



# Aviation Investigation Final Report

<b>Location:</b>	McAlpin, Florida	<b>Accident Number:</b>	ERA23FA321
<b>Date &amp; Time:</b>	August 3, 2023, 09:30 Local	<b>Registration:</b>	Unreg
<b>Aircraft:</b>	Kolb Firestar	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>	Collision with terr/obj (non-CFIT)	<b>Injuries:</b>	1 Fatal
<b>Flight Conducted Under:</b>	Part 91: General aviation - Personal		

## Analysis

The pilot of an unregistered airplane was taking off when the accident occurred. There were no witnesses to the accident; however, one witness watched as the pilot started his takeoff roll. As the airplane passed his hangar, he could no longer see the airplane but he heard a decrease in the engine noise that he attributed to the pilot aborting the takeoff, as if the power was reduced to idle. He went inside for a few minutes before deciding to drive down the runway and see if the pilot needed any help. He did not see the pilot or the airplane. Later in the evening, he walked down the runway again and located the airplane suspended about 50 ft high in the treetops.

Postaccident examination of the airplane revealed that it was inverted and hanging from the trees by the left main landing gear. About 4 ft of the left outer wing and the rudder displayed damage consistent with their contact with tree limbs. The engine, cabin, and propeller were intact and unremarkable. An engine test run was attempted, and the engine started immediately when the key was turned to start. The engine ran smoothly and ran up to high rpm without any hesitation or other problems noted. Flight control continuity was established to all flight controls. Given the lack of witness information or other more-detailed descriptions of the takeoff, along with the lack mechanical issues found during the examination of the wreckage, it could not be determined why the airplane came to rest in the trees adjacent to the runway during the attempted takeoff.

## Probable Cause and Findings

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

A collision with trees during takeoff for reasons that could not be determined based on available information.

## Findings

<b>Not determined</b>	(general) - Unknown/Not determined
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# Factual Information

## History of Flight

Takeoff	Collision with terr/obj (non-CFIT) (Defining event)
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On August 3, 2023, at 0930 eastern daylight time, an unregistered Kolb Firestar was substantially damaged when it was involved in an accident near McAlpin, Florida. The pilot was fatally injured. The airplane was operated as a Title 14 *Code of Federal Regulations* Part 91 personal flight.

A witness located along the middle of runway 18 at Little River Airport (FL10), McAlpin, Florida, reported he watched as the accident pilot taxied by his hangar about 0930 and to the end of runway 18 to complete an engine runup and preflight check. He then watched as the pilot started the takeoff roll. As the airplane passed his hangar, he could no longer see the airplane as the hangar was blocking his view. He heard a decrease in engine noise that he attributed to the pilot aborting the takeoff, as if the power was reduced to idle. The witness then went inside his house for a few minutes before deciding to drive down the runway and see if the pilot needed any help. He drove down to the end of runway 18 but did not see the pilot or the airplane.

Later in the evening, around 1800, he heard from other neighbors that the pilot and airplane were missing. He drove down the runway again to look for the airplane but did not see anything. Around 2000, he walked down the runway again and looked into the tree line. After walking into the woods, he located the airplane suspended about 50 ft above him in the treetops and the deceased pilot was lying on the ground next to a tree.

The accident site was in a wooded area, displaced laterally about 50 ft from the middle of runway 18. The airplane was inverted and hanging from the left main landing gear. The airplane was lowered to the ground and 4 ft of the left outer wing and the rudder were impact damaged. The right wing's fabric was torn. The engine and cabin section were intact and unremarkable. The propeller was unremarkable. The pilot's 4-point restraint was unlatched. An engine test run was conducted and the engine started immediately when the key was turned to the start position. The engine ran smoothly and ran up to high rpm without any hesitation or any anomalies noted. Flight control continuity was established from all flight control surfaces to the flight controls in the cockpit.

## Pilot Information

<b>Certificate:</b>	Private	<b>Age:</b>	79,Male
<b>Airplane Rating(s):</b>	Single-engine land	<b>Seat Occupied:</b>	Single
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	4-point
<b>Instrument Rating(s):</b>	Airplane	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	Yes
<b>Medical Certification:</b>	BasicMed With waivers/limitations	<b>Last FAA Medical Exam:</b>	April 11, 2023
<b>Occupational Pilot:</b>	No	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	1160 hours (Total, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Kolb	<b>Registration:</b>	Unreg
<b>Model/Series:</b>	Firestar Undesignated Series	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	Yes
<b>Airworthiness Certificate:</b>	Unknown	<b>Serial Number:</b>	amateur built
<b>Landing Gear Type:</b>	Tailwheel	<b>Seats:</b>	1
<b>Date/Type of Last Inspection:</b>	Unknown	<b>Certified Max Gross Wt.:</b>	725 lbs
<b>Time Since Last Inspection:</b>		<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>		<b>Engine Manufacturer:</b>	Hirth
<b>ELT:</b>	Not installed	<b>Engine Model/Series:</b>	3202
<b>Registered Owner:</b>	On file	<b>Rated Power:</b>	55 Horsepower
<b>Operator:</b>	On file	<b>Operating Certificate(s) Held:</b>	None

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual (VMC)	<b>Condition of Light:</b>	Day
<b>Observation Facility, Elevation:</b>	CTY,42 ft msl	<b>Distance from Accident Site:</b>	31 Nautical Miles
<b>Observation Time:</b>	09:35 Local	<b>Direction from Accident Site:</b>	200°
<b>Lowest Cloud Condition:</b>	Clear	<b>Visibility</b>	10 miles
<b>Lowest Ceiling:</b>	None	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	6 knots /	<b>Turbulence Type Forecast/Actual:</b>	None / None
<b>Wind Direction:</b>	120°	<b>Turbulence Severity Forecast/Actual:</b>	N/A / N/A
<b>Altimeter Setting:</b>	30.09 inches Hg	<b>Temperature/Dew Point:</b>	28°C / 24°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	McAlpin, FL	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>	McAlpin, FL	<b>Type of Clearance:</b>	None
<b>Departure Time:</b>		<b>Type of Airspace:</b>	Class G

## Airport Information

<b>Airport:</b>	LITTLE RIVER FL10	<b>Runway Surface Type:</b>	Grass/turf
<b>Airport Elevation:</b>	90 ft msl	<b>Runway Surface Condition:</b>	Dry
<b>Runway Used:</b>	18	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>	3400 ft / 50 ft	<b>VFR Approach/Landing:</b>	None

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 Fatal	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>	N/A	<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	1 Fatal	<b>Latitude, Longitude:</b>	30.116918,-82.90152(est)

## Administrative Information

**Investigator In Charge (IIC):** Boggs, Daniel

**Additional Participating Persons:** Chris Oaks; FAA/FSDO; Tampa, FL

**Original Publish Date:** July 5, 2024

**Last Revision Date:**

**Investigation Class:** [Class 3](#)

**Note:**

**Investigation Docket:** <https://data.nts.gov/Docket?ProjectID=192792>

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