

The following statement is based on my conversation with the flight instructor and my examination of the helicopter.

The flight instructor was demonstrating crosswind straight in autorotations with his student. The flight instructor started his flare at approximately midfield at 70 kts.

The two pilots averaged 200 lbs. each, within legal limits of the aircraft weight and balance. The aircraft weight and balance showed a forward CG of 95.7 at takeoff, within the weight and balance envelope and a forward CG of 95.6 at impact (forward cg movement caused by fuel burn off). The forward cg limit was 95.0.

During the flare to level off a large left pedal input was initiated by the instructor pilot to correct for a left crosswind gust.

The aircraft continued to float down runway in a level attitude. The instructor experienced several full left pedal inputs with a low rpm warning horn and continued down the remaining last third of the runway drifting right (wind was from 330/350 at 11 gusting to 14).

The flight instructor also experienced light to moderate wind shear. As the aircraft approached the last 1,000 feet of runway at the approach end of runway 27, a gust of wind caused the aircraft to make an uncommanded climb, gaining 30 feet agl in altitude. The low rpm horn again sounded and the aircraft rapidly descended from 30 feet and continued to drift right.

The aircraft skids made light contact at the hold short line of runway 27 while still drifting right. The aircraft bounced several feet, impacting the ground hard in the grassy area off the runway. The aircraft skidded to the left, falling over on the left side of the aircraft and coming to rest. The aircraft sustained substantial damage. My examination of the wreckage did not reveal evidence of a mechanical failure or malfunction. Both pilots evacuated the aircraft with no injuries.

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