

Aviation Investigation Final Report

Location:	FORT BENTON, Mon	tana	Accident Number:	DEN89LA163
Date & Time:	June 15, 1989, 09:45	i Local	Registration:	N4971Q
Aircraft:	CESSNA	A188B	Aircraft Damage:	Substantial
Defining Event:			Injuries:	1 None
Flight Conducted Under:	Part 137: Agricultura	I		

Analysis

THE PLT RPRTD THAT WHILE LANDING, THERE WAS A FAILURE OF THE BOLTS THAT HELD THE TAILWHEEL ASSEMBLY TO THE FUSELAGE. THE TAILWHEEL THEN SWIVELED & THE ACFT GROUNDLOOPED. THE PLT NOTED THAT THE BOLTS HAD BEEN SUBJECTED TO HEAVY FORCES DURING OPERATIONS ON ROUGH, DIRT, AG OPERATING AREAS.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: FAILURE OF THE TAILWHEEL ASSEMBLY ATTACHING BOLTS.

Findings

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

Findings 1. (C) LANDING GEAR, TAILWHEEL ASSEMBLY - FAILURE, TOTAL

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

Findings

- 2. DIRECTIONAL CONTROL NOT MAINTAINED 3. GROUND LOOP/SWERVE UNCONTROLLED

Factual Information

Pilot Information

Certificate:	Airline transport; Flight instructor	Age:	25,Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Unknown
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	Airplane multi-engine; Airplane single-engine; Instrument airplane	Toxicology Performed:	No
Medical Certification:	Class 1 Valid Medicalno waivers/lim.	Last FAA Medical Exam:	November 17, 1988
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	2650 hours (Total, all aircraft), 1300 hours (Total, this make and model), 2450 hours (Pilot In Command, all aircraft), 270 hours (Last 90 days, all aircraft), 170 hours (Last 30 days, all aircraft), 5 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	CESSNA	Registration:	N4971Q
Model/Series:	A188B A188B	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Experimental (Special)	Serial Number:	18802705T
Landing Gear Type:	Tailwheel	Seats:	1
Date/Type of Last Inspection:	April 1, 1989 Annual	Certified Max Gross Wt.:	3300 lbs
Time Since Last Inspection:	183 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	1710 Hrs	Engine Manufacturer:	CONTINENTAL
ELT:	Not installed	Engine Model/Series:	10-520
Registered Owner:	TAYLOR AVIATION INC	Rated Power:	300 Horsepower
Operator:	TAYLOR AVIATION, INC.	Operating Certificate(s) Held:	
Operator Does Business As:		Operator Designator Code:	QTLG

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:	Clear	Visibility	15 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/
Wind Direction:	0°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	(NONE)	Type of Flight Plan Filed:	None
Destination:	(NONE)	Type of Clearance:	None
Departure Time:	00:00 Local	Type of Airspace:	Class G

Airport Information

Airport:	PVT STRIP	Runway Surface Type:	Grass/turf
Airport Elevation:	3100 ft msl	Runway Surface Condition:	Dry
Runway Used:	18	IFR Approach:	None
Runway Length/Width:	1800 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:	47.979698,-110.800392(est)

Administrative Information

Investigator In Charge (IIC):	Johnson, Robert	
Additional Participating Persons:	EARL WEBB; HELENA , MT	
Original Publish Date:	April 24, 1990	
Last Revision Date:		
Investigation Class:	<u>Class</u>	
Note:		
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=17740	

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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 <u>here</u>.