



Aviation Investigation Final Report

Location:	MISSOULA, Montana	Accident Number:	DEN87LA118
Date & Time:	May 3, 1987, 14:45 Local	Registration:	N7511D
Aircraft:	PIPER PA-22-150	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

THE PRIVATE PLT WAS PRACTICING TOUCH AND GO LANDINGS. WHILE ON A TAKEOFF ROLL, A GUST OF WIND LIFTED THE RIGHT WING AND PUSHED THE ACFT OFF THE RWY TO THE LEFT. DIRECTIONAL CONTROL WAS LOST AND THE ACFT TAXIED THROUGH HIGH GRASS PARALLEL TO THE RWY. THE NOSE WHEEL STRUCK A CLUMP OF EARTH AND COLLAPSED. THE ACFT NOSED OVER AND CAME TO REST INVERTED. THE PLT STATED THAT HE NEEDED MORE CROSSWIND TAKEOFFS AND LANDING.

Probable Cause and Findings

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

Findings

Occurrence #1: ON GROUND/WATER ENCOUNTER WITH WEATHER
Phase of Operation: TAKEOFF - ROLL/RUN

Findings

1. (C) COMPENSATION FOR WIND CONDITIONS - IMPROPER - PILOT IN COMMAND
2. (C) LACK OF TOTAL EXPERIENCE IN TYPE OPERATION - PILOT IN COMMAND

Occurrence #2: LOSS OF CONTROL - ON GROUND/WATER
Phase of Operation: TAKEOFF - ROLL/RUN

Findings

3. (C) DIRECTIONAL CONTROL - NOT MAINTAINED - PILOT IN COMMAND

Occurrence #3: ON GROUND/WATER ENCOUNTER WITH TERRAIN/WATER

Phase of Operation: TAKEOFF - ROLL/RUN

Findings

4. (F) TERRAIN CONDITION - HIGH VEGETATION

5. (F) TERRAIN CONDITION - HIDDEN OBSTRUCTION(S)

Occurrence #4: NOSE OVER

Phase of Operation: TAKEOFF - ROLL/RUN

Findings

6. (F) LANDING GEAR, NOSE GEAR - OVERLOAD

Factual Information

Pilot Information

Certificate:	Private	Age:	34, Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
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:	March 26, 1986
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	98 hours (Total, all aircraft), 82 hours (Total, this make and model), 44 hours (Pilot In Command, all aircraft), 8 hours (Last 90 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	PIPER	Registration:	N7511D
Model/Series:	PA-22-150 PA-22-150	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	225238
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:	January 22, 1987 Annual	Certified Max Gross Wt.:	1840 lbs
Time Since Last Inspection:	6 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	3448 Hrs	Engine Manufacturer:	LYCOMING
ELT:	Installed, not activated	Engine Model/Series:	O-320-A1A
Registered Owner:	MACFADDEN, GARY D.	Rated Power:	150 Horsepower
Operator:	GARY D. MACFADDEN	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:		Distance from Accident Site:	
Observation Time:		Direction from Accident Site:	
Lowest Cloud Condition:	Scattered / 9000 ft AGL	Visibility	40 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	10 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	290°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	27°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	MISSOULA, MT (MSO)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	14:30 Local	Type of Airspace:	Class D

Airport Information

Airport:	MISSOULA COUNTY MSO	Runway Surface Type:	Asphalt
Airport Elevation:	3201 ft msl	Runway Surface Condition:	Dry
Runway Used:	29	IFR Approach:	None
Runway Length/Width:	9499 ft / 150 ft	VFR Approach/Landing:	Touch and go

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:	46.759857,-113.969329(est)

Administrative Information

Investigator In Charge (IIC): Collins, Robert

Additional Participating Persons: L MCNEES; HELENA , MT

Original Publish Date: August 31, 1988

Last Revision Date:

Investigation Class: [Class](#)

Note:

Investigation Docket: <https://data.nts.gov/Docket?ProjectID=17219>

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](#).