



# National Transportation Safety Board Aviation Accident Data Summary

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<b>Location:</b>	WAYNESBORO, GA	<b>Accident Number:</b>	ATL97LA056
<b>Date &amp; Time:</b>	04/02/1997, 1735 EST	<b>Registration:</b>	N53212
<b>Aircraft:</b>	Cessna A188B	<b>Injuries:</b>	1 Fatal
<b>Flight Conducted Under:</b>	Part 137: Agricultural		

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## Analysis

The airplane was attempting to spray a wheat field which was 4 1/2 miles south of the departure airport. It crashed in a heavily wooded area 1 mile south of the wheat field. According to the Cessna investigator, the airplane was within the center of gravity and weight limits. The Cessna representative also reported the left horizontal stabilizer and elevator were separated from the main wreckage. He also believed the flaps were extended one notch. Further examination of the wreckage showed the right wing was fractured along the chord line from the leading edge to the rear spar. This occurred at the rib inboard of the strut attachment point on the wing. Aft of the rear spar, the wing panel exhibited 45 degree buckling on either side of the fracture. The top cap of the front spar exhibited double bending; the outboard bend was down, and the inboard bend was up. At the inboard bend, the spar was fractured. The fracture had a 45 degree bevel and no shear lips, consistent with a tensile overload failure.

## Probable Cause

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The failure of the right wing after the pilot exceeded the design stress limit of the airplane, leading to a loss of control in flight.

## Findings

Occurrence #1: AIRFRAME/COMPONENT/SYSTEM FAILURE/MALFUNCTION  
Phase of Operation: MANEUVERING - AERIAL APPLICATION

### Findings

1. (C) WING - FAILURE, TOTAL
2. (C) DESIGN STRESS LIMITS OF AIRCRAFT - EXCEEDED - PILOT IN COMMAND

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Occurrence #2: LOSS OF CONTROL - IN FLIGHT  
Phase of Operation: MANEUVERING - AERIAL APPLICATION  
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Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER  
Phase of Operation: DESCENT - UNCONTROLLED

## Pilot Information

<b>Certificate:</b>	Commercial	<b>Age:</b>	35
<b>Airplane Rating(s):</b>	Single-engine Land	<b>Instrument Rating(s):</b>	Airplane
<b>Other Aircraft Rating(s):</b>	None	<b>Instructor Rating(s):</b>	None
<b>Flight Time:</b>	875 hours (Total, all aircraft), 15 hours (Total, this make and model), 875 hours (Pilot In Command, all aircraft), 50 hours (Last 90 days, all aircraft), 20 hours (Last 30 days, all aircraft), 4 hours (Last 24 hours, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Cessna	<b>Registration:</b>	N53212
<b>Model/Series:</b>	A188B A188B	<b>Engines:</b>	1 Reciprocating
<b>Operator:</b>	MCMILLAN AGRICULTURAL AVIATION	<b>Engine Manufacturer:</b>	Continental
<b>Operating Certificate(s) Held:</b>		<b>Engine Model/Series:</b>	IO-520-D
<b>Flight Conducted Under:</b>	Part 137: Agricultural		

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual Conditions	<b>Condition of Light:</b>	Day
<b>Observation Facility, Elevation:</b>	AGS, 423 ft msl	<b>Weather Information Source:</b>	Weather Observation Facility
<b>Lowest Ceiling:</b>	None / 0 ft agl	<b>Wind Speed/Gusts, Direction:</b>	4 knots / , 130°
<b>Temperature:</b>	20° C	<b>Visibility</b>	10 Miles
<b>Precipitation and Obscuration:</b>			
<b>Departure Point:</b>	(NONE)	<b>Destination:</b>	

## Airport Information

<b>Airport:</b>	BURKE COUNTY (BXG)	<b>Runway Surface Type:</b>	Asphalt
<b>Runway Used:</b>	8	<b>Runway Surface Condition:</b>	Dry
<b>Runway Length/Width:</b>	3200 ft / 75 ft		

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 Fatal	<b>Aircraft Damage:</b>	Destroyed
<b>Passenger Injuries:</b>	N/A	<b>Aircraft Fire:</b>	On-Ground
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Latitude, Longitude:</b>			

## Administrative Information

Investigator In Charge (IIC): PRESTON E HICKS

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](mailto: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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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.