



Aviation Investigation Final Report

Location:	Eatonton, Georgia	Accident Number:	ATL04LA094
Date & Time:	April 7, 2004, 18:15 Local	Registration:	N2200D
Aircraft:	Firefly F8B	Aircraft Damage:	Minor
Defining Event:		Injuries:	1 Fatal
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

According to a witness during the inflation process of the balloon, a quick release tie down eyebolt that was attached to a windline broke. As the windline released it struck the pilot in the head. The quick release tie down eyebolt was installed on the tailgate of an automobile. The balloon skid across the grass and hit a tree. Examination of the balloon revealed that six wicker panels were broken. Further examination of the quick release tie down eyebolt revealed that the fracture features were typical of a recent bending overstress fracture. According to the balloon manufacture, the quick release tie down eyebolt that failed was an after-market item.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The overload failure of the windline quick release tiedown eyebolt.

Findings

Occurrence #1: AIRFRAME/COMPONENT/SYSTEM FAILURE/MALFUNCTION
Phase of Operation: STANDING - PRE-FLIGHT

Findings

1. (C) MISCELLANEOUS,BOLT/NUT/FASTENER/CLAMP/SPRING - FRACTURED
2. (C) MISCELLANEOUS,BOLT/NUT/FASTENER/CLAMP/SPRING - OVERLOAD
3. MISCELLANEOUS,LIGHTER-THAN-AIR CRAFT/EQUIPMENT - FAILURE

Factual Information

On April 7, 2004 at 1815 eastern daylight time, a Firefly F8B, N2200D, registered to and operated by a commercial pilot, broke a quick release tie down eyebolt during inflation near Eatonton, Georgia. The intended personal flight was operated under the provisions of Title 14 CFR Part 91 with no flight plan filed. Visual meteorological conditions prevailed. The commercial pilot was fatally injured and the balloon sustained minor damage. The local flight was intended to depart Lake Oconee near Eatonton, Georgia, at 1820.

According to a witness during the inflation process of the balloon one of the tie down eyebolts broke. The quick release tie down eyebolt was installed on the tailgate of automobile. The windline hit the commercial pilot in the head. The balloon skid across the grass and hit a tree.

Examination of the balloon revealed that six wicker panels were broken. The fractured quick release tie down eyebolt was sent to the National Transportation Safety Board Materials Laboratory for further examination. The examination of the eyebolt revealed that the threaded portion of the eyebolt was fractured adjacent to one of the nuts. The fracture features were typical of a recent bending overstress fracture.

The commercial pilot was airlifted to Putnam County Medical Center, and subsequently moved to Atlanta Medical Center on April 8, 2004. The commercial pilot expired on April 11, 2004. No autopsy or toxicological examinations were performed. The death certificate states the cause of death as "cerebral herniation due to cerebral edema, blunt head and neck injury."

According to a representative from Firefly Balloons, the F8B is not equipped with the quick release tie down eyebolt system. The quick release tie down eyebolt is an after-market item.

Pilot Information

Certificate:	Age:
Airplane Rating(s):	Seat Occupied:
Other Aircraft Rating(s):	Restraint Used:
Instrument Rating(s):	Second Pilot Present:
Instructor Rating(s):	Toxicology Performed: No
Medical Certification:	Last FAA Medical Exam:
Occupational Pilot:	Last Flight Review or Equivalent:
Flight Time:	

Aircraft and Owner/Operator Information

Aircraft Make:	Firefly	Registration:	N2200D
Model/Series:	F8B	Aircraft Category:	Balloon
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:		Serial Number:	
Landing Gear Type:		Seats:	
Date/Type of Last Inspection:		Certified Max Gross Wt.:	
Time Since Last Inspection:		Engines:	
Airframe Total Time:		Engine Manufacturer:	
ELT:		Engine Model/Series:	
Registered Owner:		Rated Power:	
Operator:	Harry Dearing	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	
Observation Facility, Elevation:	MCN	Distance from Accident Site:	
Observation Time:	17:53 Local	Direction from Accident Site:	
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	7 knots / 0 knots	Turbulence Type Forecast/Actual:	/
Wind Direction:	210°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.81 inches Hg	Temperature/Dew Point:	25°C / 2°C
Precipitation and Obscuration:			
Departure Point:	Eatonton, GA	Type of Flight Plan Filed:	None
Destination:	Eatonton, GA	Type of Clearance:	
Departure Time:	18:15 Local	Type of Airspace:	

Wreckage and Impact Information

Crew Injuries:	1 Fatal	Aircraft Damage:	Minor
Passenger Injuries:		Aircraft Fire:	
Ground Injuries:	N/A	Aircraft Explosion:	
Total Injuries:	1 Fatal	Latitude, Longitude:	33.601943,-83.451667

Administrative Information

Investigator In Charge (IIC): Powell, Phillip
Additional Participating Persons: Tommy Bush; Atlanta FSDO-11

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Last Revision Date:

Investigation Class: [Class](#)

Note:

Investigation Docket: <https://data.ntsb.gov/Docket?ProjectID=59060>

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The NTSB does not assign fault or blame for an accident or incident; rather, as specified by NTSB regulation, “accident/incident investigations are fact-finding proceedings with no formal issues and no adverse parties ... and are not conducted for the purpose of determining the rights or liabilities of any person” (Title 49 *Code of Federal Regulations* section 831.4). Assignment of fault or legal liability is not relevant to the NTSB’s statutory mission to improve transportation safety by investigating accidents and incidents and issuing safety recommendations. In addition, statutory language prohibits the admission into evidence or use of any part of an NTSB report related to an accident in a civil action for damages resulting from a matter mentioned in the report (Title 49 *United States Code* section 1154(b)). A factual report that may be admissible under 49 *United States Code* section 1154(b) is available [here](#).