Aviation Investigation Final Report

Location:	Chandler, Arizona	**Accident Number:**	LAX06CA203
Date & Time:	June 10, 2006, 09:15 Local	**Registration:**	N280AM
Aircraft:	Aircraft Mfg & Dev. Co. (AMD) CH2000	**Aircraft Damage:**	Substantial
Defining Event:		**Injuries:**	2 None
Flight Conducted Under:	Part 91: General aviation - Instructional		

Analysis

The airplane collided with terrain during the student pilot's attempted takeoff. During a soft-field takeoff with the airplane about 10 to 15 feet above ground level (agl), the student pilot increased the pitch attitude by raising the nose. The airplane yawed about 15 degrees to the right of the runway centerline and the certified flight instructor (CFI) momentarily waited for the student pilot to make corrective action. The airplane yawed an additional 15 degrees to the right before the CFI assumed the airplane controls. He applied left rudder and lowered the nose in an effort to maneuver the airplane back to the runway. The left wing and the tail impacted the ground, which the CFI believed was the main landing gear. The CFI continued the initial takeoff climb and shortly thereafter noticed the damage to the left wing. He returned to the airport for an uneventful landing. The CFI noted no preimpact mechanical malfunctions or failures with the airframe or engine 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 student pilot's failure to maintain directional control and the instructor's delayed remedial actions, which resulted in a collision with terrain during the initial takeoff climb. The instructor's inadequate supervision of the flight was also causal.

Findings

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

Findings
1. SOFT FIELD TAKEOFF/PROCEDURE - ATTEMPTED - DUAL STUDENT
2. (C) DIRECTIONAL CONTROL - NOT MAINTAINED - DUAL STUDENT
3. (C) REMEDIAL ACTION - DELAYED - PILOT IN COMMAND(CFI)
4. (C) SUPERVISION - INADEQUATE - PILOT IN COMMAND(CFI)

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

Findings
5. TERRAIN CONDITION - GROUND

Factual Information

The airplane collided with terrain during a soft-field takeoff. In a written statement, the certified flight instructor (CFI) reported that the purpose of the flight was for the student pilot to practice soft-field takeoffs and landings, which he had briefed the student for prior to departure. After rotation, with the airplane about 10 to 15 feet above ground level (agl), the student pilot raised the nose of the airplane high, akin to a short-field takeoff configuration. The airplane yawed about 15 degrees to the right of the runway centerline and the CFI momentarily waited for the student pilot to make corrective action. The CFI directed the student pilot to input left rudder, but the airplane yawed an additional 15 degrees to the right.

The CFI further stated that he assumed the airplane controls. He applied left rudder, and lowered the nose in an effort to maneuver the airplane back to the runway. The left wing contacted the ground about 5 feet from the right edge of the runway and the tail subsequently impacted a grassy median to the right of the runway. The CFI believed that the airplane's main landing gear had contacted the ground and continued with the initial takeoff climb. Shortly thereafter, the CFI and student noticed the damage to the left wing and returned to the airport for an uneventful landing.

The CFI noted no preimpact mechanical malfunctions or failures with the airplane or engine that would have precluded normal operation.

Flight instructor Information

Certificate:	Commercial; Flight instructor	**Age:**	49,Male
Airplane Rating(s):	Single-engine land; Multi-engine land	**Seat Occupied:**	
Other Aircraft Rating(s):	None	**Restraint Used:**	
Instrument Rating(s):	Airplane	**Second Pilot Present:**	
Instructor Rating(s):	Airplane multi-engine; Airplane single-engine; Instrument airplane	**Toxicology Performed:**	No
Medical Certification:	Class 2	**Last FAA Medical Exam:**	May 1, 2006
Occupational Pilot:	Yes	**Last Flight Review or Equivalent:**	
Flight Time:	856 hours (Total, all aircraft), 67 hours (Total, this make and model), 47 hours (Last 90 days, all aircraft), 27 hours (Last 30 days, all aircraft)		

Student pilot Information

Certificate:	Student	**Age:**	55,Male
Airplane Rating(s):	None	**Seat Occupied:**	
Other Aircraft Rating(s):	None	**Restraint Used:**	
Instrument Rating(s):	None	**Second Pilot Present:**	
Instructor Rating(s):		**Toxicology Performed:**	No
Medical Certification:	Class 3	**Last FAA Medical Exam:**	April 1, 2006
Occupational Pilot:	No	**Last Flight Review or Equivalent:**	
Flight Time:	22 hours (Total, all aircraft), 20 hours (Total, this make and model), 22 hours (Last 90 days, all aircraft), 9 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Aircraft Mfg & Dev. Co. (AMD)	**Registration:**	N280AM
Model/Series:	CH2000	**Aircraft Category:**	Airplane
Year of Manufacture:		**Amateur Built:**	
Airworthiness Certificate:	Normal	**Serial Number:**	20-1041
Landing Gear Type:	Tricycle	**Seats:**	
Date/Type of Last Inspection:		**Certified Max Gross Wt.:**	
Time Since Last Inspection:		**Engines:**	1 Reciprocating
Airframe Total Time:		**Engine Manufacturer:**	Lycoming
ELT:		**Engine Model/Series:**	O-235-N2C
Registered Owner:	Outside the Box Aviation LLC	**Rated Power:**	
Operator:	League Of Extraordinary Aviators, Inc.	**Operating Certificate(s) Held:**	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	**Condition of Light:**	Day
Observation Facility, Elevation:	CHD,1243 ft msl	**Distance from Accident Site:**	5 Nautical Miles
Observation Time:	09:48 Local	**Direction from Accident Site:**	90°
Lowest Cloud Condition:		**Visibility**	25 miles
Lowest Ceiling:	Broken / 1500 ft AGL	**Visibility (RVR):**	
Wind Speed/Gusts:	/	**Turbulence Type Forecast/Actual:**	/
Wind Direction:		**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:	29.82 inches Hg	**Temperature/Dew Point:**	33°C / 9°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Chandler, AZ (P19)	**Type of Flight Plan Filed:**	None
Destination:	Chandler, AZ (P19)	**Type of Clearance:**	None
Departure Time:		**Type of Airspace:**	

Airport Information

Airport:	Stellar Airpark P19	**Runway Surface Type:**	Asphalt
Airport Elevation:		**Runway Surface Condition:**	Dry
Runway Used:	17	**IFR Approach:**	None
Runway Length/Width:	3913 ft / 60 ft	**VFR Approach/Landing:**	

Wreckage and Impact Information

Crew Injuries:	2 None	**Aircraft Damage:**	Substantial
Passenger Injuries:		**Aircraft Fire:**	None
Ground Injuries:	N/A	**Aircraft Explosion:**	
Total Injuries:	2 None	**Latitude, Longitude:**	33.29861,-111.915275

Administrative Information

Investigator In Charge (IIC):	Keliher, Zoe
Additional Participating Persons:	Chris Clark; Federal Aviation Administration; Scottsdale, AZ
Original Publish Date:	October 3, 2006
Last Revision Date:	
Investigation Class:	Class
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=63916