



Aviation Investigation Final Report

Location:	Oshkosh, Wisconsin	Accident Number:	CEN18TA296
Date & Time:	July 26, 2018, 18:55 Local	Registration:	N677TS
Aircraft:	Fisher DAKATO HAWK	Aircraft Damage:	Substantial
Defining Event:	Landing gear collapse	Injuries:	2 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The private pilot was landing the airplane on the runway at an ultralight airfield. After the airplane touched down, the left main landing gear (MLG) collapsed at the bottom end of the strut. The airplane ground looped, and the right wingtip struck the ground. The pilot stated that the landing was smooth and gentle, not hard, and that there was no side load on the landing gear at touchdown. He added that he suspected that a previous landing may have been hard, which resulted in a crack in the landing gear.

An examination of the left MLG revealed that the upper/outer strut tubing was broken, and the lower/inner strut tubing was bent. There was no evidence of fatigue. It could not be determined if the crack occurred as a result of the accident or was preexisting.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be:

The failure of the left main landing gear for reasons that could not be determined, which resulted in a loss of directional control during the ground roll.

Findings

Not determined	(general) - Unknown/Not determined
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Factual Information

History of Flight

Landing-landing roll	Landing gear collapse (Defining event)
Landing-landing roll	Loss of control on ground
Landing-landing roll	Collision with terr/obj (non-CFIT)

On July 26, 2018, about 1855 central daylight time, an amateur-built Fisher Dakato Hawk airplane, N677TS, was substantially damaged while landing at Wittman Regional Airport (KOSH), Oshkosh, Wisconsin. The private pilot and passenger were not injured. The personal flight was conducted under the provisions of Title 14 *Code of Federal Regulations* Part 91. Visual meteorological conditions prevailed and no Federal Aviation Administration (FAA) flight plan had been filed for the flight. The local flight originated about 1845.

According to the pilot, he was landing on runway 33, at the ultralight airfield. After the airplane touched down the left main landing gear collapsed at the bottom end of the strut. The airplane ground looped, and the right wingtip struck the ground resulting in substantial damage to the wing rib.

The pilot stated that the landing was smooth and gentle, not hard, and there was no side load on the landing gear at touchdown. He suspected that a previous landing may have been hard resulting in a crack in the landing gear.

An examination of the left main landing gear revealed that the upper/outer strut tubing was broken, and the lower/inner strut tubing was bent. There was no evidence of fatigue. An examination of the airplane and related systems, conducted by a National Transportation Safety Board Investigator and FAA inspectors, revealed no anomalies that would have precluded normal operation.

Pilot Information

Certificate:	Private	Age:	71,Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	3-point
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	BasicMed Without waivers/limitations	Last FAA Medical Exam:	June 28, 2018
Occupational Pilot:	No	Last Flight Review or Equivalent:	June 26, 2018
Flight Time:	1097 hours (Total, all aircraft), 10 hours (Total, this make and model), 10 hours (Last 90 days, all aircraft), 10 hours (Last 30 days, all aircraft), 3.5 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Fisher	Registration:	N677TS
Model/Series:	DAKATO HAWK	Aircraft Category:	Airplane
Year of Manufacture:	2016	Amateur Built:	Yes
Airworthiness Certificate:	Experimental (Special)	Serial Number:	021
Landing Gear Type:	Tailwheel	Seats:	2
Date/Type of Last Inspection:	August 11, 2017 Condition	Certified Max Gross Wt.:	1272 lbs
Time Since Last Inspection:	78 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	at time of accident	Engine Manufacturer:	Rotax
ELT:	Installed, not activated	Engine Model/Series:	912 UL
Registered Owner:		Rated Power:	80 Horsepower
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:	KOSH, 808 ft msl	Distance from Accident Site:	1 Nautical Miles
Observation Time:	23:53 Local	Direction from Accident Site:	180°
Lowest Cloud Condition:	Few / 6500 ft AGL	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	8 knots /	Turbulence Type Forecast/Actual:	None / None
Wind Direction:	270°	Turbulence Severity Forecast/Actual:	N/A / N/A
Altimeter Setting:	29.9 inches Hg	Temperature/Dew Point:	21°C / 14°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Oshkosh, WI (OSH)	Type of Flight Plan Filed:	None
Destination:	Oshkosh, WI (OSH)	Type of Clearance:	None
Departure Time:	18:45 Local	Type of Airspace:	Class D

Airport Information

Airport:	Wittman Rgnl OSH	Runway Surface Type:	Grass/turf
Airport Elevation:	808 ft msl	Runway Surface Condition:	Dry;Vegetation
Runway Used:	33	IFR Approach:	None
Runway Length/Width:	1200 ft / 25 ft	VFR Approach/Landing:	Full stop

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	1 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 None	Latitude, Longitude:	43.969722,-88.567779(est)

Administrative Information

Investigator In Charge (IIC):	Rodi, Jennifer
Additional Participating Persons:	Justin Hetland; Federal Aviation Administration; Milwaukee, WI Timothy Spreen; Federal Aviation Administration; Milwaukee, WI
Original Publish Date:	November 6, 2019
Note:	The NTSB did not travel to the scene of this accident.
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=97897

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. A factual report that may be admissible under 49 U.S.C. § 1154(b) is available [here](#).