

ACCIDENT

Aircraft Type and Registration:	Agusta A109 A2, N745HA	
No & Type of Engines:	2 Allison 250-C20R turboshaft engines	
Year of Manufacture:	1988	
Date & Time (UTC):	13 January 2009 at 1630 hrs	
Location:	Fairoaks Airport, Chobham, Surrey	
Type of Flight:	Training	
Persons on Board:	Crew - 2	Passengers - None
Injuries:	Crew - None	Passengers - None
Nature of Damage:	Nose landing gear damaged	
Commander's Licence:	Airline Transport Pilot's Licence	
Commander's Age:	38 years	
Commander's Flying Experience:	3,220 hours (of which 1,384 were on type) Last 90 days - 134 hours Last 28 days - 10 hours	
Information Source:	Aircraft Accident Report Form submitted by the pilot	

Synopsis

The student was performing an autorotation with both engine Speed Select Levers (SSLs) retarded from the flight idle position. They should have been returned to the flight idle position for the recovery to the hover but were reinstated too late in the descent and a run on landing was performed, damaging the nose landing gear. The instructor was distracted from advancing the SSLs whilst carrying out instruction for the student.

History of the flight

The training flight was conducted as part of a type rating course. The instructor had briefed the student for a simulated double engine failure exercise which involved an autorotation to a powered recovery, using Runway 24 as the aiming point. The instructor would retard both

engine Speed Select Levers (SSLs) for the autorotation ensuring that they were reinstated to the flight idle position by 500 ft agl. The aircraft was to be flared at approximately 120 ft and the aircraft brought to a hover at a height of six feet above the runway. Autorotation to a touchdown is not permitted in this aircraft.

The aircraft was positioned onto the final approach for Runway 24, level at 1,200 ft aal with an IAS of 100 kt. The instructor initiated the autorotation with the verbal instruction, "double engine failure, GO", and retarded both SSLs from the flight idle position. The aircraft was established in autorotation at approximately 75 kt, manoeuvring towards Runway 24. It became apparent that the student was not going to achieve the required

aiming point and the instructor advised the student of corrective action to rectify the situation. Late in the exercise he realised that he had not reinstated the SSLs and advanced them to the flight idle position. He took control and performed a running landing on the grass area alongside the runway. This was an area which he normally used for engine offlandings in other helicopters. The touchdown seemed to be normal, with a landing run on of some three to four metres and no excessive vertical or sideways forces.

The aircraft was hover-taxied back to the parking area for a 'precautionary check' and landed with no apparent signs of damage. After shutting the aircraft down, the pilot noticed that the retractable nose landing gear did not

appear to be fully extended. Close inspection revealed that the extension strut had collapsed and that the nose leg was resting against the underside of the fuselage.

The pilot considered that the damage had occurred during the short run on landing on the softer ground.

Analysis

Although the exercise had been properly briefed, the instructor became distracted from reinstating the SSLs by 500 ft agl while assisting the student. He concluded that it would have been better to reinstate the SSLs to the flight idle position before carrying out instruction or to abandon the exercise and repeat it, having debriefed the student on the previous attempt.