



AVIATION



HIGHWAY



MARINE



RAILROAD



PIPELINE

# Aviation Investigation Final Report

<b>Location:</b>	Talkeetna, Alaska	<b>Accident Number:</b>	ANC19LA015
<b>Date &amp; Time:</b>	March 16, 2019, 15:30 Local	<b>Registration:</b>	N7095S
<b>Aircraft:</b>	Cessna 150	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>	Loss of control in flight	<b>Injuries:</b>	2 None
<b>Flight Conducted Under:</b>	Part 91: General aviation - Instructional		

## Analysis

The flight instructor reported that she initiated the takeoff at the beginning of the runway to use all 3,500 ft of available runway. She added that the flight controls were free and correct and that she applied power with the control yoke full aft for a "soft field" takeoff. The airplane "seemed" to become airborne earlier than normal, and during the initial climb, the nose of the airplane wanted to pitch up slightly. She applied "some" nose-down trim and pushed the yoke forward "slightly," and the airplane continued to climb. As the airspeed increased, the airplane's pitch attitude increased; she then applied full nose-down trim and full forward yoke and asked for help from her student. She then reduced the engine power to idle, performed an emergency landing, and the airplane came to rest in the trees.

A postaccident examination of the airplane and engine revealed no mechanical failures or malfunctions 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:

A loss of pitch control for an undetermined reason, which resulted in a collision with terrain during an emergency landing.

## Findings

<b>Aircraft</b>	Pitch control - Attain/maintain not possible
<b>Not determined</b>	(general) - Unknown/Not determined

# Factual Information

## History of Flight

Takeoff	Loss of control in flight (Defining event)
Takeoff	Attempted remediation/recovery
Landing	Off-field or emergency landing

On March 16, 2019, about 1530 Alaska daylight time, a Cessna 150H airplane, N7095S, impacted trees while performing an emergency landing after takeoff at Talkeetna Airport (TKA), Talkeetna, Alaska. The certified flight instructor and one student sustained no injuries. The airplane sustained substantial damage. The airplane was registered to a private individual and was operated under the provisions of Title 14 *Code of Federal Regulations (CFR)* Part 91 as a visual flight rules instructional flight. Day visual meteorological conditions prevailed at the time of the accident, and no flight plan was filed. The flight originated from TKA, about 1530.

During discussion with the National Transportation Safety Board (NTSB) investigator-in-charge (IIC), the flight instructor reported that the purpose of the flight was to provide an introductory flight lesson to a prospective new student. She added that she was in the right seat, and the student was in the left seat at the time of the accident. Prior to departure she checked the movement of the flight controls and stated that they "were free and correct".

The flight instructor said that during the first takeoff run, condensation formed on the airplane's windscreen, so she aborted the takeoff and taxied back to the end of Runway 1 for a second attempt, using all 3,500 feet of available runway. During the second takeoff attempt, she applied power with the control yoke full aft for a "soft field" takeoff. The airplane "seemed" to become airborne earlier than normal, and during the initial climb out, the nose of the airplane wanted to pitch up slightly. She applied "some" nose down trim, and pushed the yoke forward "slightly", and the airplane continued to climb. As the airspeed increased the pitch up attitude increased, she then applied full nose down trim and full forward yoke and asked for help from her student.

The flight instructor added, she observed the tree line ahead, and unable to correct the nose high attitude of the airplane, reduced the engine power to idle and selected an area of tree covered terrain as an emergency landing site.

The airplane subsequently settled into the trees and came to rest near a road. The occupants were able to egress without further incident. The airplane sustained substantial damage to the both wings, the empennage, and the fuselage.

The flight instructor reported that during the accident flight, they had about 20 lbs. of equipment in the back seat/storage area, including an engine cover, sleeping bag, stove, and winter gear.

A postaccident examination of the airplane by the NTSB and Federal Aviation Administration revealed no mechanical failures or malfunctions that would have precluded normal operation.

The flight instructor further reported that there were no mechanical issues with the engine that would have precluded normal operation.

### Flight instructor Information

<b>Certificate:</b>	Commercial; Flight instructor	<b>Age:</b>	35,Female
<b>Airplane Rating(s):</b>	Single-engine land; Single-engine sea	<b>Seat Occupied:</b>	Right
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	Lap only
<b>Instrument Rating(s):</b>	Airplane	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	Airplane single-engine	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 3 Without waivers/limitations	<b>Last FAA Medical Exam:</b>	February 24, 2017
<b>Occupational Pilot:</b>	Yes	<b>Last Flight Review or Equivalent:</b>	February 20, 2018
<b>Flight Time:</b>	(Estimated) 950 hours (Total, all aircraft), 50 hours (Total, this make and model), 874 hours (Pilot In Command, all aircraft), 100 hours (Last 90 days, all aircraft), 70 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

### Student pilot Information

<b>Certificate:</b>	None	<b>Age:</b>	Male
<b>Airplane Rating(s):</b>	None	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	Lap only
<b>Instrument Rating(s):</b>	None	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Unknown Unknown	<b>Last FAA Medical Exam:</b>	
<b>Occupational Pilot:</b>	No	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	(Estimated)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Cessna	<b>Registration:</b>	N7095S
<b>Model/Series:</b>	150 H	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>	1967	<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal; Utility	<b>Serial Number:</b>	15067795
<b>Landing Gear Type:</b>	Tricycle	<b>Seats:</b>	2
<b>Date/Type of Last Inspection:</b>	August 1, 2018 Annual	<b>Certified Max Gross Wt.:</b>	1600 lbs
<b>Time Since Last Inspection:</b>		<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	6391.6 Hrs as of last inspection	<b>Engine Manufacturer:</b>	Continental
<b>ELT:</b>	C126 installed, not activated	<b>Engine Model/Series:</b>	O-200A-14
<b>Registered Owner:</b>		<b>Rated Power:</b>	100 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>	PATK,356 ft msl	<b>Distance from Accident Site:</b>	1 Nautical Miles
<b>Observation Time:</b>	14:53 Local	<b>Direction from Accident Site:</b>	210°
<b>Lowest Cloud Condition:</b>	Few / 9000 ft AGL	<b>Visibility</b>	10 miles
<b>Lowest Ceiling:</b>		<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	/	<b>Turbulence Type Forecast/Actual:</b>	None / None
<b>Wind Direction:</b>		<b>Turbulence Severity Forecast/Actual:</b>	N/A / N/A
<b>Altimeter Setting:</b>	29.29 inches Hg	<b>Temperature/Dew Point:</b>	1°C / -6°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	Talkeetna, AK (TKA )	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>	Talkeetna, AK (TKA )	<b>Type of Clearance:</b>	VFR
<b>Departure Time:</b>		<b>Type of Airspace:</b>	Class E

## Airport Information

<b>Airport:</b>	TALKEETNA TKA	<b>Runway Surface Type:</b>	Asphalt
<b>Airport Elevation:</b>	364 ft msl	<b>Runway Surface Condition:</b>	Dry
<b>Runway Used:</b>	01	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>	3500 ft / 75 ft	<b>VFR Approach/Landing:</b>	Full stop;Precautionary landing

## Wreckage and Impact Information

<b>Crew Injuries:</b>	2 None	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>		<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	2 None	<b>Latitude, Longitude:</b>	62.333057,-150.078613(est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Swenson, Eric		
<b>Additional Participating Persons:</b>	William Lowen ; FAA, Flight Standards District Office; Anchorage , AK		
<b>Original Publish Date:</b>	December 3, 2020	<b>Investigation Class:</b>	3
<b>Note:</b>	The NTSB did not travel to the scene of this accident.		
<b>Investigation Docket:</b>	<a href="https://data.nts.gov/Docket?ProjectID=99129">https://data.nts.gov/Docket?ProjectID=99129</a>		

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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](#).