



Aviation Investigation Final Report

Location:	PRAIRIE CITY, Iowa	Accident Number:	MKC84LA287
Date & Time:	September 30, 1984, 10:00 Local	Registration:	N8517L
Aircraft:	RAVEN S55A	Aircraft Damage:	None
Defining Event:		Injuries:	1 Serious, 2 None
Flight Conducted Under:	Part 91: General aviation		

Analysis

WHILE THE HOT AIR BALLOON WAS AIRBORNE, THE SURFACE WINDS INCREASED TO 13 KTS. THE PLT INSTRUCTED BOTH PASSENGERS TO PREPARE FOR A HIGH WIND LANDING. CONTRARY TO THE PLT'S INSTRUCTIONS, THE PASSENGER, WHO BECAME INJURED, CROUCHED IN THE BOTTOM OF THE BASKET FOR THE LANDING. THE BALLOON BOUNCED 3 TIMES BEFORE COMING TO REST IN A SMALL DITCH. DURING THE LANDING, THE PASSENGER'S KNEE STRUCK AN ANGULAR FOOT RAIL WHICH WAS AROUND THE PERIMETER OF THE BASKET. THE RAIL HAD BEEN MADE OF HEAVY, SHARPLY ANGLED METAL. THE PASSENGER WAS HOSPITALIZED FOR A TORN QUADRICEP TENDON.

Probable Cause and Findings

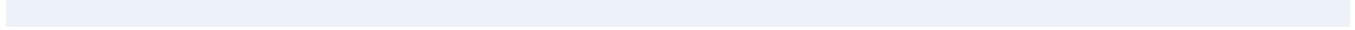
The National Transportation Safety Board determines the probable cause(s) of this accident to be:

Findings

Occurrence #1: HARD LANDING
Phase of Operation: LANDING - ROLL

Findings

1. (F) WEATHER CONDITION - UNFAVORABLE WIND
2. (C) INSTRUCTIONS, WRITTEN/VERBAL - NOT FOLLOWED - PASSENGER
3. (C) SUPERVISION - INADEQUATE - PILOT IN COMMAND



Factual Information

Pilot Information

Certificate:	Commercial	Age:	43, 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:	Class 3 None	Last FAA Medical Exam:	
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	205 hours (Total, all aircraft), 135 hours (Total, this make and model), 205 hours (Pilot In Command, all aircraft), 15 hours (Last 90 days, all aircraft), 4 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	RAVEN	Registration:	N8517L
Model/Series:	S55A S55A	Aircraft Category:	Balloon
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	S55A-219
Landing Gear Type:		Seats:	
Date/Type of Last Inspection:	October 7, 1983 Annual	Certified Max Gross Wt.:	1435 lbs
Time Since Last Inspection:	0 Hrs	Engines:	0 Unknown
Airframe Total Time:	247 Hrs	Engine Manufacturer:	
ELT:	Not installed	Engine Model/Series:	
Registered Owner:	HAWKEYE AERO STATION SOCIETY	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:	Dawn
Observation Facility, Elevation:		Distance from Accident Site:	
Observation Time:	10:00 Local	Direction from Accident Site:	
Lowest Cloud Condition:	Clear	Visibility	15 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	13 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	0°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	ALTOONA , IA	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	09:20 Local	Type of Airspace:	Class G

Airport Information

Airport:		Runway Surface Type:	
Airport Elevation:		Runway Surface Condition:	
Runway Used:	0	IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	Full stop;Straight-in

Wreckage and Impact Information

Crew Injuries:	1 Serious, 1 None	Aircraft Damage:	None
Passenger Injuries:	1 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Serious, 2 None	Latitude, Longitude:	41.650302,-93.470336(est)

Administrative Information

Investigator In Charge (IIC): Thorpe, Clint

Additional Participating Persons:

Original Publish Date:

Last Revision Date:

Investigation Class: [Class](#)

Note:

Investigation Docket: <https://data.nts.gov/Docket?ProjectID=33800>

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](#).