ACCIDENT

Aircraft Type and Registration:	Schweizer 300, G-JAMA
No & Type of Engines:	1 Lycoming HIO-360-G1A piston engine
Year of Manufacture:	2004
Date & Time (UTC):	7 September 2007 at 0905 hrs
Location:	Biggin Hill Airfield, Kent
Type of Flight:	Training
Persons on Board:	Crew - 1 Passengers - None
Injuries:	Crew - 1 (Minor) Passengers - N/A
Nature of Damage:	Tail rotor driveshaft sheared, tail rotor destroyed and cabin pierced by one tail rotor blade
Commander's Licence:	Student
Commander's Age:	32 years
Commander's Flying Experience:	30 hours (of which 30 were on type) Last 90 days - 18 hours Last 28 days - 6 hours
Information Source:	Aircraft Accident Report Form submitted by the Operator

Synopsis

As the helicopter started to lift, it began to yaw rapidly anticlockwise. It fell off the helipad and the tail rotor struck the ground. The tail rotor driveshaft sheared and parts of a tail rotor blade penetrated the cabin injuring the pilot.

History of the flight

The student pilot was planned to fly a solo, land-away, navigation exercise, as part of his PPL(H) course. He had flown the route three days earlier with an instructor. He was considered, by his instructor, to be an above average student. The weather conditions were good with a variable light wind.

The aircraft was parked on a tarmac helipad which was approximately four inches above the surrounding grass and near to a hangar. Once the pre-flight checks were completed the student raised the collective lever to take off. The aircraft started to yaw rapidly, with the nose of the aircraft going to the left (the same direction as the main rotor blades). The aircraft completed one and a half revolutions without leaving the ground. During these revolutions, the aircraft drifted towards the edge of the helipad. The back of the aircraft went off the edge of the helipad, which caused the aircraft to pitch up, and the tail rotor struck the ground.

The tail rotor blades broke into pieces and the tail rotor driveshaft sheared. A part of one of the tail rotor blades went through the aircraft's skin at the back of the cockpit and penetrated the pilot's seat causing him an injury that required four stitches. The aircraft was shut down and the pilot vacated normally.

The student believed that there may have been a fault with the aircraft, but a thorough examination found no pre-existing defects that would have caused the accident.