



Aviation Investigation Final Report

Location:	SPRINGFIELD, Michigan	Accident Number:	CHI87LA167
Date & Time:	July 12, 1987, 08:00 Local	Registration:	N1505F
Aircraft:	BALLOON WORKS FIREFLY 7	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 Serious, 1 Minor
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

TWO HOT AIR BALLOONS WERE INVOLVED IN A MIDAIR COLLISION DURING A SANCTIONED BALLOON COMPETITION. N40363 WAS ABLE TO RETAIN CONTROL AND LANDED UNEVENTFULLY. N1505F PARTIALLY DEFLATED AND DESCENDED OUT OF CONTROL TO THE GROUND. WITNESSES STATED THAT N40363 WAS THE HIGHER OF THE TWO BALLOONS AND APPEARED TO BE DESCENDING. N1505F WAS RISING AND MOVING OVER THE GROUND AT A FASTER RATE. THE GONDOLA OF N40363 CONTACTED THE ENVELOPE OF N1505F AND RIPPED A PORTION OF THE FABRIC. THE PILOT/PASSENGER OF N1505F REPORTED THAT THE PILOT, UPON CONTACT WITH N40363, PULLED THE EMERGENCY RIP PANEL, TURNED OFF THE PROPANE, AND BEGAN TO PREPARE FOR A HARD LANDING. BOTH PILOTS CLAIMED THE OTHER PILOT HAD VIOLATED CONTEST GUIDELINES.

Probable Cause and Findings

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

Findings

Occurrence #1: MIDAIR COLLISION
Phase of Operation: MANEUVERING

Findings

1. (C) VISUAL SEPARATION - NOT MAINTAINED - PILOT IN COMMAND
2. (C) VISUAL SEPARATION - NOT MAINTAINED - PILOT OF OTHER AIRCRAFT

Occurrence #2: HARD LANDING

Phase of Operation: DESCENT - UNCONTROLLED

Findings

3. BALLOON EQUIPMENT, ENVELOPE - FAILURE, PARTIAL

Factual Information

Pilot Information

Certificate:	Commercial	Age:	26,Female
Airplane Rating(s):	Single-engine land; Single-engine sea	Seat Occupied:	Unknown
Other Aircraft Rating(s):	Balloon	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 2 Expired	Last FAA Medical Exam:	March 23, 1983
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	790 hours (Total, all aircraft), 469 hours (Total, this make and model), 725 hours (Pilot In Command, all aircraft), 6 hours (Last 90 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	BALLOON WORKS	Registration:	N1505F
Model/Series:	FIREFLY 7 FIREFLY 7	Aircraft Category:	Balloon
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:		Serial Number:	11150
Landing Gear Type:		Seats:	
Date/Type of Last Inspection:	Annual	Certified Max Gross Wt.:	900 lbs
Time Since Last Inspection:		Engines:	0 Unknown
Airframe Total Time:	116 Hrs	Engine Manufacturer:	
ELT:	Not installed	Engine Model/Series:	
Registered Owner:	PEGGY OGLAND	Rated Power:	
Operator:		Operating Certificate(s) Held:	None
Operator Does Business As:		Operator Designator Code:	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	BTL ,953 ft msl	Distance from Accident Site:	2 Nautical Miles
Observation Time:	07:45 Local	Direction from Accident Site:	
Lowest Cloud Condition:	Scattered / 3000 ft AGL	Visibility	5 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	10 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	220°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	24°C / 23°C
Precipitation and Obscuration:	N/A - None - Haze		
Departure Point:	BATTLE CREEK , MI (BTL)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	07:45 Local	Type of Airspace:	Class D

Airport Information

Airport:		Runway Surface Type:	
Airport Elevation:	0 ft msl	Runway Surface Condition:	
Runway Used:	0	IFR Approach:	None
Runway Length/Width:	0 ft / 0 ft	VFR Approach/Landing:	None

Wreckage and Impact Information

Crew Injuries:	1 Minor	Aircraft Damage:	Substantial
Passenger Injuries:	1 Serious	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Serious, 1 Minor	Latitude, Longitude:	42.290969,-85.220123(est)

Administrative Information

Investigator In Charge (IIC): Bruce, William

Additional Participating Persons:

Original Publish Date: August 8, 1989

Last Revision Date:

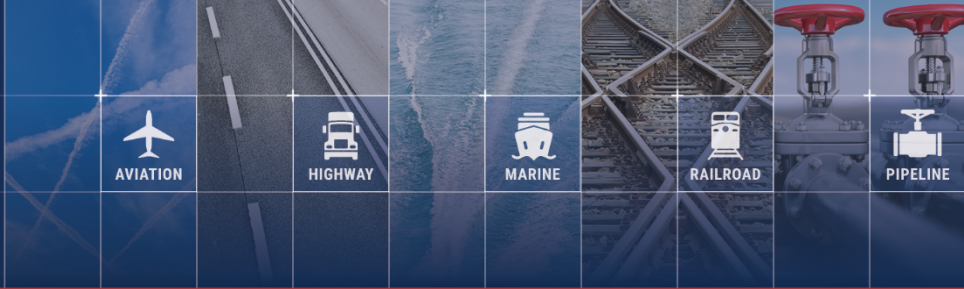
Investigation Class: [Class](#)

Note:

Investigation Docket: <https://data.nts.gov/Docket?ProjectID=13792>

The National Transportation Safety Board (NTSB) is an independent federal agency charged by Congress with investigating every civil aviation accident in the United States and significant events in other modes of transportation—railroad, transit, highway, marine, pipeline, and commercial space. We determine the probable causes of the accidents and events we investigate, and issue safety recommendations aimed at preventing future occurrences. In addition, we conduct transportation safety research studies and offer information and other assistance to family members and survivors for each accident or event we investigate. We also serve as the appellate authority for enforcement actions involving aviation and mariner certificates issued by the Federal Aviation Administration (FAA) and US Coast Guard, and we adjudicate appeals of civil penalty actions taken by the FAA.

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](#).



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Location:	SPRINGFIELD, Michigan	Accident Number:	CHI87LA167
Date & Time:	July 12, 1987, 08:00 Local	Registration:	N40363
Aircraft:	RAVEN S55A	Aircraft Damage:	Substantial
Defining Event:		Injuries:	2 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

TWO HOT AIR BALLOONS WERE INVOLVED IN A MIDAIR COLLISION DURING A SANCTIONED BALLOON COMPETITION. N40363 WAS ABLE TO RETAIN CONTROL AND LANDED UNEVENTFULLY. N1505F PARTIALLY DEFLATED AND DESCENDED OUT OF CONTROL TO THE GROUND. WITNESSES STATED THAT N40363 WAS THE HIGHER OF THE TWO BALLOONS AND APPEARED TO BE DESCENDING. N1505F WAS RISING AND MOVING OVER THE GROUND AT A FASTER RATE. THE GONDOLA OF N40363 CONTACTED THE ENVELOPE OF N1505F AND RIPPED A PORTION OF THE FABRIC. THE PILOT/PASSENGER OF N1505F REPORTED THAT THE PILOT, UPON CONTACT WITH N40363, PULLED THE EMERGENCY RIP PANEL, TURNED OFF THE PROPANE, AND BEGAN TO PREPARE FOR A HARD LANDING. BOTH PILOTS CLAIMED THE OTHER PILOT HAD VIOLATED CONTEST GUIDELINES.

Probable Cause and Findings

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

Findings

Occurrence #1: MIDAIR COLLISION
Phase of Operation: MANEUVERING

Findings

1. (C) VISUAL SEPARATION - NOT MAINTAINED - PILOT IN COMMAND
2. (C) VISUAL SEPARATION - NOT MAINTAINED - PILOT OF OTHER AIRCRAFT

Factual Information

Pilot Information

Certificate:	Private	Age:	Male
Airplane Rating(s):	None	Seat Occupied:	Unknown
Other Aircraft Rating(s):	Balloon	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	None Unknown	Last FAA Medical Exam:	
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:	307 hours (Total, all aircraft), 307 hours (Total, this make and model), 15 hours (Last 90 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	RAVEN	Registration:	N40363
Model/Series:	S55A S55A	Aircraft Category:	Balloon
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:		Serial Number:	S-55A-851
Landing Gear Type:		Seats:	
Date/Type of Last Inspection:	April 10, 1987 Annual	Certified Max Gross Wt.:	1435 lbs
Time Since Last Inspection:	207 Hrs	Engines:	0 Unknown
Airframe Total Time:	3049 Hrs	Engine Manufacturer:	
ELT:	Not installed	Engine Model/Series:	
Registered Owner:	DAVID PASCH	Rated Power:	
Operator:		Operating Certificate(s) Held:	None
Operator Does Business As:		Operator Designator Code:	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	BTL ,953 ft msl	Distance from Accident Site:	2 Nautical Miles
Observation Time:	07:45 Local	Direction from Accident Site:	
Lowest Cloud Condition:	Scattered / 3000 ft AGL	Visibility	5 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	10 knots /	Turbulence Type Forecast/Actual:	/
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Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	24°C / 23°C
Precipitation and Obscuration:	N/A - None - Haze		
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Destination:		Type of Clearance:	None
Departure Time:	07:45 Local	Type of Airspace:	Class D

Airport Information

Airport:		Runway Surface Type:	
Airport Elevation:	0 ft msl	Runway Surface Condition:	
Runway Used:	0	IFR Approach:	None
Runway Length/Width:	0 ft / 0 ft	VFR Approach/Landing:	None

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	1 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 None	Latitude, Longitude:	42.290969,-85.220123(est)

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