



Aviation Investigation Final Report

Location:	Madisonville, Tennessee	Accident Number:	ERA20CA228
Date & Time:	May 29, 2020, 14:30 Local	Registration:	N70BZ
Aircraft:	Thorp THORP T 18	Aircraft Damage:	Substantial
Defining Event:	Loss of control on ground	Injuries:	1 Minor
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot of the tailwheel-equipped airplane reported that he was landing on a soft turf runway following an uneventful local flight. During the landing roll, he applied "a little too much braking," and the airplane nosed over. Postaccident examination of the airplane by a Federal Aviation Administration inspector revealed that the vertical stabilizer, rudder, and fuselage were buckled. The pilot reported that there were no mechanical malfunctions or failures with the airplane that would have precluded normal operation.

Probable Cause and Findings

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

The pilot's failure to maintain directional control during the landing roll on a soft turf runway, which resulted in a nose-over.

Findings

Personnel issues	Aircraft control - Pilot
Aircraft	Directional control - Not attained/maintained
Environmental issues	Soft surface - Contributed to outcome

Factual Information

History of Flight

Landing	Loss of control on ground (Defining event)
Landing-landing roll	Nose over/nose down
Landing-flare/touchdown	Collision with terr/obj (non-CFIT)

Pilot Information

Certificate:	Commercial; Flight instructor	Age:	33, Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	Helicopter	Restraint Used:	4-point
Instrument Rating(s):	Airplane; Helicopter	Second Pilot Present:	No
Instructor Rating(s):	Airplane single-engine	Toxicology Performed:	No
Medical Certification:	Class 1 Without waivers/limitations	Last FAA Medical Exam:	October 14, 2019
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	1372 hours (Total, all aircraft), 77 hours (Total, this make and model), 393 hours (Pilot In Command, all aircraft), 23 hours (Last 90 days, all aircraft), 9 hours (Last 30 days, all aircraft), 5 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Thorp	Registration:	N70BZ
Model/Series:	THORP T 18 Undesignat	Aircraft Category:	Airplane
Year of Manufacture:	2005	Amateur Built:	Yes
Airworthiness Certificate:	Experimental (Special)	Serial Number:	1325
Landing Gear Type:	Tailwheel	Seats:	2
Date/Type of Last Inspection:	May 25, 2019 Condition	Certified Max Gross Wt.:	1500 lbs
Time Since Last Inspection:		Engines:	Reciprocating
Airframe Total Time:	550 Hrs	Engine Manufacturer:	Lycoming
ELT:	Installed, not activated	Engine Model/Series:	O-320-H2AD
Registered Owner:	On file	Rated Power:	160 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:	MMI,874 ft msl	Distance from Accident Site:	12 Nautical Miles
Observation Time:	20:15 Local	Direction from Accident Site:	225°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	None / None
Wind Direction:		Turbulence Severity Forecast/Actual:	N/A / N/A
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	29°C / 18°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Madisonville, TN	Type of Flight Plan Filed:	None
Destination:	PVT, TN	Type of Clearance:	None
Departure Time:	13:55 Local	Type of Airspace:	Class G

Wreckage and Impact Information

Crew Injuries:	1 Minor	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Minor	Latitude, Longitude:	35.437221,-84.401664(est)

Administrative Information

Investigator In Charge (IIC):	Alleyne, Eric
Additional Participating Persons:	Dave Knutson; FAA/FSDO; Nashville, TN
Original Publish Date:	January 29, 2021
Last Revision Date:	
Investigation Class:	Class 4
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=101484

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