ACCIDENT

Aircraft Type and Registration:	Enstrom 480B, N480KP	
No & Type of Engines:	1 Allison C20W turboshaft engine	
Year of Manufacture:	2003	
Date & Time (UTC):	11 July 2007 at 1517 hrs	
Location:	Shoreham Airport, Sussex	
Type of Flight:	Private	
Persons on Board:	Crew - 1	Passengers - 2
Injuries:	Crew - None	Passengers - None
Nature of Damage:	Creasing to tail boom, tail rotor drive and control runs separated. Skid assembly damaged	
Commander's Licence:	Airline Transport Pilot's Licence	
Commander's Age:	50 years	
Commander's Flying Experience:	16,275 hours (of which 317 were on type) Last 90 days - 31 hours Last 28 days - 7 hours	
Information Source:	Aircraft Accident Report Form submitted by the pilot	

Synopsis

During a sales demonstration a simulated engine-off landing resulted in a hard landing.

History of the flight

N480KP was being used for a sales demonstration flight. The final part of the demonstration was a simulated engine off landing onto a grass helicopter training area. At 300 ft agl, with the engine already at idle, the pilot increased the airspeed to 60 kt. During the last 100 ft, the rate of descent increased and the pilot attempted to reduce this by carrying out a gentle flare. This had no effect so he increased collective pitch but the high rate of descent continued. The rotor low rpm horn sounded just before N480KP touched down on its left skid in a nose-low attitude at approximately 30 kt. N480KP ran along the ground on the left skid for 10 ft before turning gently to the left, despite full right pedal being applied and then dropped onto the right skid. The commander checked the other occupants were uninjured, informed ATC of the incident and shut the helicopter down.

Weather

The Shoreham METAR for the time of the accident indicated a surface wind of $230^{\circ}/15$ kt, gusting to 25 kt.

Pilot's Assessment

The pilot considered that the heavy landing was probably caused by windshear.