



Aviation Investigation Final Report

Location:	Riverside, California	Accident Number:	LAX01LA173
Date & Time:	May 5, 2001, 14:50 Local	Registration:	N1159J
Aircraft:	Aero Commander 112A	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

On the landing rollout, the airplane veered to the right, departed the runway, and collided with a ditch. The purpose of the flight was to conduct three takeoffs and landings for currency. The accident landing was the first landing of the day. On the landing rollout the airplane went to the left and the pilot corrected back to runway centerline. The airplane then moved to the right of centerline. The pilot attempted to correct back to runway centerline with left rudder input and then left brake; however, the airplane continued to the right and into a ditch. A postaccident examination of the nose wheel and steering assembly revealed excessive play or wear that may have reduced steering control.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: Failure of the pilot to maintain directional control of the airplane during the landing roll. A factor was the worn nose wheel steering assembly.

Findings

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

Findings

1. (F) LANDING GEAR, STEERING SYSTEM - WORN
2. (C) DIRECTIONAL CONTROL - NOT MAINTAINED - PILOT IN COMMAND

Occurrence #2: ON GROUND/WATER ENCOUNTER WITH TERRAIN/WATER
Phase of Operation: LANDING - ROLL

Findings

3. TERRAIN CONDITION - DITCH

Factual Information

On May 5, 2001, at 1450 hours Pacific daylight time, an Aero Commander 112A, N1159J, veered off runway 27 after landing and collided with a ditch at the Riverside Municipal Airport, Riverside, California. The airplane was operated by the pilot/owner under the provisions of 14 CFR Part 91, and sustained substantial damage. The pilot, the sole occupant, was not injured. Visual meteorological conditions prevailed for the local area personal flight that originated about 1430. A flight plan had not been filed.

The Safety Board Investigator-in-charge (IIC) interviewed the pilot. He had been cleared to land, with no discrepancies noted with the approach or initial touchdown. On the landing rollout the airplane veered to the right. The pilot applied left rudder to correct the movement to the right; however, the airplane continued its movement to the right of the runway. He applied the brakes in an attempt to stop, but the airplane went into a ditch.

In the pilot's written statement to the Safety Board, he stated that the purpose of the flight was to conduct three takeoffs and landings for currency. The accident landing was the first landing of the day. He stated that he had been cleared to land and that touchdown was normal. On the landing rollout the airplane went to the left and he corrected the airplane back to runway centerline. He reported that the airplane started to move towards the right. He attempted to correct the turn to the right with left rudder input. When that had no effect, he applied the left brake. The airplane continued to the right and went into a ditch.

A Federal Aviation Administration airworthiness inspector inspected the nose wheel assembly. He noted that the nose wheel assembly appeared to show "excessive play wear and could have contributed to [a] loss of control when landing his aircraft." No further discrepancies were noted with the airplane during the inspection.

Pilot Information

Certificate:	Private	Age:	70, Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	March 21, 2000
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	June 8, 1999
Flight Time:	653 hours (Total, all aircraft), 95 hours (Total, this make and model), 394 hours (Pilot In Command, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Aero Commander	Registration:	N1159J
Model/Series:	112A	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	159
Landing Gear Type:	Retractable - Tricycle	Seats:	4
Date/Type of Last Inspection:	May 1, 2001 Annual	Certified Max Gross Wt.:	2650 lbs
Time Since Last Inspection:	1 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	1451 Hrs as of last inspection	Engine Manufacturer:	Lycoming
ELT:	Installed, not activated	Engine Model/Series:	IO-360-C1D6
Registered Owner:	Jack L. Frye	Rated Power:	200 Horsepower
Operator:		Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	RAL,818 ft msl	Distance from Accident Site:	
Observation Time:	14:53 Local	Direction from Accident Site:	
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	11 knots / 15 knots	Turbulence Type Forecast/Actual:	/
Wind Direction:	260°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.9 inches Hg	Temperature/Dew Point:	27°C / 8°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Riverside, CA (RAL)	Type of Flight Plan Filed:	None
Destination:	Riverside, CA (RAL)	Type of Clearance:	VFR
Departure Time:	14:30 Local	Type of Airspace:	Class D

Airport Information

Airport:	RIVERSIDE MUNI RAL	Runway Surface Type:	Asphalt
Airport Elevation:	818 ft msl	Runway Surface Condition:	Dry
Runway Used:	27	IFR Approach:	None
Runway Length/Width:	5401 ft / 100 ft	VFR Approach/Landing:	Touch and go;Traffic pattern

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:	33.953056,-117.433334

Administrative Information

Investigator In Charge (IIC):	Cornejo, Tealeye
Additional Participating Persons:	DANIEL BAKER; FEDERAL AVIATION ADMINISTRATION; RIVERSIDE, CA
Original Publish Date:	January 23, 2002
Last Revision Date:	
Investigation Class:	Class
Note:	The NTSB traveled to the scene of this accident.
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=52296

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](#).