



National Transportation Safety Board Aviation Accident Final Report

Location:	LONG BEACH, CA	Accident Number:	LAX95LA152
Date & Time:	04/01/1995, 1450 PST	Registration:	N111LS
Aircraft:	American Champion (ACAC) 8KCAB	Aircraft Damage:	Substantial
Defining Event:		Injuries:	2 None
Flight Conducted Under:	Part 91: General Aviation - Personal		

Analysis

THE PILOT REPORTED THAT AFTER TOUCHING DOWN HE FELT THE AIRCRAFT BOUNCE SLIGHTLY. HE RECOVERED FROM THE BOUNCE AND CONTINUED THE LANDING. DURING ROLLOUT, THE PILOT NOTED THAT THE AIRCRAFT BEGAN TO LIST EXCESSIVELY TOWARD ITS LEFT SIDE. IN SPITE OF HIS CONTROL INPUTS, THE AIRCRAFT CONTINUED TO LIST UNTIL THE LEFT WING FINALLY CONTACTED THE RUNWAY. AN INSPECTION OF THE AIRCRAFT REVEALED THAT THE LEFT MAIN LANDING GEAR ATTACHMENT BRACKET HAD SEPARATED IN THE AREA OF THE WELD. A STEREO MICROSCOPE EXAMINATION OF THE FRACTURE SURFACES REVEALED A LACK OF WELD FUSION. THE AIRCRAFT WAS MANUFACTURED IN JANUARY 1995 AND HAD ACCRUED A TOTAL OF 71.9 HOURS FLIGHT TIME WITH NO REPORTED PRIOR DAMAGE.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: the failure and collapse of the left main landing gear due to a defective and improper weld by the manufacturer.

Findings

Occurrence #1: MAIN GEAR COLLAPSED
Phase of Operation: LANDING - ROLL

Findings

1. (C) LANDING GEAR, MAIN GEAR ATTACHMENT - SEPARATION
2. (C) INSTALLATION - IMPROPER - MANUFACTURER
3. (C) INADEQUATE QUALITY CONTROL - MANUFACTURER

Factual Information

On April 1, 1995, at 1450 Pacific standard time, an American Champion 8KCAB, N111LS, sustained substantial damage while making a wheel landing at Long Beach, California. The aircraft was operated by Hart Air Squadron Jg 54 and was on a local flight. Visual meteorological conditions were prevalent at the time and no flight plan had been filed. Neither the certificated private pilot nor his passenger were injured. The flight originated from the Long Beach airport at 1400 on the day of the accident.

The pilot reported that he had been cleared to land on runway 25R and was prepared to execute a wheel landing. After initially touching down at 85 mph, he felt the aircraft bounce slightly then drift right of the runway centerline. He recovered from the bounce and realigned the aircraft with the runway. When he again touched down, he lowered his left wing slightly to compensate for the left crosswind.

During rollout, the pilot noticed that the aircraft began to list excessively toward its left side. He attempted to correct the condition by applying right aileron, but lost control effectiveness as the aircraft slowed. The aircraft continued to list until the left wing contacted the runway. As the left gear collapsed, the aircraft veered right, coming to a stop near midfield and off the right side of the runway.

The postaccident inspection of the aircraft revealed that the left main landing gear attachment bracket of the aircraft had separated in the area of the weld. The separated weld section was sent to the National Transportation Safety Board Materials Laboratory Division for inspection. A stereo microscope examination of the fractures revealed a lack of weld fusion. The aircraft was manufactured in January of 1995 and had accrued 71 total hours of operation.

Pilot Information

Certificate:	Private	Age:	30, Male
Airplane Rating(s):	Single-engine Land	Seat Occupied:	Front
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	01/27/1995
Occupational Pilot:	Last Flight Review or Equivalent:		
Flight Time:	133 hours (Total, all aircraft), 11 hours (Total, this make and model), 87 hours (Pilot In Command, all aircraft), 26 hours (Last 90 days, all aircraft), 11 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	American Champion (ACAC)	Registration:	N111LS
Model/Series:	8KCAB 8KCAB	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Aerobatic	Serial Number:	740-95
Landing Gear Type:	Tailwheel	Seats:	2
Date/Type of Last Inspection:	01/06/1995, Annual	Certified Max Gross Wt.:	1800 lbs
Time Since Last Inspection:	71 Hours	Engines:	1 Reciprocating
Airframe Total Time:	71 Hours	Engine Manufacturer:	LYCOMING
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	AEIO-360 HIA
Registered Owner:	LARRY W. SHRIVER	Rated Power:	180 hp
Operator:	DON HART	Operating Certificate(s) Held:	None
Operator Does Business As:	HART AIR	Operator Designator Code:	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	LGB, 57 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	1550 PST	Direction from Accident Site:	0°
Lowest Cloud Condition:	Clear / 0 ft agl	Visibility	15 Miles
Lowest Ceiling:	None / 0 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	8 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	200°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	21° C / 11° C
Precipitation and Obscuration:			
Departure Point:	(LGB)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	VFR
Departure Time:	1400 PST	Type of Airspace:	Class D

Airport Information

Airport:	DAUGHERTY FIELD (LGB)	Runway Surface Type:	Asphalt
Airport Elevation:	57 ft	Runway Surface Condition:	Dry
Runway Used:	25R	IFR Approach:	None
Runway Length/Width:	6192 ft / 150 ft	VFR Approach/Landing:	Full Stop; Traffic Pattern

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	1 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 None	Latitude, Longitude:	

Administrative Information

Investigator In Charge (IIC):	ROBERT R CRISPIN	Report Date:	09/24/1995
Additional Participating Persons:	JOHN GOLDFLUSS; LONG BEACH, CA SOL DAVIS; LAKEWOOD, CA		
Publish Date:			
Investigation Docket:	NTSB accident and incident dockets serve as permanent archival information for the NTSB's investigations. Dockets released prior to June 1, 2009 are publicly available from the NTSB's Record Management Division at pubinq@ntsb.gov , or at 800-877-6799. Dockets released after this date are available at http://dms.nts.gov/pubdms/ .		

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The Independent Safety Board Act, as codified at 49 U.S.C. Section 1154(b), precludes the admission into evidence or use of any part of an NTSB report related to an incident or accident in a civil action for damages resulting from a matter mentioned in the report. A factual report that may be admissible under 49 U.S.C. § 1154(b) is available [here](#).