



Aviation Investigation Final Report

Location:	MARLETTE, Michigan	Accident Number:	CHI85LA168
Date & Time:	April 20, 1985, 11:30 Local	Registration:	N3FW
Aircraft:	WHEAT PITTS S-1-S	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

100 YARDS FROM END OF RWY ON FINAL APCH PLT LOST RUDDER CONTROL. DURING LANDING ROLL AS AIRSPEED AND AILERON CONTROL EFFECTIVENESS DECREASED THE ACFT VEERED OFF THE SIDE OF THE RWY. THE LOWER LEFT WING CONTACTED A VASI LIGHT. INSPECTION REVEALED RIGHT SIDE RUDDER CABLE FAILED APRX 2 FT FROM RUDDER ATTACH POINT. CABLE APPEARED TO BE CHAFED OR CUT THROUGH 1/2 THE CIRCUMFERENCE. REMAINING PORTION APPEARS TO HAVE FAILED FROM INSTANTANEOUS TENSILE OVERLOAD.

Probable Cause and Findings

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

Findings

Occurrence #1: AIRFRAME/COMPONENT/SYSTEM FAILURE/MALFUNCTION

Phase of Operation: APPROACH - VFR PATTERN - FINAL APPROACH

Findings

1. (C) FLT CONTROL SYST, RUDDER CONTROL - INOPERATIVE

Occurrence #2: LOSS OF CONTROL - ON GROUND/WATER

Phase of Operation: LANDING - ROLL

Findings

2. DIRECTIONAL CONTROL - NOT POSSIBLE - PILOT IN COMMAND

Occurrence #3: ON GROUND/WATER COLLISION WITH OBJECT

Phase of Operation: LANDING - ROLL

Findings

3. OBJECT - RUNWAY LIGHT

Factual Information

Pilot Information

Certificate:	Commercial	Age:	58, Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Center
Other Aircraft Rating(s):	Glider	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medical-w/ waivers/lim	Last FAA Medical Exam:	May 9, 1983
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:	5050 hours (Total, all aircraft), 500 hours (Total, this make and model), 30 hours (Last 90 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	WHEAT	Registration:	N3FW
Model/Series:	PITTS S-1-S PITTS S-1-	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	Yes
Airworthiness Certificate:	Experimental (Special)	Serial Number:	7001
Landing Gear Type:	Tailwheel	Seats:	1
Date/Type of Last Inspection:	April 21, 1984 100 hour	Certified Max Gross Wt.:	900 lbs
Time Since Last Inspection:	80 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	540 Hrs	Engine Manufacturer:	LYCOMING
ELT:	Not installed	Engine Model/Series:	IO-360-B4A
Registered Owner:	WALTER R. FASSNACHT	Rated Power:	200 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:	FNT ,782 ft msl	Distance from Accident Site:	36 Nautical Miles
Observation Time:	10:50 Local	Direction from Accident Site:	45°
Lowest Cloud Condition:	Scattered / 4000 ft AGL	Visibility	7 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	14 knots / 21 knots	Turbulence Type Forecast/Actual:	/
Wind Direction:	230°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	26°C / 11°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	ROMEO , MI (D98)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	11:00 Local	Type of Airspace:	Class G

Airport Information

Airport:	MARLETTE 77G	Runway Surface Type:	Asphalt
Airport Elevation:	895 ft msl	Runway Surface Condition:	Dry
Runway Used:	19	IFR Approach:	None
Runway Length/Width:	3500 ft / 75 ft	VFR Approach/Landing:	Full stop

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:	43.319862,-83.07991 (est)

Administrative Information

Investigator In Charge (IIC):	Kleckner, Pamela
Additional Participating Persons:	R BEEM; BELLEVILLE , MI
Original Publish Date:	
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=13045

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](#).