



National Transportation Safety Board Aviation Accident Final Report

Location:	Hillsboro, OR	Accident Number:	SEA03LA182
Date & Time:	09/01/2003, 1115 PDT	Registration:	N5301W
Aircraft:	Pitts S-2A	Aircraft Damage:	Destroyed
Defining Event:		Injuries:	1 Minor
Flight Conducted Under:	Part 91: General Aviation - Personal		

Analysis

The pilot reported that due to the aircraft's configuration, she was unable to see the runway while on short final and in the flare. The pilot intended to land as close to the numbers as possible. The aircraft touched down short of the runway on the grassy embankment that descends below the runway elevation. The aircraft bounced onto the runway, the landing gear collapsed and the aircraft slid on its belly to a stop. A post-crash fire consumed the aircraft.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's failure to maintain the proper distance and altitude while on final approach which led to touching down short of the runway. The pilot's restricted visual lookout was a factor.

Findings

Occurrence #1: UNDERSHOOT

Phase of Operation: APPROACH - VFR PATTERN - FINAL APPROACH

Findings

1. (C) PROPER TOUCHDOWN POINT - NOT ATTAINED - PILOT IN COMMAND
2. (F) VISUAL LOOKOUT - RESTRICTED - PILOT IN COMMAND

Occurrence #2: IN FLIGHT COLLISION WITH TERRAIN/WATER

Phase of Operation: APPROACH - VFR PATTERN - FINAL APPROACH

Findings

3. TERRAIN CONDITION - DROP-OFF/DESCENDING EMBANKMENT

Occurrence #3: GEAR COLLAPSED

Phase of Operation: LANDING

Factual Information

On September 1, 2003, about 1115 Pacific daylight time, a Pitts S-2A, N5301W, registered to and operated by the pilot as a 14 CFR Part 91 personal flight, touched down short of the runway at Stark's Twin Oaks Airpark, Hillsboro, Oregon, bounced once, collapsed the landing gear and slid to a stop on the runway surface. Visual meteorological conditions prevailed at the time and no flight plan was filed. The aircraft was subsequently destroyed by a post-crash fire. The private pilot, the sole occupant, received minor injuries. The flight departed from Independence, Oregon, about 45 minutes prior to the accident.

In a written statement, the pilot reported that a standard pattern was flown for an approach and landing on runway 02. While on final approach, the pilot noted that the runway "looked very up sloped toward the north (far) end and it seemed short," therefore she intended to land as close to the numbers as possible. The pilot reported that due to the aircraft's configuration, she was unable to see the runway while on short final and in the flare.

The approach and landing was reported as normal until the aircraft touched down short of the runway edge on the grassy embankment that descends below the runway elevation. The aircraft bounced onto the runway surface, the main landing gear collapsed and the aircraft slid to a stop on its belly. The aircraft was on fire when the pilot exited the aircraft which was subsequently consumed.

After the accident, two main landing gear impressions were noted in the grassy embankment. The aircraft came to rest about 125 feet from the runway edge and partially off to the right side of the runway.

Pilot Information

Certificate:	Private	Age:	59, Female
Airplane Rating(s):	Single-engine Land	Seat Occupied:	Rear
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 Valid Medical--w/ waivers/lim.	Last FAA Medical Exam:	12/13/2002
Occupational Pilot:		Last Flight Review or Equivalent:	08/01/2003
Flight Time:	1034 hours (Total, all aircraft), 297 hours (Total, this make and model), 978 hours (Pilot In Command, all aircraft), 39 hours (Last 90 days, all aircraft), 5 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Pitts	Registration:	N5301W
Model/Series:	S-2A	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	2264
Landing Gear Type:	Tailwheel	Seats:	2
Date/Type of Last Inspection:	06/02/2003, Annual	Certified Max Gross Wt.:	1575 lbs
Time Since Last Inspection:	22 Hours	Engines:	1 Reciprocating
Airframe Total Time:	976 Hours at time of accident	Engine Manufacturer:	Lycoming
ELT:	Installed, not activated	Engine Model/Series:	AEIO-360-A1E
Registered Owner:	Joan G. Hill	Rated Power:	200 hp
Operator:	Joan G. Hill	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	HIO, 204 ft msl	Distance from Accident Site:	6 Nautical Miles
Observation Time:	1053 PDT	Direction from Accident Site:	340°
Lowest Cloud Condition:	Clear	Visibility	10 Miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	Calm /	Turbulence Type Forecast/Actual:	/
Wind Direction:		Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.08 inches Hg	Temperature/Dew Point:	19° C / 8° C
Precipitation and Obscuration:			
Departure Point:	Independence, OR (7S5)	Type of Flight Plan Filed:	None
Destination:	Hillsboro, OR (7S3)	Type of Clearance:	None
Departure Time:	1055 PDT	Type of Airspace:	Class E

Airport Information

Airport:	Stark's Twin Oaks Airpark (7S3)	Runway Surface Type:	Asphalt
Airport Elevation:	170 ft	Runway Surface Condition:	Dry
Runway Used:	02	IFR Approach:	None
Runway Length/Width:	2465 ft / 48 ft	VFR Approach/Landing:	Traffic Pattern

Wreckage and Impact Information

Crew Injuries:	1 Minor	Aircraft Damage:	Destroyed
Passenger Injuries:	N/A	Aircraft Fire:	On-Ground
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Minor	Latitude, Longitude:	45.416667, -122.933333

Administrative Information

Investigator In Charge (IIC):	Debra J Eckrote	Report Date:	12/30/2003
Additional Participating Persons:	Bill McKibbon; FAA- FSDO; Hillsboro, OR		
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 pubinq@ntsb.gov , or at 800-877-6799. Dockets released after this date are available at http://dms.nts.gov/pubdms/ .		

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