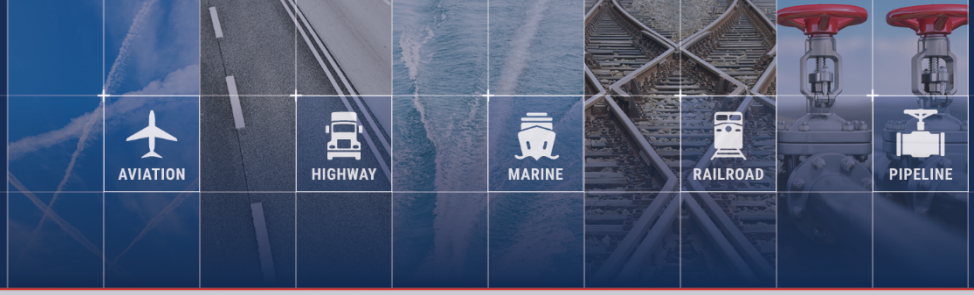

Aviation Investigation Final Report

Location:	HELENA, Montana	**Accident Number:**	SEA93LA210
Date & Time:	September 24, 1993, 19:15 Local	**Registration:**	N273GW
Aircraft:	WHITE BD-5	**Aircraft Damage:**	Substantial
Defining Event:		**Injuries:**	1 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

DURING A TOUCH-AND-GO LANDING, THE PILOT, WHO HAD ONLY FIVE HOURS EXPERIENCE IN THIS MAKE AND MODEL AIRCRAFT, ALLOWED THE AIRSPEED TO GET LOW. DUE TO THE LOW AIRSPEED, THE AIRCRAFT DROPPED HARD ONTO THE RUNWAY, AND THE NOSE GEAR COLLAPSED. THE AIRCRAFT THEN SKIDDED OFF THE RUNWAY AND IMPACTED A RUNWAY LIGHT, WHICH RESULTED IN DAMAGE TO THE FUEL SYSTEM. SPARKS FROM THE LIGHT SYSTEM IGNITED FUEL THAT WAS LEAKING FROM THE DAMAGED FUEL SYSTEM, AND THE AIRCRAFT CAUGHT FIRE AND PARTIALLY BURNED.

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 AIRSPEED. THE PILOT'S LACK OF EXPERIENCE IN THIS MAKE AND MODEL AIRCRAFT WAS A FACTOR.

Findings

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

Findings
1. (C) AIRSPEED - NOT MAINTAINED - PILOT IN COMMAND
2. (F) LACK OF TOTAL EXPERIENCE IN TYPE OF AIRCRAFT - PILOT IN COMMAND

Occurrence #2: NOSE GEAR COLLAPSED
Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings
3. (C) LANDING GEAR,NOSE GEAR ASSEMBLY - OVERLOAD

Factual Information

On September 24, 1993, at approximately 1915 mountain daylight time (MDT), an experimental White BD-5, N273GW, experienced a nose gear collapse while landing at Helena Regional Airport, Helena, Montana. The FAA certificated commercial pilot, who was the sole occupant of the aircraft, was not injured, but the aircraft sustained substantial damage. The personal pleasure flight, which was being conducted in the local traffic pattern, had departed the same airport about one hour and 15 minutes earlier. At the time of the accident, the aircraft was operating in visual meteorological conditions, and there was no report of an ELT transmission.

According to the pilot, who only had a total of five hours flight time in this make and model aircraft, he allowed his airspeed to get low while attempting a touch-and-go landing. The low airspeed resulted in the aircraft dropping hard onto the runway, followed by a collapse of the nose gear. This resulted in the aircraft sliding down the runway on its nose section. As it slid, the aircraft swerved off the left side of the runway and into a runway light. The impact with the light severed a fuel line or fractured the right fuel tank, and sparks from the lighting system ignited the spilling fuel. The aircraft then caught fire resulting in substantial damage to its forward portion.

Pilot Information

Certificate:	Commercial	**Age:**	58,Male
Airplane Rating(s):	Single-engine land	**Seat Occupied:**	Front
Other Aircraft Rating(s):	None	**Restraint Used:**	
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:**	June 2, 1992
Occupational Pilot:	UNK	**Last Flight Review or Equivalent:**	
Flight Time:	550 hours (Total, all aircraft), 5 hours (Total, this make and model)		

Aircraft and Owner/Operator Information

Aircraft Make:	WHITE	**Registration:**	N273GW
Model/Series:	BD-5 BD-5	**Aircraft Category:**	Airplane
Year of Manufacture:		**Amateur Built:**	Yes
Airworthiness Certificate:	Experimental (Special)	**Serial Number:**	GW-1
Landing Gear Type:	Retractable - Tricycle	**Seats:**	1
Date/Type of Last Inspection:	April 8, 1993 Annual	**Certified Max Gross Wt.:**	800 lbs
Time Since Last Inspection:	15 Hrs	**Engines:**	1 Reciprocating
Airframe Total Time:	15 Hrs	**Engine Manufacturer:**	ROTAX
ELT:	Not installed	**Engine Model/Series:**	503
Registered Owner:	WERMLING, GEORGE A.	**Rated Power:**	52 Horsepower
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:**	Dusk
Observation Facility, Elevation:	HLN ,3500 ft msl	**Distance from Accident Site:**	1 Nautical Miles
Observation Time:	18:55 Local	**Direction from Accident Site:**	
Lowest Cloud Condition:	Unknown / 20000 ft AGL	**Visibility**	40 miles
Lowest Ceiling:	Broken / 20000 ft AGL	**Visibility (RVR):**	
Wind Speed/Gusts:	7 knots /	**Turbulence Type Forecast/Actual:**	/
Wind Direction:	270°	**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:	30 inches Hg	**Temperature/Dew Point:**	18°C / 1°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:		**Type of Flight Plan Filed:**	None
Destination:		**Type of Clearance:**	VFR
Departure Time:	06:00 Local	**Type of Airspace:**	Class D

Airport Information

Airport:	HELENA REGIONAL HLN	**Runway Surface Type:**	Asphalt
Airport Elevation:	3500 ft msl	**Runway Surface Condition:**	Dry
Runway Used:	27	**IFR Approach:**	None
Runway Length/Width:	9000 ft / 150 ft	**VFR Approach/Landing:**	Touch and go

Wreckage and Impact Information

Crew Injuries:	1 None	**Aircraft Damage:**	Substantial
Passenger Injuries:		**Aircraft Fire:**	On-ground
Ground Injuries:	N/A	**Aircraft Explosion:**	None
Total Injuries:	1 None	**Latitude, Longitude:**	46.529079,-112.20977(est)

Administrative Information

Investigator In Charge (IIC):	Anderson, Orrin
Additional Participating Persons:	KEN KANTOLA; HELENA , MT
Original Publish Date:	August 1, 1994
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=41776