



National Transportation Safety Board Aviation Accident Final Report

Location:	ATLANTIC OCEAN, AO	Accident Number:	ATL92FA039
Date & Time:	01/13/1992, 1606 EST	Registration:	N40JK
Aircraft:	CESSNA 421C	Aircraft Damage:	Destroyed
Defining Event:		Injuries:	5 Fatal
Flight Conducted Under:	Part 91: General Aviation - Personal		

Analysis

AT 0716, THE PILOT RCVD A WX BRIEF FOR A PROPOSED TAKEOFF OF 1130. THE FSS BRIEFER PROVIDED INFO ON TSTMS FORECAST IN GA & FL. NO INFO WAS PROVIDED ABOUT FORECAST LINES & CLUSTERS OF TSTMS IN SC CSTL PLAINS & SERN GA. EN ROUTE, THE PILOT WAS GIVEN INFO ABOUT LEVEL III TSTMS ACROSS THE PROJECTED FLIGHT PATH BY BEAUFORT & SAVANNAH APPCH CNTRL. ATC RADAR DATA REVEALED THAT THE ACFT FLEW THE ROUTE CONTAINED IN THE FLIGHT PLAN CLEARANCE. RADIO TRANSMISSIONS FROM THE ACFT INDICATED THAT ONBOARD WX RADAR WAS BEING USED. ATC RADAR DATA & RADIO COMMUNICATIONS INDICATED THAT THE ACFT ENTERED A TSTM, THEN MADE A 180 DEGREE TURN TO EXIT THE STORM. EXAMINATION OF THE WRECKAGE REVEALED PLASTIC DEFORMATION OF THE WINGS INBOARD OF THE ENGINES IN AN UPWARD DIRECTION. ALSO, BOTH WINGS BROKE OFF OUTBOARD OF THE ENGINES IN A DOWNWARD DIRECTION. THE HORIZONTAL STAB & ELEVATOR WERE NOT RECOVERED. THERE WAS FUSELAGE DAMAGE WHICH INDICATED THAT THE HORIZONTAL STAB SEPARATED AFT & DOWN.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: THE PILOT'S INADEQUATE WEATHER EVALUATION, AND HIS CONTINUED FLIGHT INTO KNOWN ADVERSE WEATHER CONDITIONS. FACTORS WERE: THE IMPROPER WEATHER BRIEFING BY A FLIGHT SERVICE STATION SPECIALIST, AND LEVEL III THUNDERSTORMS.

Findings

Occurrence #1: IN FLIGHT ENCOUNTER WITH WEATHER

Phase of Operation: CRUISE - NORMAL

Findings

1. (F) PREFLIGHT BRIEFING SERVICE - IMPROPER - ATC PERSONNEL(FSS)
2. (C) WEATHER EVALUATION - INADEQUATE - PILOT IN COMMAND
3. (F) WEATHER CONDITION - THUNDERSTORM,LEVEL III
4. HAZARDOUS WEATHER ADVISORY - ISSUED - ATC PERSONNEL(DEP/APCH)
5. (C) FLIGHT INTO KNOWN ADVERSE WEATHER - CONTINUED - PILOT IN COMMAND

Occurrence #2: LOSS OF CONTROL - IN FLIGHT

Phase of Operation: MANEUVERING - TURN TO REVERSE DIRECTION

Occurrence #3: AIRFRAME/COMPONENT/SYSTEM FAILURE/MALFUNCTION

Phase of Operation: DESCENT - UNCONTROLLED

Findings

6. DESIGN STRESS LIMITS OF AIRCRAFT - EXCEEDED - PILOT IN COMMAND
7. WING - OVERLOAD
8. WING - SEPARATION

Occurrence #4: IN FLIGHT COLLISION WITH TERRAIN/WATER

Phase of Operation: DESCENT - UNCONTROLLED

Factual Information

Pilot Information

Certificate:	Private	Age:	60, Male
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Seat Occupied:	Unknown
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	Yes
Medical Certification:	Class 3 Valid Medical--w/ waivers/lim.	Last FAA Medical Exam:	08/14/1990
Occupational Pilot:	Last Flight Review or Equivalent:		
Flight Time:	3064 hours (Total, all aircraft), 500 hours (Total, this make and model)		

Aircraft and Owner/Operator Information

Aircraft Make:	CESSNA	Registration:	N40JK
Model/Series:	421C 421C	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	42100441
Landing Gear Type:	Retractable - Tricycle	Seats:	7
Date/Type of Last Inspection:	06/26/1991, Annual	Certified Max Gross Wt.:	7200 lbs
Time Since Last Inspection:		Engines:	2 Reciprocating
Airframe Total Time:		Engine Manufacturer:	CONTINENTAL
ELT:	Installed, not activated	Engine Model/Series:	GTSIO-520-L
Registered Owner:	WILLIAMSON, J. M.	Rated Power:	375 hp
Operator:	WILLIAMSON, J. M.	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Instrument Conditions	Condition of Light:	Day
Observation Facility, Elevation:	SSI, 20 ft msl	Distance from Accident Site:	30 Nautical Miles
Observation Time:	1548 EST	Direction from Accident Site:	340°
Lowest Cloud Condition:	Scattered / 600 ft agl	Visibility	1 Miles
Lowest Ceiling:	Overcast / 1200 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	Calm /	Turbulence Type Forecast/Actual:	/
Wind Direction:		Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	15° C / 15° C
Precipitation and Obscuration:			
Departure Point:	MILVILLE, NJ (MIV)	Type of Flight Plan Filed:	IFR
Destination:	SEBASTIAN, FL (X26)	Type of Clearance:	IFR
Departure Time:	1214 EST	Type of Airspace:	Class E

Wreckage and Impact Information

Crew Injuries:	1 Fatal	Aircraft Damage:	Destroyed
Passenger Injuries:	4 Fatal	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	5 Fatal	Latitude, Longitude:	

Administrative Information

Investigator In Charge (IIC):	Preston E Hicks	Report Date:	10/08/1993
Additional Participating Persons:	JOE WALL; ATLANTA, GA		
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 pubinquiry@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](#).