



Aviation Investigation Final Report

Location:	Mokelumne Hills, California	Accident Number:	WPR20CA059
Date & Time:	January 4, 2020, 12:09 Local	Registration:	N92785
Aircraft:	Sud Aviation SE 3130 ALOUETTE II	Aircraft Damage:	Substantial
Defining Event:	Dynamic rollover	Injuries:	1 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot reported that, after about 20 minutes of flight in the helicopter, he returned to a private runway. The pilot descended the helicopter and began a hover-taxi from one end of the runway to the other. During the hover, the right skid contacted grass adjacent to the runway. The helicopter rolled over on its right side, which resulted in substantial damage to the main rotor blades. The pilot reported that there were no preaccident mechanical failures or malfunctions with the helicopter that would have precluded normal operation.

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 adequate clearance from terrain during a hover-taxi, which resulted in the helicopter's skid contacting grass and a subsequent dynamic roll-over.

Findings

Personnel issues	Aircraft control - Pilot
Personnel issues	Monitoring environment - Pilot
Environmental issues	(general) - Effect on operation

Factual Information

History of Flight

Taxi	Collision with terr/obj (non-CFIT)
Taxi	Dynamic rollover (Defining event)

Pilot Information

Certificate:	Private	Age:	74, Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Right
Other Aircraft Rating(s):	Helicopter	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 With waivers/limitations	Last FAA Medical Exam:	January 12, 2018
Occupational Pilot:	No	Last Flight Review or Equivalent:	December 12, 2017
Flight Time:	(Estimated) 1291 hours (Total, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Sud Aviation	Registration:	N92785
Model/Series:	SE 3130 ALOUETTE II No Series	Aircraft Category:	Helicopter
Year of Manufacture:	1958	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	1236
Landing Gear Type:	Skid	Seats:	
Date/Type of Last Inspection:	January 12, 2018 Annual	Certified Max Gross Wt.:	2000 lbs
Time Since Last Inspection:		Engines:	
Airframe Total Time:		Engine Manufacturer:	
ELT:	Installed, activated	Engine Model/Series:	
Registered Owner:	On file	Rated Power:	
Operator:	On file	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	KSCK, 27 ft msl	Distance from Accident Site:	34 Nautical Miles
Observation Time:	21:55 Local	Direction from Accident Site:	225°
Lowest Cloud Condition:	Scattered / 2200 ft AGL	Visibility	10 miles
Lowest Ceiling:		Visibility (RVR):	
Wind Speed/Gusts:	11 knots /	Turbulence Type Forecast/Actual:	None / None
Wind Direction:	320°	Turbulence Severity Forecast/Actual:	N/A / N/A
Altimeter Setting:	30.35 inches Hg	Temperature/Dew Point:	16°C / 10°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Mokelumne Hills, CA (PVT)	Type of Flight Plan Filed:	None
Destination:	Mokelumne Hills, CA (PVT)	Type of Clearance:	None
Departure Time:		Type of Airspace:	

Airport Information

Airport:	Private PVT	Runway Surface Type:	
Airport Elevation:	1500 ft msl	Runway Surface Condition:	Dry
Runway Used:		IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	None

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:	38.295555,-120.720832

Administrative Information

Investigator In Charge (IIC):	Keliher, Zoe
Additional Participating Persons:	Kurt Gibbons; Federal Aviation Administration; Salt Lake City, UT
Original Publish Date:	June 16, 2020
Last Revision Date:	
Investigation Class:	Class
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=100778

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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](#).