



Aviation Investigation Final Report

Location:	DAVIS, California	Accident Number:	LAX00LA287
Date & Time:	August 4, 2000, 09:00 Local	Registration:	N300RE
Aircraft:	Piper PA-30	Aircraft Damage:	Substantial
Defining Event:		Injuries:	2 None
Flight Conducted Under:	Part 91: General aviation - Instructional		

Analysis

The airplane sustained substantial damage when it veered off the runway and collided with a runway light during a simulated engine failure in the takeoff ground roll . The certified flight instructor (CFI) explained to his student that he would be simulating an engine failure on the takeoff roll and proceeded to retard the right throttle. The CFI waited for his student to apply the proper correction procedures; however, the airplane continued to drift to the right side of the runway. The CFI pulled both throttles but realized at that point that he did not have any brakes on his side of the airplane. He increased the throttles and the airplane "violently swerved and rolled" to the left as it became airborne. As the airplane drifted down the runway in ground effect, the CFI regained control and continued the departure. The CFI and student made another practice stop-and-go landing. During the taxi back, they noticed the left wing tip was missing and returned to their home base.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: the dual student's improper response to a simulated engine failure and the flight instructor's delayed remedial action and inadequate supervision of the flight.

Findings

Occurrence #1: LOSS OF CONTROL - ON GROUND/WATER
Phase of Operation: TAKEOFF - ROLL/RUN

Findings

1. EMERGENCY PROCEDURE - SIMULATED - PILOT IN COMMAND(CFI)
2. (C) AIRCRAFT CONTROL - NOT MAINTAINED - DUAL STUDENT
3. (C) SUPERVISION - INADEQUATE - PILOT IN COMMAND(CFI)
4. (C) REMEDIAL ACTION - DELAYED - PILOT IN COMMAND(CFI)

Occurrence #2: DRAGGED WING, ROTOR, POD, FLOAT OR TAIL/SKID
Phase of Operation: TAKEOFF - ROLL/RUN

Findings

5. WING, WINGTIP - TEAR/TORN

Factual Information

On August 4, 2000, about 0900 Pacific daylight time, a Piper PA-30, N300RE, veered off the runway and collided with a runway light during takeoff from Yolo County Airport, Davis, California. Travis Air Force Base USAF Aero Club was operating the airplane under the provisions of 14 CFR Part 91. The certified flight instructor (CFI) and the commercial rated multiengine student were not injured; the airplane sustained substantial damage. The instructional flight departed the private Travis AFB Aero Club airport about 0830. Day visual meteorological conditions prevailed, and no flight plan had been filed.

In a written statement given by the CFI, he stated that he explained to his student that he would be simulating an engine failure on the takeoff roll and proceeded to retard the right throttle. The airplane started to drift to the right and the CFI said he felt the distinct application of left rudder. As the CFI waited for his student to apply the proper correction procedures, the airplane continued to drift to the right side of the runway.

The CFI pulled both throttles but realized at that point that he did not have any brakes on his side of the airplane. He increased the throttles and the airplane "violently swerved" and rolled to the left as it became airborne. As the airplane drifted down the runway in ground effect, the CFI regained control and continued the departure.

The CFI and student continued back around to practice another stop-and-go landing. During the taxi back for takeoff they noticed "something shiny" on the side of the runway. The CFI noticed the left wing tip was missing. The CFI then took control of the airplane and flew it back to Travis AFB Aero Club airport.

The pilot and operator submitted written statements, but did not submit an NTSB 6120.1/2 pilot/operator report.

Flight instructor Information

Certificate:	Commercial; Flight instructor	Age:	23, 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:	Yes
Instructor Rating(s):	Airplane multi-engine; Airplane single-engine; Instrument airplane	Toxicology Performed:	No
Medical Certification:		Last FAA Medical Exam:	March 28, 2000
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	1434 hours (Total, all aircraft), 307 hours (Last 90 days, all aircraft), 126 hours (Last 30 days, all aircraft)		

Student pilot Information

Certificate:	Commercial	Age:	65, Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	Yes
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 Valid Medical-w/ waivers/lim	Last FAA Medical Exam:	November 11, 1999
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:	1151 hours (Total, all aircraft), 19 hours (Last 90 days, all aircraft), 14 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Piper	Registration:	N300RE
Model/Series:	PA-30 PA-30	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	30-841
Landing Gear Type:	Retractable - Tricycle	Seats:	4
Date/Type of Last Inspection:	Unknown	Certified Max Gross Wt.:	3600 lbs
Time Since Last Inspection:		Engines:	2 Reciprocating
Airframe Total Time:		Engine Manufacturer:	Lycoming
ELT:	Installed, not activated	Engine Model/Series:	IO-320
Registered Owner:	Joseph C. Hefferon	Rated Power:	150 Horsepower
Operator:	TRAVIS AFB AEROCLUB	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	SMF,27 ft msl	Distance from Accident Site:	15 Nautical Miles
Observation Time:	08:53 Local	Direction from Accident Site:	40°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	8 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	160°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	21°C / 12°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	FAIRFIELD, CA (8Q0)	Type of Flight Plan Filed:	None
Destination:	(2Q3)	Type of Clearance:	None
Departure Time:	08:30 Local	Type of Airspace:	Class E

Airport Information

Airport:	Yolo County 2Q3	Runway Surface Type:	Asphalt
Airport Elevation:	98 ft msl	Runway Surface Condition:	Dry
Runway Used:	16	IFR Approach:	None
Runway Length/Width:	6000 ft / 100 ft	VFR Approach/Landing:	Full stop;Traffic pattern

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:	38.344444,-121.810554

Administrative Information

Investigator In Charge (IIC):	Plagens, Howard
Additional Participating Persons:	EARL BENEDICT; FAA; Sacramento, CA
Original Publish Date:	November 25, 2003
Last Revision Date:	
Investigation Class:	Class
Note:	The NTSB traveled to the scene of this accident.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=49963

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