



National Transportation Safety Board Aviation Accident Final Report

Location:	Livermore, CA	Accident Number:	WPR11LA216
Date & Time:	05/01/2011, 1630 PDT	Registration:	N998RV
Aircraft:	Dralle (Van's Aircraft) RV-8	Aircraft Damage:	Substantial
Defining Event:	Abrupt maneuver	Injuries:	1 None
Flight Conducted Under:	Part 91: General Aviation - Personal		

Analysis

The pilot of the experimental, amateur-built, tailwheel-equipped airplane reported that he performed a straight-in approach and subsequent landing with a gusting crosswind. As the airplane slowed, and the tail dropped, he applied full aft elevator control input. The pilot applied brakes and then initiated a turn onto the taxiway. He stated that during the turn a gust of wind caught the right wing, tipping the airplane onto the left wing and causing the left aileron hinge to scrape on the runway. The airplane then bounced two times on the left main landing gear. The airplane came to a stop after the pilot applied corrective control inputs. Postaccident examination revealed that the left landing gear mounting box and the adjacent fuselage structure was bent. Additionally the left wing sustained buckling damage to its leading edge, adjacent to the fuselage mounting point and landing gear box. The damage was consistent with the left main landing gear being subjected to an excessive side load. The pilot reported no preimpact mechanical malfunctions or failures with the airframe or engine that would have precluded normal operation. He further stated that the accident could have been prevented by either slowing the airplane down prior to exiting at the chosen taxiway or continuing to the next available taxiway.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's decision to exit the runway while still traveling at an excessive speed and his subsequent loss of directional control.

Findings

Aircraft	Directional control - Not attained/maintained (Cause) Surface speed/braking - Not attained/maintained (Cause)
Personnel issues	Decision making/judgment - Pilot (Cause)

Factual Information

On May 1, 2011, about 1630 Pacific daylight time, a Dralle (Van's Aircraft) RV-8, N998RV, sustained substantial damage during the landing roll at Livermore Municipal Airport, Livermore, California. The pilot was operating the experimental amateur-built airplane under the provisions of Title 14 Code of Federal Regulations Part 91. The private pilot was not injured. The cross-country personal flight departed Los Banos Municipal Airport, Los Banos, California, about 1600. Visual meteorological conditions prevailed, and no flight plan had been filed.

The pilot of the tailwheel equipped airplane performed a straight-in approach and subsequent wheel landing on runway 25R. He reported a direct 8-knot crosswind, gusting to 15. As the airplane slowed and the tail dropped, the pilot applied full aft elevator control input. His intention was to exit to the right onto taxiway E, and as he approached the taxiway he applied brakes. He reported that as he initiated the turn, a gust of wind caught the right wing, tipping the airplane onto the left wing and causing the left aileron hinge to scrape on the runway. The airplane then hopped two times on the left main landing gear. The pilot applied left rudder, realigning the airplane with the runway centerline, and the airplane came to a stop. He assessed the situation, and not perceiving any damage, continued to taxi back to his hangar.

Post accident examination revealed that the left landing gear mounting box and the adjacent fuselage structure was bent. Additionally, the left wing sustained buckling damage to its leading edge adjacent to the forward fuselage mounting point and landing gear box.

The pilot reported no preimpact mechanical malfunctions or failures with the airframe or engine that would have precluded normal operation. He further stated that the accident could have been prevented by either slowing the airplane down prior to exiting at the chosen taxiway, or continuing to the next available taxiway. He additionally cited gusty wind conditions as aggravating the situation.

History of Flight

Landing-landing roll	Abrupt maneuver (Defining event)
	Loss of control on ground
	Abnormal runway contact

Pilot Information

Certificate:	Private	Age:	47, Male
Airplane Rating(s):	Single-engine Land	Seat Occupied:	Center
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 Without Waivers/Limitations	Last Medical Exam:	07/14/2010
Occupational Pilot:	No	Last Flight Review or Equivalent:	04/30/2010
Flight Time:	480 hours (Total, all aircraft), 178 hours (Total, this make and model), 480 hours (Pilot In Command, all aircraft), 33 hours (Last 90 days, all aircraft), 14 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Manufacturer:	Dralle (Van's Aircraft)	Registration:	N998RV
Model/Series:	RV-8	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	Yes
Airworthiness Certificate:	Experimental	Serial Number:	82880
Landing Gear Type:	Tailwheel	Seats:	2
Date/Type of Last Inspection:	04/23/2011, Conditional	Certified Max Gross Wt.:	2000 lbs
Time Since Last Inspection:	3 Hours	Engines:	1 Reciprocating
Airframe Total Time:	170 Hours	Engine Manufacturer:	Aero Sport Power (Lycoming)
ELT:	C126 installed, not activated	Engine Model/Series:	IO-390-X
Registered Owner:	On file	Rated Power:	210 hp
Operator:	On file	Air Carrier Operating Certificate:	None

Meteorological Information and Flight Plan

Observation Facility, Elevation:	LVK, 400 ft msl	Observation Time:	1653 PDT
Distance from Accident Site:	0 Nautical Miles	Condition of Light:	Day
Direction from Accident Site:	0°	Conditions at Accident Site:	Visual Conditions
Lowest Cloud Condition:		Temperature/Dew Point:	25° C / -4° C
Lowest Ceiling:	None	Visibility	10 Miles
Wind Speed/Gusts, Direction:	13 knots, 280°	Visibility (RVR):	
Altimeter Setting:	30.19 inches Hg	Visibility (RVV):	
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Los Banos, CA (KLSN)	Type of Flight Plan Filed:	None
Destination:	Livermore, CA (LVK)	Type of Clearance:	VFR
Departure Time:	1600 PDT	Type of Airspace:	

Airport Information

Airport:	Livermore (LVK)	Runway Surface Type:	Asphalt
Airport Elevation:	400 ft	Runway Surface Condition:	Dry
Runway Used:	25R	IFR Approach:	None
Runway Length/Width:	5253 ft / 100 ft	VFR Approach/Landing:	Full Stop; Straight-in

Wreckage and Impact Information

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

Administrative Information

Investigator In Charge (IIC):	Elliott Simpson	Adopted Date:	08/03/2011
Additional Participating Persons:	Glenn A Gathright; Federal Aviation Administration FSDO; Oakland, CA		
Publish Date:	08/03/2011		
Investigation Docket:	http://dms.nts.gov/pubdms/search/dockList.cfm?mKey=79013		

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