Robinson R22 Beta, G-INTC

AAIB Bulletin No: 3/99 Ref: E	W/G99/01/04 Category: 2.3
Aircraft Type and Registration:	Robinson R22 Beta, G-INTC
No & Type of Engines:	1 Lycoming O-320-B2C piston engine
Year of Manufacture:	1989
Date & Time (UTC):	5 January 1999 at 1028 hrs
Location:	Halfpenny Green Airport, West Midlands
Type of Flight:	Private (Training)
Persons on Board:	Crew - 2 - Passengers - None
Injuries:	Crew - None - Passengers - None
Nature of Damage:	Substantial
Commander's Licence:	Airline Transport Pilot's Licence (Helicopters)
Commander's Age:	35 years
Commander's Flying Experience:	2,888 hours (of which 2,300 were on type)
	Last 90 days - 197 hours
	Last 28 days - 56 hours
Information Source:	Aircraft Accident Report Form submitted by the pilot

The student pilot was practising engine-off landings under the supervision of an instructor. Having successfully completed several landings, the student was given a simulated engine failure at 150 feet agl. During the subsequent recovery, the rotor RPM fell to 90%, within normal limits for the exercise, and given the headwind of 25 kt, the student fully expected the rotor RPM to recover during the landing flare. However as the student initiated the flare, the wind speed reduced significantly and the helicopter sank rapidly causing him to instinctively raise the collective lever further reducing the rotor RPM. The instructor took control but was unable to prevent a heavy landing. Because of the high landing forces and the, by now, low rotor speed the main rotor drooped and severed the tail boom whereupon the helicopter yawed to the left and rolled over coming to rest on its right side. The crew were able to evacuate the aircraft through the shattered windshield without injury.

The instructor attributed the cause of the accident to the sudden drop in windspeed which allowed insufficient time to either recover to the hover or to execute a go-around.