



Aviation Investigation Final Report

Location:	WILLIAMS, Arizona	Accident Number:	LAX91LA245
Date & Time:	June 5, 1991, 15:45 Local	Registration:	N484ER
Aircraft:	CESSNA R182	Aircraft Damage:	Substantial
Defining Event:		Injuries:	2 Minor, 1 None
Flight Conducted Under:	Part 91: General aviation - Instructional		

Analysis

THE FLIGHT WAS A CFI INSTRUCTIONAL FLIGHT. THE CFI/PIC WAS OCCUPYING THE LEFT FRONT SEAT AND THE CERTIFICATED COMMERCIAL PILOT/CFI TRAINEE OCCUPIED THE RIGHT FRONT SEAT AND WAS FLYING THE AIRPLANE. THE CFI TRAINEE HAD PREVIOUSLY COMPLETED A TOUCH AND GO LANDING AND TAKEOFF. ON THE SECOND LANDING THE AIRPLANE BOUNCED AND THE CFI/PIC INSTRUCTED THE TRAINEE TO GO AROUND. THE AIRPLANE LIFTED OFF AND WAS CLIMBING AT THE BEST RATE WHEN THE AIRPLANE ENCOUNTERED A WIND SHEAR. THE AIRPLANE YAWED VIOLENTLY TO THE RIGHT. THE CFI/PIC IMMEDIATELY ASSUMED THE FLIGHT CONTROLS BUT ALL HE COULD DO WAS TO MAINTAIN A WINGS LEVEL ATTITUDE. THE AIRPLANE CONTINUED TO SETTLE AND LANDED HARD AND CARTWHEELED. THE AIRPORT MANAGER CONFIRMED THAT VIRGA AND A DUST DEVIL APPEARED TO ENGULF THE AIRPORT WITHOUT ANY WARNING.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: THAT THE FLIGHT ENCOUNTERED WINDSHEAR AND THAT AIRCRAFT CONTROL WAS NOT POSSIBLE.

Findings

Occurrence #1: IN FLIGHT ENCOUNTER WITH WEATHER
Phase of Operation: TAKEOFF - INITIAL CLIMB

Findings

1. (C) WEATHER CONDITION - WINDSHEAR

Occurrence #2: LOSS OF CONTROL - IN FLIGHT

Phase of Operation: TAKEOFF - INITIAL CLIMB

Findings

2. (F) AIRCRAFT CONTROL - NOT POSSIBLE - PILOT IN COMMAND(CFI)

Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER

Phase of Operation: DESCENT - UNCONTROLLED

Findings

3. TERRAIN CONDITION - RUNWAY

Factual Information

Pilot Information

Certificate:	Commercial; Flight instructor	Age:	35, Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Unknown
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	Airplane multi-engine; Airplane single-engine; Instrument airplane	Toxicology Performed:	No
Medical Certification:	Class 1 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	February 28, 1991
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:	1638 hours (Total, all aircraft), 345 hours (Total, this make and model), 1503 hours (Pilot In Command, all aircraft), 359 hours (Last 90 days, all aircraft), 193 hours (Last 30 days, all aircraft), 5 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	CESSNA	Registration:	N484ER
Model/Series:	R182 R182	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:		Serial Number:	R18200123
Landing Gear Type:	Retractable - Tricycle	Seats:	4
Date/Type of Last Inspection:	January 2, 2000 Unknown	Certified Max Gross Wt.:	3100 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	LYCOMING
ELT:	Installed, not activated	Engine Model/Series:	O-540-J365D
Registered Owner:	EMBRY-RIDDLE AERO UNIVERSITY	Rated Power:	235 Horsepower
Operator:	EMBRY-RIDDLE AERO UNIVERSITY	Operating Certificate(s) Held:	None
Operator Does Business As:		Operator Designator Code:	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:		Distance from Accident Site:	
Observation Time:		Direction from Accident Site:	
Lowest Cloud Condition:	Scattered / 6000 ft AGL	Visibility	50 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	15 knots / 20 knots	Turbulence Type Forecast/Actual:	/
Wind Direction:	200°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	21°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	PRESCOTT , AZ (PRC)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	14:00 Local	Type of Airspace:	

Airport Information

Airport:	WILLIAMS P32	Runway Surface Type:	Asphalt
Airport Elevation:	6680 ft msl	Runway Surface Condition:	Dry
Runway Used:	18	IFR Approach:	None
Runway Length/Width:	4500 ft / 60 ft	VFR Approach/Landing:	Go around;Touch and go;Traffic pattern

Wreckage and Impact Information

Crew Injuries:	1 Minor, 1 None	Aircraft Damage:	Substantial
Passenger Injuries:	1 Minor	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 Minor, 1 None	Latitude, Longitude:	35.369968,-112.259506(est)

Administrative Information

Investigator In Charge (IIC):	Llorente, A.
Additional Participating Persons:	PAUL TEXTER; SCOTTSDALE , AZ
Original Publish Date:	May 27, 1993
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=27234

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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](#).