



Aviation Investigation Final Report

Location:	SEBRING, Florida	Accident Number:	MIA01LA020
Date & Time:	October 30, 2000, 10:30 Local	Registration:	N39124
Aircraft:	John S. Eberle SPECIAL S1S	PITTS	Aircraft Damage: Substantial
Defining Event:		Injuries:	1 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot stated that he made a 3 point touchdown and the tailwheel immediately began to hammer or shimmy. The airplane began tracking about 10 degrees to the right and then started to turn to the right. He locked the left brake but could not prevent the airplane from ground looping to the right. He stated that examination of the tailwheel assembly after the accident showed the bearings in the assembly were worn out from dirt getting into the bearings, and the assembly was free to move sideways about 1/2 inch. He stated that this caused the shimmy during landing and that he normally operated from a dirt strip.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: Improper inspection of the tailwheel assembly by the pilot which resulted in shimmy of the tailwheel assembly during landing due to a worn bearing caused by dirt infiltration which resulted in the pilot being unable to control the airplane and the airplane ground looping to the right.

Findings

Occurrence #1: LOSS OF CONTROL - ON GROUND/WATER
Phase of Operation: LANDING - ROLL

Findings

1. (C) LANDING GEAR, TAILWHEEL ASSEMBLY - WORN
2. (C) AIRCRAFT PREFLIGHT - INADEQUATE - PILOT IN COMMAND
3. DIRECTIONAL CONTROL - NOT POSSIBLE - PILOT IN COMMAND
4. GROUND LOOP/SWERVE - INADVERTENT

Factual Information

On October 30, 2000, about 1030 eastern standard time, an Eberle Pitts Special S1S, N39124, registered to an individual, went off the runway when control was lost during landing at Sebring Regional Airport, Sebring, Florida, while on a Title 14 CFR Part 91 personal flight. Visual meteorological conditions prevailed at the time and no flight plan was filed. The aircraft received substantial damage and the private-rated pilot was not injured. The flight originated from Sebring, Florida, the same day, about 1010.

The pilot stated that he made a normal landing approach and a three-point touch down. Immediately, the tailwheel began "hammering" or shimmying, and the airplane began tracking down the runway to the right about 10 degrees. The airplane then began to turn to the right as he locked the left brake. The airplane then ground looped to the right. He stated that examination of the tailwheel assembly after the accident showed the bearings in the assembly were worn out from dirt getting into the bearings, and the assembly was free to move sideways about 1/2 inch. He stated that this caused the shimmy during landing and that he normally operated from a dirt strip.

Pilot Information

Certificate:	Private	Age:	45, 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:	October 13, 1998
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	456 hours (Total, all aircraft), 161 hours (Total, this make and model), 405 hours (Pilot In Command, all aircraft), 34 hours (Last 90 days, all aircraft), 14 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	John S. Eberle	Registration:	N39124
Model/Series:	PITTS SPECIAL S1S PITTS SPEC	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	Yes
Airworthiness Certificate:	Experimental (Special)	Serial Number:	20938
Landing Gear Type:	Tailwheel	Seats:	1
Date/Type of Last Inspection:	February 13, 2000 Annual	Certified Max Gross Wt.:	1150 lbs
Time Since Last Inspection:	80 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	456 Hrs	Engine Manufacturer:	Lycoming
ELT:		Engine Model/Series:	AEIO-360-B4A
Registered Owner:	WILLIAM E. BHAME	Rated Power:	180 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:	Day
Observation Facility, Elevation:	FPR ,23 ft msl	Distance from Accident Site:	50 Nautical Miles
Observation Time:	10:53 Local	Direction from Accident Site:	90°
Lowest Cloud Condition:	Clear	Visibility	4 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	5 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	10°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	26°C / 19°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	(SEF)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	10:10 Local	Type of Airspace:	Class G

Airport Information

Airport:	SEBRING REGIONAL AIRPORT SEF	Runway Surface Type:	Asphalt
Airport Elevation:	63 ft msl	Runway Surface Condition:	Dry
Runway Used:	36	IFR Approach:	None
Runway Length/Width:	5190 ft / 150 ft	VFR Approach/Landing:	Traffic pattern

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	27.490386,-81.449546(est)

Administrative Information

Investigator In Charge (IIC):	Kennedy, Jeffrey
Additional Participating Persons:	REGIS LOUER; ORLANDO , FL
Original Publish Date:	May 17, 2001
Last Revision Date:	
Investigation Class:	Class
Note:	The NTSB traveled to the scene of this accident.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=50555

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](#).