



Aviation Investigation Final Report

Location:	KNIGHTS LANDING, California	Accident Number:	LAX97LA144
Date & Time:	April 7, 1997, 11:30 Local	Registration:	N87770
Aircraft:	Aero Commander 100	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot was landing for the first time at a 1,500-foot-long duster strip, and stated that because of the shortness of the runway and the potential for automobile cross traffic at the other end, he attempted a short field landing. However, the approach end of the runway had a dirt berm across it and it was hard to judge the height. As he approached the berm he added power to clear it, but the plane stalled about 6 to 7 feet agl and landed hard. It bounced and turned left colliding with a metal storage shed.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: the pilot's failure to maintain minimum control airspeed during the approach. Contributing to the accident was the pilot's failure to maintain directional control after landing.

Findings

Occurrence #1: HARD LANDING
Phase of Operation: LANDING - FLARE/TOUCHDOWN

Findings

1. (C) FLARE - IMPROPER - PILOT IN COMMAND
2. (C) DIRECTIONAL CONTROL - NOT MAINTAINED - PILOT IN COMMAND

Occurrence #2: LOSS OF CONTROL - ON GROUND/WATER
Phase of Operation: LANDING - FLARE/TOUCHDOWN

Factual Information

On April 7, 1997, at 1130 hours Pacific daylight time, an Aero Commander 100, N87770, was substantially damaged during landing at a private airstrip 1 mile north of Knights Landing, California. The aircraft was being operated by the owner/pilot and he was not injured. Visual meteorological conditions prevailed for the personal cross-country flight and a VFR flight plan was filed. The flight originated at Concord, California, at 1050.

The pilot was landing for the first time at a 1,500-foot-long duster strip. He departed from a 4,400-foot-long runway at his home base, and stated that because of the shortness of the runway and the potential for automobile cross traffic at the other end, he attempted a short field landing. However, the approach end of the runway had a dirt berm across it and it was hard to judge the height. As he approached the berm he added power to clear it, but the airplane stalled about 6 to 7 feet agl and landed hard. The airplane bounced and turned left colliding with a metal storage shed. The pilot reported the winds were calm at the time of the landing.

Pilot Information

Certificate:	Private	Age:	57, Male
Airplane Rating(s):	Single-engine land	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:	Class 3 Valid Medical-w/ waivers/lim	Last FAA Medical Exam:	September 26, 1995
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	
Flight Time:	213 hours (Total, all aircraft), 42 hours (Total, this make and model), 68 hours (Pilot In Command, all aircraft), 18 hours (Last 90 days, all aircraft), 8 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Aero Commander	Registration:	N87770
Model/Series:	100 100	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	328
Landing Gear Type:	Tricycle	Seats:	
Date/Type of Last Inspection:	March 1, 1997 Annual	Certified Max Gross Wt.:	2250 lbs
Time Since Last Inspection:	9 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	2243 Hrs	Engine Manufacturer:	Lycoming
ELT:	Installed	Engine Model/Series:	O-320-A2B
Registered Owner:	BILLY J. BOYDSTUN	Rated Power:	150 Horsepower
Operator:		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:	KSM	Distance from Accident Site:	
Observation Time:	10:47 Local	Direction from Accident Site:	
Lowest Cloud Condition:	Clear	Visibility	20 miles
Lowest Ceiling:	Broken / 20000 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	4 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	330°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	16°C / 8°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	CONCORD , CA (CCR)	Type of Flight Plan Filed:	VFR
Destination:	(NONE)	Type of Clearance:	VFR
Departure Time:	10:50 Local	Type of Airspace:	Class E

Airport Information

Airport:	SUN RISE DUSTERS, INC NONE	Runway Surface Type:	Asphalt
Airport Elevation:	21 ft msl	Runway Surface Condition:	Dry
Runway Used:	0	IFR Approach:	None
Runway Length/Width:	1500 ft / 40 ft	VFR Approach/Landing:	Full stop

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:	38.890655,-121.800361(est)

Administrative Information

Investigator In Charge (IIC):	Petterson, George
Additional Participating Persons:	NANCY LEIPPE; SACRAMENTO , CA
Original Publish Date:	February 2, 1998
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=29760

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