



# Aviation Investigation Final Report

<b>Location:</b>	ALBUQUERQUE, New Mexico	<b>Accident Number:</b>	DEN00LA073
<b>Date &amp; Time:</b>	April 12, 2000, 13:15 Local	<b>Registration:</b>	N3MA
<b>Aircraft:</b>	Helio H-295	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	2 None
<b>Flight Conducted Under:</b>	Part 91: General aviation - Instructional		

## Analysis

The instructional flight was on takeoff roll when a witness observed the airplane's left main wheel and tail wheel exit the left side of the runway at approximately 50 to 70 yards from roll commencement. The airplane left the ground, and rocked from side to side. It then came back down to the runway, and was on the asphalt for 2 to 3 seconds. The witness said that the engine sound of 'full power' never changed. He said that the airplane then jumped back into the air again, and again rocked from side to side like it was going to stall at any moment. He said then the airplane nosed down and hit the runway.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The flight instructor's failure to maintain aircraft control during takeoff initial climb.

### Findings

Occurrence #1: LOSS OF CONTROL - IN FLIGHT  
Phase of Operation: TAKEOFF - INITIAL CLIMB

#### Findings

1. (C) AIRCRAFT CONTROL - NOT MAINTAINED - PILOT IN COMMAND(CFI)

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Occurrence #2: IN FLIGHT COLLISION WITH TERRAIN/WATER  
Phase of Operation: TAKEOFF - INITIAL CLIMB

Findings

2. TERRAIN CONDITION - GROUND

## Factual Information

On April 12, 2000, approximately 1315 mountain daylight time, a Helio H-295, N3MA, was substantially damaged following impact with terrain during a takeoff at Coronado Airport, Albuquerque, New Mexico. The airline transport flight instructor and the private pilot receiving instruction were not injured. The airplane was being operated by the private pilot student under Title 14 CFR Part 91. Visual meteorological conditions prevailed for the cross-country instructional flight that was originating at the time of the accident. No flight plan had been filed, but the instructor pilot said that their intended destination was Mesa, Arizona.

The flight instructor said that they had stopped at Coronado Airport for fuel and rest. He said that hot start procedures were required to start the engine, and that taxi operations to the end of runway 17 were normal. The flight instructor said that takeoff acceleration was "rapid," but that the student rotated the airplane late. The instructor said that he "heard and felt a power reduction, followed by a surge to increase to (full??) power, followed by a second decrease in power of greater magnitude than the first power loss." He then instructed the student to "put it back on the runway." During the ensuing "hard" landing, the right main landing gear collapsed. An FAA inspector examined the airplane and reported that the engine's firewall was wrinkled and the right wing spar was bent.

A witness in an airplane waiting to takeoff behind the accident airplane said the following: "when N3MA release[d] brakes for takeoff, that [the] airplane's left main and tail wheel left the left side of the runway within 50 to 70 yards." He said that the airplane then left the ground and rocked side to side. It then came back down to the runway and was on the asphalt for 2 to 3 seconds. He said the engine sound of "full power" never changed. Next, the airplane "jumped back into the air again, and again rocked from side to side like it was going to stall at any moment." He said the airplane nosed down and hit the runway.

## Pilot Information

<b>Certificate:</b>	Airline transport; Commercial	<b>Age:</b>	68, Male
<b>Airplane Rating(s):</b>	Single-engine land; Multi-engine land	<b>Seat Occupied:</b>	Right
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	
<b>Instrument Rating(s):</b>	Airplane	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	Airplane multi-engine; Airplane single-engine; Instrument airplane	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 1 Valid Medical-w/ waivers/lim	<b>Last FAA Medical Exam:</b>	December 7, 1998
<b>Occupational Pilot:</b>	UNK	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	8895 hours (Total, all aircraft), 25 hours (Total, this make and model), 8393 hours (Pilot In Command, all aircraft), 56 hours (Last 90 days, all aircraft), 27 hours (Last 30 days, all aircraft), 6 hours (Last 24 hours, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Helio	<b>Registration:</b>	N3MA
<b>Model/Series:</b>	H-295 H-295	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	1291
<b>Landing Gear Type:</b>	Tailwheel	<b>Seats:</b>	2
<b>Date/Type of Last Inspection:</b>	April 6, 2000 Annual	<b>Certified Max Gross Wt.:</b>	3800 lbs
<b>Time Since Last Inspection:</b>	8 Hrs	<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>		<b>Engine Manufacturer:</b>	Lycoming
<b>ELT:</b>	Installed, not activated	<b>Engine Model/Series:</b>	GO-480-G1D6
<b>Registered Owner:</b>	GARY H. HOPKINS	<b>Rated Power:</b>	295 Horsepower
<b>Operator:</b>		<b>Operating Certificate(s) Held:</b>	None
<b>Operator Does Business As:</b>		<b>Operator Designator Code:</b>	

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual (VMC)	<b>Condition of Light:</b>	Day
<b>Observation Facility, Elevation:</b>	ABQ ,5352 ft msl	<b>Distance from Accident Site:</b>	9 Nautical Miles
<b>Observation Time:</b>	12:56 Local	<b>Direction from Accident Site:</b>	360°
<b>Lowest Cloud Condition:</b>	Scattered / 4500 ft AGL	<b>Visibility</b>	10 miles
<b>Lowest Ceiling:</b>	None	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	3 knots /	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	0°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>	30 inches Hg	<b>Temperature/Dew Point:</b>	15°C / 1°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	(4AC )	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>	MESA , AZ (FF2 )	<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	13:15 Local	<b>Type of Airspace:</b>	Class E

## Airport Information

<b>Airport:</b>	CORONADO AIRPORT 4AC	<b>Runway Surface Type:</b>	Asphalt
<b>Airport Elevation:</b>	5280 ft msl	<b>Runway Surface Condition:</b>	Dry
<b>Runway Used:</b>	17	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>	4010 ft / 60 ft	<b>VFR Approach/Landing:</b>	None

## 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>	35.090011,-106.899368(est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Struhsaker, James
<b>Additional Participating Persons:</b>	AL WESTBROOK; ALBUQUERQUE , NM
<b>Original Publish Date:</b>	March 2, 2001
<b>Last Revision Date:</b>	
<b>Investigation Class:</b>	<a href="#">Class</a>
<b>Note:</b>	The NTSB traveled to the scene of this accident.
<b>Investigation Docket:</b>	<a href="https://data.ntsb.gov/Docket?ProjectID=48943">https://data.ntsb.gov/Docket?ProjectID=48943</a>

The National Transportation Safety Board (NTSB) is an independent federal agency charged by Congress with investigating every civil aviation accident in the United States and significant events in other modes of transportation—railroad, transit, highway, marine, pipeline, and commercial space. We determine the probable causes of the accidents and events we investigate, and issue safety recommendations aimed at preventing future occurrences. In addition, we conduct transportation safety research studies and offer information and other assistance to family members and survivors for each accident or event we investigate. We also serve as the appellate authority for enforcement actions involving aviation and mariner certificates issued by the Federal Aviation Administration (FAA) and US Coast Guard, and we adjudicate appeals of civil penalty actions taken by the FAA.

The NTSB does not assign fault or blame for an accident or incident; rather, as specified by NTSB regulation, “accident/incident investigations are fact-finding proceedings with no formal issues and no adverse parties ... and are not conducted for the purpose of determining the rights or liabilities of any person” (Title 49 *Code of Federal Regulations* section 831.4). Assignment of fault or legal liability is not relevant to the NTSB’s statutory mission to improve transportation safety by investigating accidents and incidents and issuing safety recommendations. In addition, statutory language prohibits the admission into evidence or use of any part of an NTSB report related to an accident in a civil action for damages resulting from a matter mentioned in the report (Title 49 *United States Code* section 1154(b)). A factual report that may be admissible under 49 *United States Code* section 1154(b) is available [here](#).