



Aviation Investigation Final Report

Location:	Old Forge, New York	Accident Number:	GAA17CA554
Date & Time:	September 21, 2017, 15:45 UTC	Registration:	N233TD
Aircraft:	THOMAS J MURRAY KITFOX SUPER SPORT	Aircraft Damage:	Substantial
Defining Event:	Nose over/nose down	Injuries:	2 Minor
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

According to the pilot in the experimental, amateur-built, tailwheel-equipped airplane, he touched down on a turf surface runway, and the airplane bounced. When the airplane descended to the surface, the right main landing gear wheel and brake assembly separated from the landing gear leg. The pilot reported that the airplane "skidded down" the runway and nosed over.

The pilot reported that he had recently installed tundra tires on the airplane and that the four bolts that came with the tundra tire kit were not long enough to properly secure the wheel and brake assembly to the landing gear leg. He recalled that he used four bolts that were longer; however, they were not provided by the manufacturer. He asserted that the nuts he used to retain the bolts were provided in the wheel assembly kit.

The airplane sustained substantial damage to the right-wing strut and the left-wing spar.

Probable Cause and Findings

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

The separation of the wheel assembly during landing due to the pilot's use of improper retaining nuts when he installed the tundra tires.

Findings

Aircraft	Wheel/ski/float - Failure
Personnel issues	Installation - Pilot

Factual Information

History of Flight

Landing-flare/touchdown	Abnormal runway contact
Landing-landing roll	Sys/Comp malf/fail (non-power)
Landing-landing roll	Nose over/nose down (Defining event)

Pilot Information

Certificate:	Private	Age:	62,Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	4-point
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	None	Last FAA Medical Exam:	
Occupational Pilot:	No	Last Flight Review or Equivalent:	July 5, 2016
Flight Time:	(Estimated) 180 hours (Total, all aircraft), 113 hours (Total, this make and model), 8 hours (Last 90 days, all aircraft), 4 hours (Last 30 days, all aircraft)		

Passenger Information

Certificate:	None	Age:	63,Female
Airplane Rating(s):	None	Seat Occupied:	Right
Other Aircraft Rating(s):	None	Restraint Used:	4-point
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:		Last FAA Medical Exam:	
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	(Estimated)		

Aircraft and Owner/Operator Information

Aircraft Make:	THOMAS J MURRAY	Registration:	N233TD
Model/Series:	KITFOX SUPER SPORT SUPER SPOR	Aircraft Category:	Airplane
Year of Manufacture:	2014	Amateur Built:	Yes
Airworthiness Certificate:	Experimental light sport (Special)	Serial Number:	KA12155233
Landing Gear Type:	Tailwheel	Seats:	1
Date/Type of Last Inspection:	September 1, 2017 Annual	Certified Max Gross Wt.:	1320 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	113 Hrs at time of accident	Engine Manufacturer:	Lycoming
ELT:	C126 installed	Engine Model/Series:	233
Registered Owner:		Rated Power:	115 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:	KGTB,688 ft msl	Distance from Accident Site:	38 Nautical Miles
Observation Time:	19:56 Local	Direction from Accident Site:	301°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	8 knots /	Turbulence Type Forecast/Actual:	/ None
Wind Direction:	360°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.07 inches Hg	Temperature/Dew Point:	27°C / 16°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Fulton, NY (FZY)	Type of Flight Plan Filed:	None
Destination:	Old Forge, NY (NK26)	Type of Clearance:	None
Departure Time:	10:00 Local	Type of Airspace:	Class G

Airport Information

Airport:	OLD FORGE NK26	Runway Surface Type:	Grass/turf
Airport Elevation:	1753 ft msl	Runway Surface Condition:	Dry
Runway Used:	09	IFR Approach:	Visual
Runway Length/Width:	3200 ft / 100 ft	VFR Approach/Landing:	Full stop;Straight-in

Wreckage and Impact Information

Crew Injuries:	1 Minor	Aircraft Damage:	Substantial
Passenger Injuries:	1 Minor	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 Minor	Latitude, Longitude:	43.725276,-74.976112(est)

Administrative Information

Investigator In Charge (IIC):	Hicks, Michael
Additional Participating Persons:	Walmer Gordon-Tennant; FAA; Albany, NY
Original Publish Date:	April 23, 2018
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=96091

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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](#).