



# National Transportation Safety Board Aviation Accident Final Report

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<b>Location:</b>	KNOXVILLE, TN	<b>Accident Number:</b>	ATL88FA191
<b>Date &amp; Time:</b>	06/09/1988, 1203 EDT	<b>Registration:</b>	N700SC
<b>Aircraft:</b>	CESSNA 421B	<b>Aircraft Damage:</b>	Destroyed
<b>Defining Event:</b>		<b>Injuries:</b>	1 Fatal

**Flight Conducted Under:** Part 91: General Aviation - Business

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## Analysis

DURING AN IFR FLT AT FL170, THE PLT RPTD AIRFRAME ICING AND REQUESTED A HIGHER ALT. THE PLT CLIMBED TO FL210 WHERE HE STARTED A DESCENT AND RPTD LOSS OF MANIFOLD PRESSURE IN THE LEFT ENGINE. THE PLT INDICATED THAT WX WAS IN HIS FLT PATH AND DESCENT WAS REQUIRED TO AVOID ICING. 90 SECONDS LATER THE PLT XMITTED '...LOSING IT...'. RADAR DATA INDICATED ACFT HAD AN INFLT BREAKUP AT APPROXIMATELY 17,000' MSL. THERE WAS NO EVIDENCE OF MECHANICAL OR STRUCTURAL MALFUNCTION PRIOR TO THE BREAKUP. THE ACFT DID NOT HAVE A COMPLETE CURRENT ANNUAL AND DE-ICE EQUIPMENT WAS INOP. THE PLT HAD NO ACTUAL INST EXPERIENCE AND WAS NOT CERTIFIED FOR MULTIENGINE IFR FLT. THE PLT HAD A MEDICAL HISTORY OF ANXIETY ATTACKS AND HAD BEEN TAKING PRESCRIPTION MEDICATION, XANAX AND TOFRANIL, FOR APPROX THREE YEARS PRIOR TO THE ACCIDENT. THE BLOOD CONTAINED 1.2 MCG/ML OF IMIPRAMINE(TOFRANIL) AND 2.6 MCG/ML DESIPRAMINE(METABOLITE OF TOFRANIL). XANAX (ALPRAZOLAM) WAS NOT RPTD IN BLOOD TOX. THESE DRUGS HAVE BEEN KNOWN TO PRODUCE SIDE EFFECTS THAT INCLUDE POOR JUDGEMENT.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be:

## Findings

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Occurrence #1: IN FLIGHT ENCOUNTER WITH WEATHER  
Phase of Operation: CRUISE - NORMAL

### Findings

1. (F) WEATHER CONDITION - THUNDERSTORM
  2. (F) WEATHER CONDITION - ICING CONDITIONS
  3. (F) FLIGHT CONTROL SURFACES/ATTACHMENTS - ICE
  4. (F) WEATHER CONDITION - RAIN
  5. (F) WEATHER CONDITION - TURBULENCE
  6. (C) IN-FLIGHT PLANNING/DECISION - POOR - PILOT IN COMMAND
  7. (C) IMPAIRMENT(DRUGS) - PILOT IN COMMAND
  8. (C) FLIGHT INTO KNOWN ADVERSE WEATHER - INTENTIONAL - PILOT IN COMMAND
  9. (F) LACK OF TOTAL INSTRUMENT TIME - PILOT IN COMMAND
  10. (F) OPERATION WITH KNOWN DEFICIENCIES IN EQUIPMENT - PERFORMED - PILOT IN COMMAND
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Occurrence #2: LOSS OF ENGINE POWER(PARTIAL) - NONMECHANICAL  
Phase of Operation: CRUISE

### Findings

11. 1 ENGINE
  12. ENGINE ASSEMBLY - UNDETERMINED
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Occurrence #3: AIRFRAME/COMPONENT/SYSTEM FAILURE/MALFUNCTION  
Phase of Operation: DESCENT - UNCONTROLLED

### Findings

13. (F) OPERATION WITH KNOWN DEFICIENCIES IN EQUIPMENT - PERFORMED - PILOT IN COMMAND
  14. (C) DESIGN STRESS LIMITS OF AIRCRAFT - EXCEEDED - PILOT IN COMMAND
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Occurrence #4: IN FLIGHT COLLISION WITH TERRAIN/WATER  
Phase of Operation: DESCENT - UNCONTROLLED

### Findings

15. TERRAIN CONDITION - RESIDENTIAL AREA

## Factual Information

### Pilot Information

<b>Certificate:</b>	Private	<b>Age:</b>	31, Male
<b>Airplane Rating(s):</b>	Multi-engine Land; Single-engine Land	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	Seatbelt
<b>Instrument Rating(s):</b>	Airplane	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	Yes
<b>Medical Certification:</b>	Class 3 Valid Medical--no waivers/lim.	<b>Last FAA Medical Exam:</b>	06/06/1986
<b>Occupational Pilot:</b>		<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	435 hours (Total, all aircraft), 250 hours (Total, this make and model), 344 hours (Pilot In Command, all aircraft), 117 hours (Last 90 days, all aircraft), 68 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

### Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	CESSNA	<b>Registration:</b>	N700SC
<b>Model/Series:</b>	421B 421B	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	No
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	421B0910
<b>Landing Gear Type:</b>	Retractable - Tricycle	<b>Seats:</b>	8
<b>Date/Type of Last Inspection:</b>	07/23/1987, Annual	<b>Certified Max Gross Wt.:</b>	7450 lbs
<b>Time Since Last Inspection:</b>	120 Hours	<b>Engines:</b>	2 Reciprocating
<b>Airframe Total Time:</b>	3516 Hours	<b>Engine Manufacturer:</b>	CONTINENTAL
<b>ELT:</b>	Installed, not activated	<b>Engine Model/Series:</b>	GTSIO-520-H
<b>Registered Owner:</b>	DAVID M. BAILIE, INC.	<b>Rated Power:</b>	375 hp
<b>Operator:</b>	DAVID M. BAILIE, INC.	<b>Operating Certificate(s) Held:</b>	None

## Meteorological Information and Flight Plan

Conditions at Accident Site:	Instrument Conditions	Condition of Light:	Day
Observation Facility, Elevation:	TYS, 981 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	1150 EDT	Direction from Accident Site:	0°
Lowest Cloud Condition:	Unknown / 0 ft agl	Visibility	1 Miles
Lowest Ceiling:	Overcast / 3400 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	11 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	40°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	19° C / 18° C
Precipitation and Obscuration:			
Departure Point:	INDIANAPOLIS, IN (IND)	Type of Flight Plan Filed:	IFR
Destination:	JACKSONVILLE, FL (JAX)	Type of Clearance:	IFR
Departure Time:	1036 EDT	Type of Airspace:	Class E

## Wreckage and Impact Information

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

## Administrative Information

Investigator In Charge (IIC):	CHARLES T FOUTS	Report Date:	11/16/1989
Additional Participating Persons:	LARRY WILLIAMS; NASHVILLE, TN DALE CARTER; MARIETTA, GA TERESA O'LEARY; WICHITA, KS		
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 <a href="mailto:pubinq@ntsb.gov">pubinq@ntsb.gov</a> , or at 800-877-6799. Dockets released after this date are available at <a href="http://dms.nts.gov/pubdms/">http://dms.nts.gov/pubdms/</a> .		

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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](#).