUGE DOWNPOUR' WITH 'VERY STRONG WINDS' AT THE TIME OF THE ACCIDENT. WRECKAGE EXAMINATION REVEALED THAT ALL POWER CONTROLS FOR BOTH ENGINES WERE IN THE FULL FORWARD POSITION, AND THAT THE LEFT AND RIGHT MAIN LANDING GEAR MOUNTING TRUNNIONS WERE DISPLACED UPWARD INTO THE WING FUEL TANKS.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: THE PILOT'S DECISION TO CONTINUE FLIGHT INTO KNOWN ADVERSE WEATHER CONDITIONS RESULTING IN A WINDSHEAR ENCOUNTER WITH INSUFFICIENT ALTITUDE FOR RECOVERY. THE EXISTING ADVERSE WEATHER CONDITIONS WERE FACTORS.

Findings

Occurrence #1: IN FLIGHT COLLISION WITH TERRAIN/WATER

Phase of Operation: APPROACH - FAF/OUTER MARKER TO THRESHOLD (IFR)

Findings

1. (F) LIGHT CONDITION - DARK NIGHT
2. (F) WEATHER CONDITION - ICING CONDITIONS
3. (F) WEATHER CONDITION - LOW CEILING
4. (F) WEATHER CONDITION - FOG
5. (F) WEATHER CONDITION - THUNDERSTORM
6. (F) WEATHER CONDITION - RAIN
7. (C) WEATHER CONDITION - WINDSHEAR
8. (C) FLIGHT INTO KNOWN ADVERSE WEATHER - CONTINUED - PILOT IN COMMAND

Factual Information

Pilot Information

Certificate:	Commercial	Age:	27, Male
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Seat Occupied:	Unknown
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	Yes
Medical Certification:	Class 1 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	11/18/1989
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	1920 hours (Total, all aircraft), 425 hours (Total, this make and model), 1800 hours (Pilot In Command, all aircraft), 230 hours (Last 90 days, all aircraft), 65 hours (Last 30 days, all aircraft), 6 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	CESSNA	Registration:	N87163
Model/Series:	402B 402B	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:		Serial Number:	402B1005
Landing Gear Type:	Retractable - Tricycle	Seats:	2
Date/Type of Last Inspection:	Unknown	Certified Max Gross Wt.:	6300 lbs
Time Since Last Inspection:		Engines:	2 Reciprocating
Airframe Total Time:		Engine Manufacturer:	CONTINENTAL
ELT:	Installed, not activated	Engine Model/Series:	TSIO-520-EB8
Registered Owner:	SUPERIOR AVIATION, INC.	Rated Power:	300 hp
Operator:	SUPERIOR AVIATION, INC.	Operating Certificate(s) Held:	On-demand Air Taxi (135)
Operator Does Business As:	AIRBORNE EXPRESS	Operator Designator Code:	EATA

Meteorological Information and Flight Plan

Conditions at Accident Site:	Instrument Conditions	Condition of Light:	Night/Dark
Observation Facility, Elevation:	ATW, 918 ft msl	Distance from Accident Site:	1 Nautical Miles
Observation Time:	2040 CST	Direction from Accident Site:	30°
Lowest Cloud Condition:	Unknown / 0 ft agl	Visibility	0 Miles
Lowest Ceiling:	Obscured / 200 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	5 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	60°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	0°C / -1°C
Precipitation and Obscuration:			
Departure Point:	MOSINEE, WI (CWA)	Type of Flight Plan Filed:	IFR
Destination:		Type of Clearance:	IFR
Departure Time:	2006 CST	Type of Airspace:	

Airport Information

Airport:	OUTAGAMIE COUNTY (ATW)	Runway Surface Type:	
Airport Elevation:	918 ft	Runway Surface Condition:	
Runway Used:	3	IFR Approach:	ILS
Runway Length/Width:	7001 ft / 150 ft	VFR Approach/Landing:	None

Wreckage and Impact Information

Crew Injuries:	1 Fatal	Aircraft Damage:	Destroyed
Passenger Injuries:	N/A	Aircraft Fire:	On-Ground
Ground Injuries:	N/A	Aircraft Explosion:	On-Ground
Total Injuries:	1 Fatal	Latitude, Longitude:	

Administrative Information

Investigator In Charge (IIC):	MARK E DOUB	Report Date:	12/14/1992
Additional Participating Persons:	ROBERT WHITE; WICHITA, KS GEORGE HOLLINGSWORTH; ALEXANDRIA, VA JEFF ANDERSON; MILWAUKEE, WI		
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/ .		

The National Transportation Safety Board (NTSB), established in 1967, is an independent federal agency mandated by Congress through the Independent Safety Board Act of 1974 to investigate transportation accidents, determine the probable causes of the accidents, issue safety recommendations, study transportation safety issues, and evaluate the safety effectiveness of government agencies involved in transportation. The NTSB makes public its actions and decisions through accident reports, safety studies, special investigation reports, safety recommendations, and statistical reviews.

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](#).