ACCIDENT

Aircraft Type and Registration:	Robinson R44 Astro, G-RONN
No & type of Engines:	1 Lycoming O-540-F1B5 piston engine
Year of Manufacture:	1996
Date & Time (UTC):	6 June 2006 at 1515 hrs
Location:	Netherthorpe Airfield, Nottinghamshire
Type of Flight:	Training
Persons on Board:	Crew -1 Passengers - None
Injuries:	Crew - None Passengers - N/A
Nature of Damage:	Twisted airframe; engine and main rotor gearbox oversped
Commander's Licence:	Student
Commander's Age:	33 years
Commander's Flying Experience:	38 hours (of which 38 were on type)Last 90 days - 30 hoursLast 28 days - 9 hours
Information Source:	Aircraft Accident Report Form submitted by the pilot

Synopsis

The student pilot lost control of the aircraft whilst attempting to recover a map which had fallen onto the floor during takeoff. The student tried to land the aircraft whilst it was rotating rapidly to the left resulting in damage to the airframe and engine controls; this in turn resulted in the engine and gearbox being oversped.

History of the flight

The student pilot was about to undertake the second leg of a solo cross-country navigation exercise. He occupied the right pilot's seat and prior to takeoff had stowed his map between the side of the seat and the door. On lifting into the air the map fell into the footwell and the student instinctively bent forward to pick it up. This resulted in an unintentional input on the flying controls lurching the aircraft to the right, forcing the map further forwards under the pedals. The student stated this made him panic and push down on the left yaw pedal, subconsciously as though he were applying the brake in a car in order to stop. The aircraft then rotated rapidly to the left through at least one complete rotation and, as he could no longer control the aircraft, the student decided to attempt to land. In doing so the aircraft remained upright but the rear of the right skid dug into the ground, twisting the airframe. The student reported that he then found he was unable to close the throttle so he closed down the engine by selecting the mixture to CUT OFF, but not before both the engine and rotors had oversped. The pilot was uninjured in the accident and after completing the rest of the shut-down checks, he was able to vacate the aircraft unaided.

Post-accident examination of the helicopter revealed that the pilot was unable to close the throttle because distortion to the airframe had damaged the engine controls.

Comment

Previous accidents have occurred where pilots have tried to recover objects or attempted other actions such as re-closing doors during inappropriate phases of flight. This student stated that his actions on this occasion were all instinctive.

His frank and open report serves to reinforce the need to resist such actions until they can be conducted safely.