

Aviation Investigation Final Report

Location: Glendale, Arizona **Accident Number:** WPR12LA074

Date & Time: January 6, 2012, 08:00 Local Registration: N247DY

Aircraft: CZECH SPORTPLANES SRO DYNAMIC WT9 Aircraft Damage: Substantial

Defining Event: Loss of control on ground **Injuries**: 1 None

Flight Conducted Under: Part 91: General aviation - Personal

Analysis

According to the pilot, he performed a brake check and used the brakes numerous times while taxiing to the run-up area; however, as he approached the run-up area, the brakes failed, and the airplane continued to roll forward. He decided to steer the airplane off the taxiway surface and not risk an excursion onto the active runway. The airplane veered off the paved surface onto unprepared desert terrain, and the airplane continued to accelerate. The pilot attempted to shut down the engine with the ignition switch, but was unable to. He said that normal engine shut down is accomplished using two magneto switches on the instrument panel and not the ignition switch. The airplane then struck a boundary fence.

Postaccident examination revealed that the left wheel brake assembly was damaged by impact forces consistent with the airplane's collision with the fence. The examination of the brake system for fluid leaks and functionality did not disclose any evidence of a preexisting mechanical malfunction that would have precluded normal operation. It is likely that, if the pilot had shut down the engine before the airplane departed the taxiway surface, he would have been able to stop in time to avoid colliding with the airport boundary fence.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot did not shut down the engine upon recognizing a brake malfunction. Contributing to the accident was the airplane's brake malfunction for undetermined reasons.

Findings

Personnel issues Incorrect action performance - Pilot

Aircraft Brake - Malfunction

Not determined (general) - Unknown/Not determined

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Factual Information

History of Flight

Taxi-to runway	Loss of control on ground (Defining event)
Taxi-to runway	Collision with terr/obj (non-CFIT)

On January 6, 2012, at 0800 mountain standard time, a Czech Sportplanes Dynamic WT-9, N247DY, collided with a fence following an excursion off the taxiway at the Glendale, Arizona, airport. The aircraft was operated by the pilot for a local area personal flight conducted under the provisions of 14 CFR Part 91 of the Federal Aviation Regulations. Visual meteorological conditions prevailed. The airplane sustained substantial damage and the pilot was not injured.

While taxing to the run-up area the pilot performed a brake check and used the brakes numerous times while taxing. The pilot said that the brakes failed as he approached the run-up area and the airplane continued to roll forward. He decided to steer the airplane off the taxiway surface, and not risk an excursion onto the active runway. Once off the paved surface and onto unprepared desert terrain, the airplane continued to accelerate. The pilot attempted to shut down the engine with the ignition switch but the engine remained operating. The airplane veered to the left, continued to proceed over the unprepared terrain, and impacted the airport boundary chain link fence.

The pilot said that normal engine shut down is accomplished using two magneto switches on the instrument panel and that the ignition switch does not shut down the engine.

NTSB investigators examined the airplane and found the left wheel brake assembly damaged by impact forces consistent with the airplane's collision with the chain link fence. The brake system was inspected for fluid leaks and functionality. No preexisting condition was identified that would have precluded the normal operation of the brake system.

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Pilot Information

Certificate:	Commercial	Age:	65,Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	Sport pilot	Toxicology Performed:	No
Medical Certification:	Sport pilot	Last FAA Medical Exam:	
Occupational Pilot:	No	Last Flight Review or Equivalent:	October 19, 2010
Flight Time:	3800 hours (Total, all aircraft), 51 hours (Total, this make and model), 3500 hours (Pilot In Command, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	CZECH SPORTPLANES SRO	Registration:	N247DY
Model/Series:	DYNAMIC WT9	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Special light-sport (Special)	Serial Number:	DY-247/2008
Landing Gear Type:	Tricycle	Seats:	2
Date/Type of Last Inspection:	May 18, 2011 Annual	Certified Max Gross Wt.:	1212 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	70 Hrs at time of accident	Engine Manufacturer:	ROTAX
ELT:	Installed, not activated	Engine Model/Series:	912ULS
Registered Owner:	Southwest Hornets Nest, LLC	Rated Power:	100 Horsepower
Operator:	William B. McKee	Operating Certificate(s) Held:	None

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Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	KGEU,1071 ft msl	Distance from Accident Site:	
Observation Time:	07:50 Local	Direction from Accident Site:	
Lowest Cloud Condition:	Few / 25000 ft AGL	Visibility	20 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/
Wind Direction:		Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.04 inches Hg	Temperature/Dew Point:	6°C / 0°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Glendale, AZ (KGEU)	Type of Flight Plan Filed:	None
Destination:	Glendale, AZ (KGEU)	Type of Clearance:	None
Departure Time:		Type of Airspace:	

Airport Information

Airport:	Glendale Municipal Airport KGEU	Runway Surface Type:	
Airport Elevation:		Runway Surface Condition:	
Runway Used:		IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	None

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:	33.526943,-112.29528(est)

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Administrative Information

Investigator In Charge (IIC): McKenny, Van

Additional Participating Persons:

Original Publish Date: March 28, 2012

Last Revision Date:

Investigation Class: Class

Note:

Investigation Docket: https://data.ntsb.gov/Docket?ProjectID=82623

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.

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