



Aviation Investigation Final Report

Location:	Meadville, Pennsylvania	Accident Number:	NYC06CA200
Date & Time:	August 11, 2006, 15:25 Local	Registration:	N97541
Aircraft:	Stinson 108	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 Minor, 1 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

During the landing roll, the Stinson 108 began a left turn. The pilot applied opposite rudder to counter the turn, but was unsuccessful. The airplane departed the runway, struck a ditch, nosed over, and came to rest inverted. Examination of the wreckage revealed that the tailwheel spring clips had disconnected from the tailwheel springs, and were stretched and distorted. About 2 weeks before the accident, the owner of the airplane installed a new tailwheel and elected not to install the tailwheel spring clips provided with the kit, but instead to use the clips that were already on the airplane. The owner was not a certificated mechanic, nor did he consult with a mechanic during the installation process.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The owner's failure to install the proper tailwheel spring clips, which resulted in a loss of directional control during the landing roll. A factor was his lack of a mechanic certificate.

Findings

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

Findings

1. (C) LANDING GEAR, TAILWHEEL ASSEMBLY - IMPROPER
2. (C) MAINTENANCE, INSTALLATION - IMPROPER - OWNER/PILOT MECHANIC

3. (F) LACK OF CERTIFICATION - OWNER/PILOT MECHANIC

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

Factual Information

During the landing roll, the Stinson 108 began a left turn. The pilot applied opposite rudder to counter the turn, but was unsuccessful. The airplane departed the runway, struck a ditch, nosed over, and came to rest inverted. Examination of the wreckage revealed that the tailwheel spring clips had disconnected from the tailwheel springs, and were stretched and distorted. About 2 weeks before the accident, the owner of the airplane installed a new tailwheel and elected not install the tailwheel spring clips provided with the kit, but instead to use the clips that were already on the airplane. The owner was not a certificated mechanic, nor did he consult with a mechanic during the installation process.

Pilot Information

Certificate:	Commercial; Flight instructor	Age:	23, Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	
Instructor Rating(s):		Toxicology Performed:	No
Medical Certification:	Class 1	Last FAA Medical Exam:	June 1, 2006
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	296 hours (Total, all aircraft), 0 hours (Total, this make and model), 36 hours (Last 90 days, all aircraft), 14 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Stinson	Registration:	N97541
Model/Series:	108	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	108-541
Landing Gear Type:	Tailwheel	Seats:	
Date/Type of Last Inspection:		Certified Max Gross Wt.:	
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	Franklin
ELT:		Engine Model/Series:	6-A4-150-B3
Registered Owner:	On file	Rated Power:	
Operator:	On file	Operating Certificate(s) Held:	None

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:		Visibility	
Lowest Ceiling:		Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/
Wind Direction:		Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	
Precipitation and Obscuration:			
Departure Point:	Erie, PA (ERI)	Type of Flight Plan Filed:	None
Destination:	Meadville, PA (GKJ)	Type of Clearance:	None
Departure Time:		Type of Airspace:	

Airport Information

Airport:	Port Meadville Airport GKJ	Runway Surface Type:	
Airport Elevation:		Runway Surface Condition:	
Runway Used:	7	IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	1 Minor	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	
Total Injuries:	1 Minor, 1 None	Latitude, Longitude:	41.6394,-80.140975(est)

Administrative Information

Investigator In Charge (IIC): Diaz, Dennis

Additional Participating Persons:

Original Publish Date: November 29, 2006

Last Revision Date:

Investigation Class: [Class](#)

Note: This accident report documents the factual circumstances of this accident as described to the NTSB.

Investigation Docket: <https://data.nts.gov/Docket?ProjectID=64312>

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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](#).