Robinson R22 Beta, G-BOEW, 10 June 2002 at 1103 hrs

AAIB Bulletin No: 8/2002	Ref: EW/G2002/06/10	Category: 2.3
Aircraft Type and Registration:	Robinson R22 Beta, G-BOEW	
No & Type of Engines:	1 Lycoming O-320-B2C piston engine	
Year of Manufacture:	1988	
Date & Time (UTC):	10 June 2002 at 1103 hrs	
Location:	Cranfield Airport, Bedfordshire	
Type of Flight:	Aerial Work (Training)	
Persons on Board:	Crew - 2	Passengers - None
Injuries:	Crew - None	Passengers N/A
Nature of Damage:	Tail boom severed and tail rotor drive shaft damaged	
Commander's Licence:	Airline Transport Pilots Licence (Helicopters)	
Commander's Age:	65 years	
Commander's Flying Experience:	11,778 hours (of which 543 were on type)	
	Last 90 days - 93 hours	
	Last 28 days - 24 hours	
Information Source:	Aircraft Accident Report Form submitted by the pilot	

The flying instructor was demonstrating a practice 'engine off' landing for a student. It was the seventh such landing that he had carried out that morning. During the run on, one main rotor blade struck the tail boom causing both the boom and tail rotor drive shaft to break.

The helicopter was landing on the grass helicopter strip, designated 22, heading into wind. The surface wind was reported as being from 230° at 24 kt. The initial ground contact was made on the port side skid on the right hand edge of the strip, which has a boundary marked with scraped earth that is slightly raised above the surrounding grass.

The pilot felt that the initial skid contact with this edge destabilised the run on and his subsequent attempted corrections led to large control inputs at a low main rotor speed.

The pilot commented that there were no cockpit indications to show that any damage had occurred, but he felt a slight vibration and a change of rotor noise following the event. The accident was observed by ATC who alerted the pilot and advised him to shut down.