



# National Transportation Safety Board Aviation Accident Final Report

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<b>Location:</b>	MASON, MI	<b>Accident Number:</b>	CHI99LA017
<b>Date &amp; Time:</b>	11/01/1998, 1200 EST	<b>Registration:</b>	N5908D
<b>Aircraft:</b>	Piper PA-22-20-150	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	2 None
<b>Flight Conducted Under:</b>	Part 91: General Aviation - Personal		

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## Analysis

The pilot said the tail wheel-equipped airplane began yawing to the left as he brought the airplane onto its main landing gear during takeoff. He said he over corrected with right rudder and then left rudder. The pilot said a yaw oscillation followed and the airplane departed the runway's left edge. Shortly after departing the runway's edge, the airplane's right main gear tire dug into the ground. The airplane ground-looped to the right and came to a stop on its right wing tip and nose. The pilot said he had 19-hours total time in the airplane and about 255-hours in a tail wheel-equipped home built airplane that was similar to the accident airplane except with about half the horse power.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: was the pilot not maintaining control of the airplane. A factor in this accident was the pilots lack of total experience in the airplane.

## Findings

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Occurrence #1: LOSS OF CONTROL - ON GROUND/WATER

Phase of Operation: TAKEOFF - ROLL/RUN

Findings

1. (C) DIRECTIONAL CONTROL - NOT OBTAINED/MAINTAINED - PILOT IN COMMAND
2. (F) LACK OF TOTAL EXPERIENCE IN TYPE OF AIRCRAFT - PILOT IN COMMAND

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Occurrence #2: DRAGGED WING, ROTOR, POD, FLOAT OR TAIL/SKID

Phase of Operation: TAKEOFF - ROLL/RUN

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

Phase of Operation: TAKEOFF - ROLL/RUN

Findings

3. TERRAIN CONDITION - GRASS

## Factual Information

On November 1, 1998, at 1200 eastern standard time (est), a Piper PA-22-20-150, N5908D, piloted by a private pilot, was substantially damaged during a ground loop event that occurred while on the initial takeoff roll. The airplane was taking off on runway 09 (3,503' X 75' dry asphalt) at the Mason-Jewett Field, Mason, Michigan. Visual meteorological conditions prevailed at the time of the accident. The 14 CFR Part 91 personal flight was operating on a flight plan. The pilot and passenger reported no injuries. The flight was departing Mason, Michigan, at 1200 est.

The pilot said the airplane began yawing to the left as he brought it onto its main gear for takeoff. He said he over-corrected with right rudder and the airplane yawed rapidly to the right and then over-corrected to the left. According to the pilot, he caused the airplane to oscillate about its yaw axis due to another over-correction. The airplane departed the runway's left edge into the grass and ground looped to the left. The pilot said "The right wheel dug into the soil on the left side of the runway and the airplane tipped up... ."

The pilot said he may have applied too much right rudder as he brought the airplane onto its main landing gear. According to the pilot, he had 19-hours in the accident airplane. He said he had about 255-hours in a homebuilt tail wheel airplane that was about the same size as the accident airplane. He said the experimental airplane had a 70-HP engine on it. The accident airplane was equipped with a 150 horse power engine. The pilot said he had about 1-hour of dual instruction in N5908D before flying it as pilot-in-command.

## Pilot Information

<b>Certificate:</b>	Private	<b>Age:</b>	58, Male
<b>Airplane Rating(s):</b>	Single-engine Land	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	Seatbelt, Shoulder harness
<b>Instrument Rating(s):</b>	None	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 3 Valid Medical--w/ waivers/lim.	<b>Last FAA Medical Exam:</b>	03/31/1998
<b>Occupational Pilot:</b>	<b>Last Flight Review or Equivalent:</b>		
<b>Flight Time:</b>	426 hours (Total, all aircraft), 19 hours (Total, this make and model), 358 hours (Pilot In Command, all aircraft), 27 hours (Last 90 days, all aircraft), 19 hours (Last 30 days, all aircraft)		

## Aircraft and Owner/Operator Information

Aircraft Make:	Piper	Registration:	N5908D
Model/Series:	PA-22-20-150 PA-22-20-1	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	22-4570
Landing Gear Type:	Tailwheel	Seats:	4
Date/Type of Last Inspection:	05/07/1998, Annual	Certified Max Gross Wt.:	2000 lbs
Time Since Last Inspection:	47 Hours	Engines:	1 Reciprocating
Airframe Total Time:	2033 Hours	Engine Manufacturer:	Lycoming
ELT:	Installed, not activated	Engine Model/Series:	O-320
Registered Owner:	CHARLES H. DOWNEY	Rated Power:	150 hp
Operator:	CHARLES H. DOWNEY	Operating Certificate(s) Held:	None

## Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	TEW, 919 ft msl	Distance from Accident Site:	1 Nautical Miles
Observation Time:	1217 EST	Direction from Accident Site:	180°
Lowest Cloud Condition:	Scattered / 2300 ft agl	Visibility	10 Miles
Lowest Ceiling:	Overcast / 5000 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	8 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	30°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	11 °C / 6 °C
Precipitation and Obscuration:			
Departure Point:	(TEW)	Type of Flight Plan Filed:	None
Destination:	(TEW)	Type of Clearance:	None
Departure Time:	1200 EST	Type of Airspace:	Class G

## Airport Information

Airport:	MASON-JEWETT AIRPORT (TEW)	Runway Surface Type:	Asphalt
Airport Elevation:	919 ft	Runway Surface Condition:	Dry
Runway Used:	9	IFR Approach:	
Runway Length/Width:	3503 ft / 75 ft	VFR Approach/Landing:	

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 None	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>	1 None	<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	2 None	<b>Latitude, Longitude:</b>	

## Administrative Information

<b>Investigator In Charge (IIC):</b>	FRANK S GATTOLIN	<b>Report Date:</b>	02/16/2001
<b>Additional Participating Persons:</b>	GLENN SHAW; BELLEVILLE, MI		
<b>Publish Date:</b>			
<b>Investigation Docket:</b>	NTSB accident and incident dockets serve as permanent archival information for the NTSB's investigations. Dockets released prior to June 1, 2009 are publicly available from the NTSB's Record Management Division at <a href="mailto:pubinq@ntsb.gov">pubinq@ntsb.gov</a> , or at 800-877-6799. Dockets released after this date are available at <a href="http://dms.nts.gov/pubdms/">http://dms.nts.gov/pubdms/</a> .		

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The Independent Safety Board Act, as codified at 49 U.S.C. Section 1154(b), precludes the admission into evidence or use of any part of an NTSB report related to an incident or accident in a civil action for damages resulting from a matter mentioned in the report. A factual report that may be admissible under 49 U.S.C. § 1154(b) is available [here](#).