



Aviation Investigation Final Report

Location:	HOUGHTON LAKE, Michigan	Accident Number:	CHI85LA277
Date & Time:	July 7, 1985, 08:55 Local	Registration:	N42RB
Aircraft:	BURCH PITTS S-1	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

THE ACFT NOSED DOWN FOLLOWING A GROUND LOOP DURING A LANDING ROLL. THE PLT REPORTED THE TAILWHEEL BEGAN TO SHIMMY, DIRECTIONAL CONTROL OF THE ACFT WAS LOST AND IT GROUND LOOPED TO THE RIGHT. THE ACFT TRAVELED APRX 10 FT OFF THE RWY WHERE THE LEFT WING DUG INTO THE TERRAIN AND THE ACFT NOSED DOWN. POST ACCIDENT INSPECTION REVEALED THE TAILWHEEL STEERING SPRINGS WERE DISCONNECTED AND THE WHEEL HAD COME LOOSE FROM THE HUB.

Probable Cause and Findings

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

Findings

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

Findings

1. (C) LANDING GEAR, TAILWHEEL ASSEMBLY - SEPARATION
 2. (F) GROUND LOOP/SWERVE - INADVERTENT - PILOT IN COMMAND
 3. (C) LANDING GEAR, TAILWHEEL ASSEMBLY - VIBRATION
-

Occurrence #2: NOSE DOWN
Phase of Operation: LANDING - ROLL

Factual Information

Pilot Information

Certificate:	Private	Age:	57, Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Center
Other Aircraft Rating(s):	Glider	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 4, 1983
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	1994 hours (Total, all aircraft), 92 hours (Total, this make and model), 1994 hours (Pilot In Command, all aircraft), 3 hours (Last 90 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	BURCH	Registration:	N42RB
Model/Series:	PITTS S-1 PITTS S-1	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	Yes
Airworthiness Certificate:	Experimental (Special)	Serial Number:	12128
Landing Gear Type:	Tailwheel	Seats:	1
Date/Type of Last Inspection:	May 15, 1985 Annual	Certified Max Gross Wt.:	1150 lbs
Time Since Last Inspection:	2 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	97 Hrs	Engine Manufacturer:	LYCOMING
ELT:	Not installed	Engine Model/Series:	AEIO-360-B4A
Registered Owner:	ROBERT J. BURCH	Rated Power:	180 Horsepower
Operator:	ROBERT J. BURCH	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:	HTL ,1150 ft msl	Distance from Accident Site:	
Observation Time:	08:54 Local	Direction from Accident Site:	
Lowest Cloud Condition:	Clear	Visibility	15 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	3 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	10°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	14°C / 8°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	LAKE CITY , MI (Y91)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	00:00 Local	Type of Airspace:	Class G

Airport Information

Airport:	ROSCOMMON HTL	Runway Surface Type:	Asphalt
Airport Elevation:	1150 ft msl	Runway Surface Condition:	Dry
Runway Used:	27	IFR Approach:	None
Runway Length/Width:	4000 ft / 75 ft	VFR Approach/Landing:	Full stop;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:	44.310306,-84.76081 (est)

Administrative Information

Investigator In Charge (IIC): Siegman, James

Additional Participating Persons:

Original Publish Date:

Last Revision Date:

Investigation Class: [Class](#)

Note:

Investigation Docket: <https://data.nts.gov/Docket?ProjectID=13131>

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](#).