by the

ACCIDENT

Aircraft Type and Registration:	AS355F2, Twin Squirrel, G-CAMB	
No & Type of Engines:	2 Allison 250-C20F turboshaft engines	
Year of Manufacture:	1989	
Date & Time (UTC):	7 April 2007 at 1225 hrs	
Location:	Shobdon Airfield, Herefordshire	
Type of Flight:	Training	
Persons on Board:	Crew - 2	Passengers - None
Injuries:	Crew - 1(Minor)	Passengers - N/A
Nature of Damage:	Crease damage to forward end of tail boom	
Commander's Licence:	Commercial Pilot's Licence	
Commander's Age:	59 years	
Commander's Flying Experience:	4,372 hours (of which 1,190 were on type) Last 90 days - 39 hours Last 28 days - 25 hours	
Information Source:	Aircraft Accident Recommander	eport Form submitted

Synopsis

During type conversion training, a rejected takeoff manoeuvre resulted in a hard landing.

History of the flight

The student was in the final stages of type conversion. A departure, with a simulated engine failure, was carried out with the intention of landing straight ahead. After simulating the engine failure, the helicopter was at approximately 8 ft agl when it lost forward speed and developed an increased rate of descent. The simulated failed engine was immediately restored by the instructor. A slight yaw developed and the helicopter landed on the right skid before bouncing from right to left to right and then settling onto both skids. The commander considered the landing not to have been unduly hard and the exercise was continued; a subsequent rejected takeoff being accomplished before the helicopter returned to its dispersal. The damage was discovered during the post flight inspection. The instructor suffered a minor injury from delayed whiplash.

Analysis

When this twin-engined helicopter takeoff was rejected, translational lift was used to offset some of the reduced performance capability. As the speed decayed, the reduction in translational lift resulted in the remaining engine being unable to provide sufficient torque to arrest the rate of descent. The slight yaw the crew reported was probably the additional torque effect of the simulated failed engine being restored.