

ACCIDENT

Aircraft Type and Registration:	Robinson R22 Beta, G-TIMH	
No & Type of Engines:	1 Lycoming O-360-J2A piston engine	
Year of Manufacture:	2007 (Serial no: 4108)	
Date & Time (UTC):	13 September 2015 at 1330 hrs	
Location:	Nottingham Heliport	
Type of Flight:	Training	
Persons on Board:	Crew - 2	Passengers - None
Injuries:	Crew - None	Passengers - N/A
Nature of Damage:	Damage to the tailcone, cabin floor and engine firewall	
Commander's Licence:	Commercial Pilot's License	
Commander's Age:	45 years	
Commander's Flying Experience:	1,366 hours (of which 841 were on type) Last 90 days - 138 hours Last 28 days - 61 hours	
Information Source:	Aircraft Accident Report Form submitted by the pilot	

Synopsis

The helicopter suffered a heavy landing during a training exercise. An initial inspection did not reveal any damage but later, under different light conditions, damage in the aft fuselage area was noticed.

History of the flight

The instructor and student were carrying out an exercise to practise engine failures in the hover. The first few practices were completed to successful landings. The final attempt resulted in a turn to the left, through 100°, and a heavy landing, both skids touching down together. No unusual vibrations or noises were heard and the instructor lifted the helicopter into a hover, to check for normal operation. No faults were observed and the training detail was continued.

On completion, the helicopter returned to the apron area and the instructor carried out a post-flight inspection. This included a check of the top of the cooling fan for any evidence of contact from the tail rotor mechanism and a check of the lower cross tube for signs of damage or bowing. No damage was observed.

The helicopter was then used on another training flight. After it had returned and shut down, the instructor noticed an "odd" reflection of sunlight from the forward part of the tailcone. Further inspections revealed damage to the engine firewall and the cabin floor.

Conclusions

It was considered that the damage must have occurred during the earlier heavy landing. The helicopter has a black colour scheme, which may have made the damage more difficult to see on the first inspection.

The instructor considered that he had not reacted quickly enough to an incorrect yaw pedal input by the student.