



# Aviation Investigation Final Report

<b>Location:</b>	Moriarty, New Mexico	<b>Accident Number:</b>	CEN18LA218
<b>Date &amp; Time:</b>	June 8, 2018, 07:53 Local	<b>Registration:</b>	N4323N
<b>Aircraft:</b>	AEROVODOCHODY L 29 DELFIN	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>	Collision during takeoff/land	<b>Injuries:</b>	2 Minor
<b>Flight Conducted Under:</b>	Part 91: General aviation - Instructional		

## Analysis

The commercial pilot was receiving his second training flight after purchasing the vintage single-engine, turbine-powered airplane. While on a visual approach, the pilot flew below the glidepath with a slow airspeed and allowed a sink rate to develop. Subsequently, the flight instructor assumed control of the airplane and applied full engine power; however, the airplane continued to settle and impacted terrain 1/2 mile short of the runway. The flight instructor stated that he had "let his guard down" during the final approach and had not intervened quickly enough because the airplane descended below the glidepath. The pilot's failure to maintain a proper glidepath and the flight instructor's delayed remedial action allowed the airplane to descend and hit terrain short of the runway.

## 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 a proper glidepath during a visual approach and the flight instructor's delayed remedial action, which resulted in ground impact before the runway.

## Findings

<b>Personnel issues</b>	Aircraft control - Pilot
<b>Personnel issues</b>	Delayed action - Instructor/check pilot
<b>Aircraft</b>	Descent/approach/glide path - Not attained/maintained

# Factual Information

## History of Flight

Approach-VFR pattern final	Collision during takeoff/land (Defining event)
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On June 8, 2018, about 0753 mountain daylight time, an Aerovodochody L29 Deflin airplane, N4323N, was substantially damaged during a visual approach to Moriarty Airport (0E0), Moriarty, New Mexico. The pilot and flight instructor suffered minor injuries. The airplane was registered to and operated by the pilot under the provisions of 14 *Code of Federal Regulations* Part 91 as an instructional flight. Day visual meteorological conditions prevailed for the local flight, which departed about 0745 without a flight plan.

Following his recent purchase of the vintage, single-engine, turbine powered trainer airplane, the pilot was receiving his second training flight and accomplished a takeoff and traffic pattern for Runway 26. While on final approach, the flight instructor told the pilot to increase engine power after the airplane descended below glide path with a slow airspeed. After the engine did not respond as the flight instructor expected, he assumed control of the airplane and applied full power. The airplane continued to settle and impacted the ground about ½ mile short of the Runway 26 threshold, damaging both wings.

The flight instructor stated that he had "let his guard down" during the final approach and had not intervened quick enough as the airplane descended below the glide path. He was aware of the engine's "slow spool up" characteristic and viewed this issue, as well as the high-density altitude conditions, as contributors to his inability to counteract the airplane's sink rate after applying full power.

The pilot did not recall details of the final approach due to a concussion that he suffered during the accident. Although a previous military navigator, the pilot was not experienced piloting a turbine powered airplane. The flight instructor did not realize the pilot's military flight experience occurred as a navigator.

## Flight instructor Information

<b>Certificate:</b>	Airline transport; Commercial; Flight engineer; Flight instructor	<b>Age:</b>	65,Male
<b>Airplane Rating(s):</b>	Single-engine land; Single-engine sea; Multi-engine land	<b>Seat Occupied:</b>	Rear
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	3-point
<b>Instrument Rating(s):</b>	Airplane	<b>Second Pilot Present:</b>	Yes
<b>Instructor Rating(s):</b>	Airplane multi-engine; Airplane single-engine; Instrument airplane	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	BasicMed Without waivers/limitations	<b>Last FAA Medical Exam:</b>	January 25, 2018
<b>Occupational Pilot:</b>	Yes	<b>Last Flight Review or Equivalent:</b>	March 15, 2018
<b>Flight Time:</b>	(Estimated) 25000 hours (Total, all aircraft), 900 hours (Total, this make and model)		

## Pilot Information

<b>Certificate:</b>	Private	<b>Age:</b>	75,Male
<b>Airplane Rating(s):</b>	Single-engine land	<b>Seat Occupied:</b>	Front
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	3-point
<b>Instrument Rating(s):</b>	None	<b>Second Pilot Present:</b>	Yes
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	None None	<b>Last FAA Medical Exam:</b>	September 14, 2009
<b>Occupational Pilot:</b>	No	<b>Last Flight Review or Equivalent:</b>	September 9, 2006
<b>Flight Time:</b>	2878 hours (Total, all aircraft), 2 hours (Total, this make and model), 878 hours (Pilot In Command, all aircraft), 2 hours (Last 90 days, all aircraft), 2 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	AEROVODOCHODY	<b>Registration:</b>	N4323N
<b>Model/Series:</b>	L 29 DELFIN NO SERIES	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>	1971	<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Experimental (Special)	<b>Serial Number:</b>	194145
<b>Landing Gear Type:</b>	Tricycle	<b>Seats:</b>	2
<b>Date/Type of Last Inspection:</b>	August 1, 2017 Condition	<b>Certified Max Gross Wt.:</b>	6000 lbs
<b>Time Since Last Inspection:</b>		<b>Engines:</b>	1 Turbo jet
<b>Airframe Total Time:</b>	739 Hrs at time of accident	<b>Engine Manufacturer:</b>	Motorlet
<b>ELT:</b>	Installed, not activated	<b>Engine Model/Series:</b>	M701-500C
<b>Registered Owner:</b>		<b>Rated Power:</b>	1960 Lbs thrust
<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>	KCQC,7086 ft msl	<b>Distance from Accident Site:</b>	17 Nautical Miles
<b>Observation Time:</b>	07:53 Local	<b>Direction from Accident Site:</b>	85°
<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>	/	<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>	30.31 inches Hg	<b>Temperature/Dew Point:</b>	19°C / 7°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	Moriarty, NM (0E0 )	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>	Moriarty, NM (0E0 )	<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	07:45 Local	<b>Type of Airspace:</b>	Class E

## Airport Information

<b>Airport:</b>	MORIARTY 0E0	<b>Runway Surface Type:</b>	Asphalt
<b>Airport Elevation:</b>	6204 ft msl	<b>Runway Surface Condition:</b>	Dry
<b>Runway Used:</b>	26	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>	7702 ft / 75 ft	<b>VFR Approach/Landing:</b>	Full stop;Traffic pattern

## Wreckage and Impact Information

<b>Crew Injuries:</b>	2 Minor	<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 Minor	<b>Latitude, Longitude:</b>	34.982223,-105.990837(est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Folkerts, Michael
<b>Additional Participating Persons:</b>	Ken Hand; Flight Standards District Office; Albuquerque, NM
<b>Original Publish Date:</b>	February 5, 2019
<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=97440">https://data.nts.gov/Docket?ProjectID=97440</a>

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