



National Transportation Safety Board Aviation Accident Data Summary

Location:	TWISP, WA	Accident Number:	SEA95LA087
Date & Time:	05/01/1995, 1030 PDT	Registration:	N2548Y
Aircraft:	CESSNA 172	Injuries:	1 Minor
Flight Conducted Under:	Part 91: General Aviation - Personal		

Analysis

AFTER SEVERAL TOUCH-AND-GO LANDINGS, THE PRIVATE PILOT MADE A FULL STOP LANDING, TAXIED BACK, AND TOOK OFF AGAIN. NO PROBLEMS WERE REPORTED DURING THE TAKEOFF. THE PILOT ENTERED THE TRAFFIC PATTERN AND ATTEMPTED ANOTHER LANDING. THE PILOT STATED THAT SHE IMMEDIATELY LOST DIRECTIONAL CONTROL OF THE AIRPLANE AFTER THE NOSE LANDING GEAR SETTLED ONTO THE RUNWAY. THE AIRPLANE VEERED OFF THE LEFT SIDE OF THE RUNWAY, SKIDDED INTO THE DIRT, NOSED OVER, AND WAS SUBSTANTIALLY DAMAGED. EXAMINATION OF THE NOSE LANDING GEAR ASSEMBLY REVEALED THAT THE CENTER SCISSOR BOLT WAS MISSING AND THE NOSE GEAR WAS COCKED TO ONE SIDE. THE BOLT WAS FOUND ON THE RUNWAY ABOUT 800 FEET FROM THE WRECKAGE. EXAMINATION OF THE BOLT REVEALED THAT NO COTTER KEY HAD BEEN INSTALLED TO SECURE THE NUT.

Probable Cause

The National Transportation Safety Board determines the probable cause(s) of this accident to be: THE IMPROPER INSTALLATION OF A NOSE LANDING GEAR ASSEMBLY BOLT (NO COTTER KEY INSTALLED) BY UNKNOWN MAINTENANCE PERSONNEL. THIS LED TO A FAILURE OF THE NOSE LANDING GEAR STEERING AND SUBSEQUENT NOSEOVER DURING LANDING ROLLOUT.

Findings

Occurrence #1: AIRFRAME/COMPONENT/SYSTEM FAILURE/MALFUNCTION
Phase of Operation: LANDING

Findings

1. (C) LANDING GEAR,NOSE GEAR ASSEMBLY - LOOSE PART/BOLT/NUT/CLAMP/ETC
2. LANDING GEAR,NOSE GEAR ASSEMBLY - DISABLED
3. (C) MAINTENANCE,INSTALLATION - IMPROPER - UNKNOWN

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

Findings

4. DIRECTIONAL CONTROL - NOT POSSIBLE - PILOT IN COMMAND

Occurrence #3: NOSE OVER
Phase of Operation: LANDING - ROLL

Pilot Information

Certificate:	Private	Age:	62
Airplane Rating(s):	Single-engine Land	Instrument Rating(s):	None
Other Aircraft Rating(s):	None	Instructor Rating(s):	None
Flight Time:	133 hours (Pilot In Command, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	CESSNA	Registration:	N2548Y
Model/Series:	172 172	Engines:	1 Reciprocating
Operator:	METHOW VALLEY FLYERS, INC.	Engine Manufacturer:	CONTINENTAL
Operating Certificate(s) Held:	None	Engine Model/Series:	O-300
Flight Conducted Under:	Part 91: General Aviation - Personal		

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	EAT, 1245 ft msl	Weather Information Source:	Weather Observation Facility
Lowest Ceiling:	None / 0 ft agl	Wind Speed/Gusts, Direction:	5 knots / , 310°
Temperature:	11°C	Visibility	10 Miles
Precipitation and Obscuration:			
Departure Point:	Destination:		

Airport Information

Airport:	TWISP MUNICIPAL (2S0)	Runway Surface Type:	Asphalt
Runway Used:	28	Runway Surface Condition:	Dry
Runway Length/Width:	2700 ft / 40 ft		

Wreckage and Impact Information

Crew Injuries:	1 Minor	Aircraft Damage:	Substantial
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Latitude, Longitude:			

Administrative Information

Investigator In Charge (IIC): JEFFREY B GUZZETTI Adopted Date: 12/19/1995

Investigation Docket: 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 pubinq@ntsb.gov, or at 800-877-6799. Dockets released after this date are available at <http://dms.nts.gov/pubdms/>.

The National Transportation Safety Board (NTSB), established in 1967, is an independent federal agency mandated by Congress through the Independent Safety Board Act of 1974 to investigate transportation accidents, determine the probable causes of the accidents, issue safety recommendations, study transportation safety issues, and evaluate the safety effectiveness of government agencies involved in transportation. The NTSB makes public its actions and decisions through accident reports, safety studies, special investigation reports, safety recommendations, and statistical reviews.

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.