



Aviation Investigation Final Report

Location: CHANDLER, Arizona Accident Number: LAX02LA029

Date & Time: November 14, 2001, 14:20 Local Registration: N4HV

Aircraft: Aviat S-2C Aircraft Damage: Substantial

Defining Event: 2 None

Flight Conducted Under: Part 91: General aviation - Instructional

Analysis

The airplane departed the right side of runway 22R and struck a taxiway sign. During the rollout, the nose of the airplane started to move to the left and the right, and the instructor took control of the airplane. The instructor straightened the nose and continued the rollout. As the airplane slowed, the airplane started to move to the right. The instructor pumped left rudder, but the airplane continued to the right. He applied and held full left rudder, but determined that the airplane would depart the runway. He released the left rudder pedal and intended to stop in the dirt. However, he did not see a runway sign, which collided with the lower right wing. The collision spun the airplane around resulting in substantial damage to the lower wing spar.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: Failure of the flight instructor to maintain directional control resulted in a departure from the runway surface and collision with a runway sign.

Findings

Occurrence #1: LOSS OF CONTROL - ON GROUND/WATER

Phase of Operation: LANDING - ROLL

Findings

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

Occurrence #2: ON GROUND/WATER COLLISION WITH OBJECT Phase of Operation: LANDING - ROLL

Findings 2. OBJECT - SIGN

Page 2 of 6 LAX02LA029

Factual Information

On November 14, 2001, about 1420 mountain standard time, an Aviat (Pitts) S-2C, N4HV, departed the right side of runway 22R and struck a taxiway sign at Chandler, Arizona. Chandler Air Service was operating the rental airplane under the provisions of 14 CFR Part 91. The certified flight instructor pilot and commercial pilot undergoing instruction were not injured; the airplane sustained substantial damage. The local instructional flight departed Chandler about 1330. Visual meteorological conditions prevailed, and no flight plan had been filed.

The instructor stated they completed airwork in the local practice area and returned to the landing pattern. The student was low on the first approach and the instructor had him complete a go-around. The second approach was satisfactory during the approach and touchdown. During the rollout, the nose of the airplane started to move to the left and the right, and the instructor advised the student that he was taking control of the airplane. The instructor straightened the nose and continued the rollout. As the airplane slowed, the airplane started to move to the right. The instructor pumped left rudder, but the airplane continued to the right. He applied and held full left rudder, but determined that the airplane would depart the runway. He released the left rudder pedal and intended to stop in the dirt. However, he did not see a runway sign, which collided with the lower right wing. The collision spun the airplane around and resulted in substantial damage to the lower wing.

Flight instructor Information

Certificate:	Commercial; Flight instructor	Age:	44,Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Front
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	Airplane multi-engine; Airplane single-engine	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medicalno waivers/lim.	Last FAA Medical Exam:	May 15, 2000
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	February 1, 2001
Flight Time:	3250 hours (Total, all aircraft), 10 hours (Total, this make and model), 2986 hours (Pilot In Command, all aircraft), 150 hours (Last 90 days, all aircraft), 78 hours (Last 30 days, all aircraft), 4 hours (Last 24 hours, all aircraft)		

Page 3 of 6 LAX02LA029

Student pilot Information

Certificate:	Commercial	Age:	57,Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Rear
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 Valid Medicalno waivers/lim.	Last FAA Medical Exam:	January 12, 2001
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:			

Aircraft and Owner/Operator Information

Aircraft Make:	Aviat	Registration:	N4HV
Model/Series:	S-2C	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Aerobatic; Normal	Serial Number:	6001
Landing Gear Type:	Tailwheel	Seats:	2
Date/Type of Last Inspection:	June 14, 2001 100 hour	Certified Max Gross Wt.:	1700 lbs
Time Since Last Inspection:	87 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	892 Hrs at time of accident	Engine Manufacturer:	Lycoming
ELT:	Installed, not activated	Engine Model/Series:	AEIO-540
Registered Owner:	PHOENIX PITTS LEASING	Rated Power:	260 Horsepower
Operator:	CHANDLER AIR SERVICE	Operating Certificate(s) Held:	None

Page 4 of 6 LAX02LA029

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	IWA,1382 ft msl	Distance from Accident Site:	7 Nautical Miles
Observation Time:	13:47 Local	Direction from Accident Site:	245°
Lowest Cloud Condition:	Few / 20000 ft AGL	Visibility	20 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	7 knots / 0 knots	Turbulence Type Forecast/Actual:	/
Wind Direction:	280°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.92 inches Hg	Temperature/Dew Point:	22°C / 2°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	CHANDLER, AZ (CHD)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	13:30 Local	Type of Airspace:	Class D

Airport Information

Airport:	CHANDLER CHD	Runway Surface Type:	Asphalt
Airport Elevation:	1243 ft msl	Runway Surface Condition:	Dry
Runway Used:	22R	IFR Approach:	None
Runway Length/Width:	4401 ft / 75 ft	VFR Approach/Landing:	Full stop

Wreckage and Impact Information

Crew Injuries:	2 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 None	Latitude, Longitude:	33.239017,-111.780792(est)

Page 5 of 6 LAX02LA029

Administrative Information

Investigator In Charge (IIC): Plagens, H. Additional Participating Persons: CHRISTINE CLARK; FEDERAL AVIATION ADMINISTRATION; SCOTTSDALE, AZ Persons: April 23, 2003 Last Revision Date: Investigation Class: Class Note: https://data.ntsb.gov/Docket?ProjectID=53774		
Persons: Original Publish Date: April 23, 2003 Last Revision Date: Investigation Class: Class Note:	Investigator In Charge (IIC):	Plagens, H.
Last Revision Date: Investigation Class: Class Note:		CHRISTINE CLARK; FEDERAL AVIATION ADMINISTRATION; SCOTTSDALE, AZ
Investigation Class: Class Note:	Original Publish Date:	April 23, 2003
Note:	Last Revision Date:	
	Investigation Class:	<u>Class</u>
Investigation Docket: https://data.ntsb.gov/Docket?ProjectID=53774	Note:	
	Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=53774

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.

Page 6 of 6 LAX02LA029