



Aviation Investigation Final Report

Location:	COLOMA, California	Accident Number:	LAX93LA279
Date & Time:	July 5, 1993, 09:15 Local	Registration:	N35GS
Aircraft:	RAVEN S-60A	Aircraft Damage:	None
Defining Event:		Injuries:	1 Serious, 2 None
Flight Conducted Under:	Part 91: General aviation		

Analysis

AFTER A 40 MINUTE LOCAL FOR HIRE SIGHTSEEING FLIGHT, THE PILOT DESCENDED INTO AN OAK TREE STUDDED FIELD FOR LANDING. THE PILOT NOTED THAT HE HAD USED THIS FIELD FOR LANDINGS ON 12 TO 15 OCCASIONS. DURING THE APPROACH, THE BASKET GRAZED A TREE TOP. THE PILOT SAID THE TREE CONTACT SLOWED THE BALLOON'S PROGRESS SLIGHTLY, BUT DID 'NOT DEFLECT THE BALLOON FROM ITS FLIGHT PATH.' THE BALLOON BASKET MADE CONTACT WITH THE GROUND ABOUT 30 FEET BEYOND THE TREE IN WHAT THE PILOT DESCRIBED AS A 'STAND-UP LANDING, WITH LITTLE OR NO DRAG ACROSS THE GROUND.' THE PILOT REPORTED THAT THE INJURED PASSENGER'S ANKLE 'WENT OUT FROM UNDER HER AND TWISTED, BREAKING THE ANKLE IN THREE PLACES.'

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: the passenger's injury to an ankle during the landing touchdown.

Findings

Occurrence #1: MISCELLANEOUS/OTHER
Phase of Operation: LANDING - FLARE/TOUCHDOWN

- Findings
1. (C) MISCELLANEOUS

Factual Information

On July 5, 1993, at 0915 Pacific daylight time, a passenger on board a Raven S60A balloon, N35GS, sustained a broken ankle during a landing near Coloma, California. The balloon was owned and operated by the pilot, and was engaged in for-hire sight seeing flight operations. Visual meteorological conditions prevailed at the time and no flight plan was filed for the operation. The balloon was not damaged. One passenger sustained serious injuries; however, neither the certificated commercial balloon pilot nor the one remaining passenger were injured. The flight originated from a field near Coloma, California, on the day of the mishap at 0730 as a local area sight seeing flight.

According to the pilot's statement, after a 40 minute flight he descended into an oak tree studded field for landing. The pilot noted that he had used this field for landings on 12 to 15 occasions. During the approach, the basket grazed a tree top. The pilot said the tree contact slowed the balloon's progress slightly, but did "not deflect the balloon from it's flight path." The balloon basket made contact with the ground about 30 feet beyond the tree in what the pilot described as a "stand-up landing, with little or no drag across the ground." The pilot reported that the injured passenger's ankle "went out from under her and twisted, breaking the ankle in three places."

An FAA inspector from the Sacramento, California, Flight Standards District Office, interviewed the pilot. The inspector stated that the pilot told him that he intentionally contacts the tree tops to slow the balloon down prior to touchdown. The injured passenger told the FAA inspector that the pilot told her that he was low on fuel and made only one burn correction during the final descent. In the interview, the pilot denied the passenger's allegations.

Pilot Information

Certificate:	Commercial	Age:	41, 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 None	Last FAA Medical Exam:	
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	1144 hours (Total, all aircraft), 34 hours (Last 90 days, all aircraft), 18 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	RAVEN	Registration:	N35GS
Model/Series:	S-60A S-60A	Aircraft Category:	Balloon
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	S60A-226
Landing Gear Type:		Seats:	0
Date/Type of Last Inspection:	July 30, 1993 Annual	Certified Max Gross Wt.:	1800 lbs
Time Since Last Inspection:	96 Hrs	Engines:	0 Unknown
Airframe Total Time:	640 Hrs	Engine Manufacturer:	
ELT:	Not installed	Engine Model/Series:	
Registered Owner:	ALAN V. EHRGOTT	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:		Distance from Accident Site:	
Observation Time:		Direction from Accident Site:	
Lowest Cloud Condition:	Clear	Visibility	30 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	7 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	90°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	(NONE)	Type of Flight Plan Filed:	None
Destination:	(NONE)	Type of Clearance:	None
Departure Time:	07:30 Local	Type of Airspace:	Class G

Airport Information

Airport:		Runway Surface Type:	Dirt
Airport Elevation:		Runway Surface Condition:	Vegetation
Runway Used:	0	IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	Full stop

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	None
Passenger Injuries:	1 Serious, 1 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Serious, 2 None	Latitude, Longitude:	

Administrative Information

Investigator In Charge (IIC):	Rich, Jeff
Additional Participating Persons:	DAN ABDON; SACRAMENTO , CA
Original Publish Date:	June 30, 1994
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=28420

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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](#).