



# National Transportation Safety Board Aviation Accident Final Report

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<b>Location:</b>	FT. SCOTT, KS	<b>Accident Number:</b>	MKC88DCQ01
<b>Date &amp; Time:</b>	01/01/1988, 1100 CST	<b>Registration:</b>	N87LF
<b>Aircraft:</b>	FLAGG STAR LITE	<b>Aircraft Damage:</b>	Destroyed
<b>Defining Event:</b>		<b>Injuries:</b>	1 Fatal

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

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## Analysis

THE PILOT HAD PLANNED TO MAKE SEVERAL PASSES OVER HIS PARENTS' HOUSE. ON THE THIRD PASS WITNESSES OBSERVED A WING DEPART THE AIRCRAFT AND THE AIRCRAFT FELL FROM THE SKY. THE AIRCRAFT CAME TO REST IN A RIVER. EXAM OF THE AIRCRAFT COMPONENTS REVEALED A SPAR AND SPAR ATTACHMENT FAILURE. COMPARISON OF THE MANUFACTURING PROCESS DISCLOSED AN IMPROPERLY CONSTRUCTED MAIN SPAR (WHERE THE SPARS ATTACH TO EACH OTHER AND TO THE FUSELAGE). A REVIEW OF THE PILOT'S LOG BOOKS DID NOT SHOW ANY LOGGED TIME IN THIS AIRCRAFT.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: THE FAILURE OF THE MAIN SPARS AT THE ATTACHMENT POINTS INSIDE THE FUSELAGE.

## Findings

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

### Findings

1. (C) WING,SPAR - FAILURE,TOTAL
  2. (C) ACFT/EQUIP,INADEQUATE DESIGN - MANUFACTURER
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Occurrence #2: LOSS OF CONTROL - IN FLIGHT  
Phase of Operation: MANEUVERING

### Findings

3. WING - SEPARATION
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Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER  
Phase of Operation: DESCENT - UNCONTROLLED

## Factual Information

### Pilot Information

<b>Certificate:</b>	Commercial; Private	<b>Age:</b>	34, Male
<b>Airplane Rating(s):</b>	Multi-engine Land; Single-engine Land	<b>Seat Occupied:</b>	Center
<b>Other Aircraft Rating(s):</b>		<b>Restraint Used:</b>	Seatbelt, Shoulder harness
<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 2 Valid Medical--w/ waivers/lim.	<b>Last FAA Medical Exam:</b>	08/12/1987
<b>Occupational Pilot:</b>		<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	281 hours (Total, all aircraft), 148 hours (Pilot In Command, all aircraft), 16 hours (Last 90 days, all aircraft), 9 hours (Last 30 days, all aircraft)		

### Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	FLAGG	<b>Registration:</b>	N87LF
<b>Model/Series:</b>	STAR LITE STAR LITE	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	Yes
<b>Airworthiness Certificate:</b>	Experimental	<b>Serial Number:</b>	113
<b>Landing Gear Type:</b>	Tailwheel	<b>Seats:</b>	1
<b>Date/Type of Last Inspection:</b>	Unknown	<b>Certified Max Gross Wt.:</b>	500 lbs
<b>Time Since Last Inspection:</b>		<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>		<b>Engine Manufacturer:</b>	ROTAX
<b>ELT:</b>	Not installed	<b>Engine Model/Series:</b>	447
<b>Registered Owner:</b>	VERNON H. PAVEY	<b>Rated Power:</b>	40 hp
<b>Operator:</b>	VERNON H. PAVEY	<b>Operating Certificate(s) Held:</b>	None

## Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	CNU, 1001 ft msl	Distance from Accident Site:	35 Nautical Miles
Observation Time:	1051 CST	Direction from Accident Site:	65°
Lowest Cloud Condition:	Clear / 0 ft agl	Visibility	0 Miles
Lowest Ceiling:	None / 0 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	10 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	340°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	-7° C / -17° C
Precipitation and Obscuration:			
Departure Point:	FORT SCOTT, KS (FSK)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	1050 CST	Type of Airspace:	Class G

## 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):	R D GLASCOCK	Report Date:	04/24/1990
Additional Participating Persons:			
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:pubinquiry@ntsb.gov">pubinquiry@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](#).