

Aviation Investigation Final Report

Location: PRESCOTT, Arizona Accident Number: LAX92LA157

Date & Time: March 31, 1992, 08:16 Local Registration: N250ER

Aircraft: CESSNA 172 Aircraft Damage: Substantial

Defining Event: 3 None

Flight Conducted Under: Part 91: General aviation - Instructional

Analysis

BOTH AIRPLANES WERE IN THE TOWER CONTROLLED TRAFFIC PATTERN; ONE AIRPLANE WAS ON A LEFT DOWNWIND WITH A CFI, DUAL STUDENT, AND A STUDENT PILOT/OBSERVER OCCUPYING THE REAR SEAT; THE OTHER AIRPLANE WAS ON A RIGHT DOWNWIND AND WAS BEING FLOWN BY A SOLO STUDENT PILOT. THE LOCAL CONTROLLER CLEARED THE SOLO STUDENT PILOT ON THE RIGHT DOWNWIND TO LAND FOLLOWING AN AIRPLANE TO THE STUDENT PILOT'S LEFT. THE LOCAL CONTROLLER THEN CLEARED THE DUAL STUDENT'S FLIGHT TO FOLLOW THE SOLO STUDENT AIRPLANE'S ON THE RIGHT DOWNWIND. THE DUAL STUDENT'S FLIGHT ACKNOWLEDGED THE CLEARANCE, BUT BOTH PILOTS MISIDENTIFIED THE SOLO STUDENT'S AIRPLANE AND BEGAN FOLLOWING THE AIRPLANE AHEAD OF AND TO THE LEFT OF THE SOLO STUDENT'S AIRPLANE. AFTER THE LOCAL CONTROLLER CLEARED THE SOLO STUDENT TO LAND HE THEN CLEARED THE DUAL STUDENT'S FLIGHT TO FOLLOW THE SOLO STUDENT'S AIRPLANE. THE DUAL STUDENT'S FLIGHT FOLLOWED THE AIRPLANE AHEAD OF THE SOLO STUDENT AND BEGAN TO TURN ONTO THE FINAL APPROACH. SHORTLY THEREAFTER THE SOLO STUDENT'S AIRPLANE DESCENDED ONTO THE DUAL STUDENT'S AIRPLANE. THE SOLO STUDENT LANDED ON THE RUNWAY WITHOUT FURTHER INCIDENT. THE CFI IN THE DUAL STUDENT'S AIRPLANE EXECUTED A FORCED LANDING IN THE OPEN DESERT TERRAIN, BUT NOSED OVER DURING THE LANDING ROLL.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: THE FLIGHT INSTRUCTOR'S POOR SUPERVISION OF THE FLIGHT; THE FLIGHT INSTRUCTOR'S AND DUAL STUDENT'S MISIDENTIFICATION OF THE OTHER AIRPLANE AND THE FLIGHT INSTRUCTOR'S AND DUAL STUDENT'S POOR VISUAL LOOKOUT. CONTRIBUTING TO THIS

ACCIDENT WAS THE SOFT, ROUGH AND UNEVEN TERRAIN.

Findings

Occurrence #1: MIDAIR COLLISION

Phase of Operation: APPROACH - VFR PATTERN - BASE LEG/BASE TO FINAL

Findings

1. (C) SUPERVISION - POOR - PILOT IN COMMAND(CFI)

2. (C) IDENTIFICATION OF AIRCRAFT VISUALLY - IMPROPER - PILOT IN COMMAND(CFI)

3. (C) IDENTIFICATION OF AIRCRAFT VISUALLY - IMPROPER - DUAL STUDENT

4. (C) VISUAL LOOKOUT - POOR - PILOT IN COMMAND(CFI)

5. (C) VISUAL LOOKOUT - POOR - DUAL STUDENT

Occurrence #2: FORCED LANDING

Phase of Operation: DESCENT - EMERGENCY

Occurrence #3: NOSE OVER

Phase of Operation: LANDING - ROLL

Findings

6. (F) TERRAIN CONDITION - SOFT

7. (F) TERRAIN CONDITION - ROUGH/UNEVEN

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Factual Information

Pilot Information

Certificate:	Commercial; Flight instructor	Age:	23,Female
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Right
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–w/ waivers/lim	Last FAA Medical Exam:	March 20, 1992
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:		nours (Total, this make and model), 15 ast 90 days, all aircraft), 45 hours (La	

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Aircraft and Owner/Operator Information

Aircraft Make:	CESSNA	Registration:	N250ER
Model/Series:	172 172	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal; Utility	Serial Number:	17270499
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:	March 17, 1992 AAIP	Certified Max Gross Wt.:	2300 lbs
Time Since Last Inspection:	28 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	6448 Hrs	Engine Manufacturer:	LYCOMING
ELT:	Installed	Engine Model/Series:	O-360-A4M
Registered Owner:	EMBRY-RIDDLE AERONAUTICAL UNV	Rated Power:	180 Horsepower
Operator:	EMBRY-RIDDLE AERONAUTICAL UNV	Operating Certificate(s) Held:	None
Operator Does Business As:		Operator Designator Code:	BF8S

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Conditions at Accident Site.	visual (vivio)	Condition of Light.	Day
Observation Facility, Elevation:	PRC ,5406 ft msl	Distance from Accident Site:	1 Nautical Miles
Observation Time:	08:16 Local	Direction from Accident Site:	210°
Lowest Cloud Condition:	Scattered / 2600 ft AGL	Visibility	40 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	8 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	120°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	4°C / 2°C
Precipitation and Obscuration:	No Obscuration; No Precipita	ation	
Departure Point:		Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	07:15 Local	Type of Airspace:	Class D

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Airport Information

Airport:	ERNEST A. LOVE FIELD PRC	Runway Surface Type:	Asphalt
Airport Elevation:	5042 ft msl	Runway Surface Condition:	Dry
Runway Used:	21	IFR Approach:	None
Runway Length/Width:	7601 ft / 150 ft	VFR Approach/Landing:	Touch and go

Wreckage and Impact Information

Crew Injuries:	2 None	Aircraft Damage:	Substantial
Passenger Injuries:	1 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	3 None	Latitude, Longitude:	34.619922,-112.420791(est)

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Administrative Information

Investigator In Charge (IIC):	Llorente, A.	
Additional Participating Persons:	ASI MIKE WARTH; SCOTTSDALE , AZ	
Original Publish Date:	August 26, 1993	
Last Revision Date:		
Investigation Class:	<u>Class</u>	
Note:		
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=27585	

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.

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Aviation Investigation Final Report

Location: PRESCOTT, Arizona Accident Number: LAX92LA157

Date & Time: March 31, 1992, 08:16 Local Registration: N267ER

Aircraft: CESSNA 172N Aircraft Damage: Substantial

Defining Event: 1 None

Flight Conducted Under: Part 91: General aviation - Instructional

Analysis

BOTH AIRPLANES WERE IN THE TOWER CONTROLLED TRAFFIC PATTERN; ONE AIRPLANE WAS ON A LEFT DOWNWIND WITH A CFI, DUAL STUDENT, AND A STUDENT PILOT/OBSERVER OCCUPYING THE REAR SEAT; THE OTHER AIRPLANE WAS ON A RIGHT DOWNWIND AND WAS BEING FLOWN BY A SOLO STUDENT PILOT. THE LOCAL CONTROLLER CLEARED THE SOLO STUDENT PILOT ON THE RIGHT DOWNWIND TO LAND FOLLOWING AN AIRPLANE TO THE STUDENT PILOT'S LEFT. THE LOCAL CONTROLLER THEN CLEARED THE DUAL STUDENT'S FLIGHT TO FOLLOW THE SOLO STUDENT AIRPLANE'S ON THE RIGHT DOWNWIND. THE DUAL STUDENT'S FLIGHT ACKNOWLEDGED THE CLEARANCE, BUT BOTH PILOTS MISIDENTIFIED THE SOLO STUDENT'S AIRPLANE AND BEGAN FOLLOWING THE AIRPLANE AHEAD OF AND TO THE LEFT OF THE SOLO STUDENT'S AIRPLANE. AFTER THE LOCAL CONTROLLER CLEARED THE SOLO STUDENT TO LAND HE THEN CLEARED THE DUAL STUDENT'S FLIGHT TO FOLLOW THE SOLO STUDENT'S AIRPLANE. THE DUAL STUDENT'S FLIGHT FOLLOWED THE AIRPLANE AHEAD OF THE SOLO STUDENT AND BEGAN TO TURN ONTO THE FINAL APPROACH. SHORTLY THEREAFTER THE SOLO STUDENT'S AIRPLANE DESCENDED ONTO THE DUAL STUDENT'S AIRPLANE. THE SOLO STUDENT LANDED ON THE RUNWAY WITHOUT FURTHER INCIDENT. THE CFI IN THE DUAL STUDENT'S AIRPLANE EXECUTED A FORCED LANDING IN THE OPEN DESERT TERRAIN, BUT NOSED OVER DURING THE LANDING ROLL.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: THE OTHER AIRPLANE'S FLIGHT INSTRUCTOR'S POOR SUPERVISION OF THE FLIGHT; THE OTHER AIRPLANE'S FLIGHT INSTRUCTOR'S AND DUAL STUDENT'S MISIDENTIFICATION OF THE AIRPLANE THE STUDENT PILOT WAS FOLLOWING AND THE OTHER AIRPLANE'S FLIGHT

INSTRUCTOR'S AND DUAL STUDENT'S POOR VISUAL LOOKOUT.

Findings

Occurrence #1: MIDAIR COLLISION

Phase of Operation: APPROACH - VFR PATTERN - FINAL APPROACH

Findings

1. (C) SUPERVISION - POOR - PILOT OF OTHER AIRCRAFT

2. (C) IDENTIFICATION OF AIRCRAFT VISUALLY - IMPROPER - PILOT OF OTHER AIRCRAFT

3. (C) VISUAL LOOKOUT - POOR - PILOT OF OTHER AIRCRAFT

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Factual Information

Pilot Information

Certificate:	Student	Age:	19,Male
Airplane Rating(s):	None	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	None Valid Medicalw/ waivers/lim	Last FAA Medical Exam:	September 7, 1991
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	61 hours (Total, all aircraft), 61 hours (Total, this make and model), 1 hours (Pilot In Command, all aircraft), 22 hours (Last 90 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	CESSNA	Registration:	N267ER
Model/Series:	172N 172N	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal; Utility	Serial Number:	1727056D
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:	March 16, 1992 AAIP	Certified Max Gross Wt.:	2300 lbs
Time Since Last Inspection:	38 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	4736 Hrs	Engine Manufacturer:	LYCOMING
ELT:	Installed, not activated	Engine Model/Series:	O-360-A4M
Registered Owner:	EMBRY-RIDDLE AERONAUTICAL UNV	Rated Power:	180 Horsepower
Operator:	EMBRY-RIDDLE AERONAUTICAL UNV	Operating Certificate(s) Held:	None
Operator Does Business As:		Operator Designator Code:	BF8S

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Meteorological Information and Flight Plan

Visual (VMC)	Condition of Light:	Day
PRC ,5406 ft msl	Distance from Accident Site:	1 Nautical Miles
08:16 Local	Direction from Accident Site:	210°
Scattered / 2600 ft AGL	Visibility	40 miles
None	Visibility (RVR):	
8 knots /	Turbulence Type Forecast/Actual:	/
120°	Turbulence Severity Forecast/Actual:	/
30 inches Hg	Temperature/Dew Point:	4°C / 2°C
No Obscuration; No Precipita	ation	
	Type of Flight Plan Filed:	None
	Type of Clearance:	None
07:30 Local	Type of Airspace:	Class D
	PRC ,5406 ft msl 08:16 Local Scattered / 2600 ft AGL None 8 knots / 120° 30 inches Hg No Obscuration; No Precipital	PRC ,5406 ft msl Distance from Accident Site: 08:16 Local Direction from Accident Site: Scattered / 2600 ft AGL Visibility None Visibility (RVR): 8 knots / Turbulence Type Forecast/Actual: 120° Turbulence Severity Forecast/Actual: 30 inches Hg Temperature/Dew Point: No Obscuration; No Precipitation Type of Flight Plan Filed: Type of Clearance:

Airport Information

Airport:	ERNEST A. LOVE FIELD PRC	Runway Surface Type:	Asphalt
Airport Elevation:	5042 ft msl	Runway Surface Condition:	Dry
Runway Used:	21	IFR Approach:	None
Runway Length/Width:	7601 ft / 150 ft	VFR Approach/Landing:	Touch and go

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	34.619922,-112.420791(est)

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Administrative Information

Investigator In Charge (IIC):	Llorente, A.	
Additional Participating Persons:	ASI MIKE WARTH; SCOTTSDALE , AZ	
Original Publish Date:	August 26, 1993	
Last Revision Date:		
Investigation Class:	<u>Class</u>	
Note:		
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=27585	

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