

ACCIDENT

Aircraft Type and Registration:	Agusta Bell 206B, G-GLSS	
No & Type of Engines:	1 Allison 250-C20 turboshaft engine	
Year of Manufacture:	1968	
Date & Time (UTC):	5 April 2006 at 1423 hrs	
Location:	Southend Airport, Essex	
Type of Flight:	Training	
Persons on Board:	Crew - 1	Passengers - None
Injuries:	Crew - 1 (Minor)	Passengers - N/A
Nature of Damage:	Helicopter destroyed	
Commander's Licence:	Student Pilot	
Commander's Age:	55 years	
Commander's Flying Experience:	36 hours (all on type) Last 90 days - 18 hours Last 28 days - 3 hours	
Information Source:	Aircraft Accident Report Form submitted by the instructor pilot and a statement from the student pilot	

Synopsis

The student pilot was flying a solo circuit exercise under the close supervision of his instructor. After a satisfactory circuit the helicopter pilot attempted a normal landing. In the subsequent descent the helicopter started to yaw and struck the ground, causing both skids to break off; it continued to yaw whilst remaining substantially upright. As the yaw ceased, the main rotor blades hit the ground, destroying themselves and causing extensive damage to the helicopter. The student pilot received a head wound but was able to secure and vacate the helicopter.

History of the flight

The helicopter had flown from its base at Earls Colne in Essex to Southend Airport, crewed by an instructor pilot and his student. The student pilot had flown less than two hours solo; this had included solo circuit exercises on the previous two days and his instructor remarked that the student had handled the exercises well. Runway 06 was in use at Southend, with CAVOK conditions and a surface wind from 010° (M) at 6 kt. The weather conditions were similar to those the student had experienced during the previous solo exercises. Helicopter circuits at Southend were flown parallel to, and to the north of, the main runway.

After arriving at Southend a dual circuit was flown

from a grass area adjacent to the runway. This was handled satisfactorily by the student, so the instructor then briefed him for solo circuits, reminding the student of the expected handling differences when flying solo. The instructor also re-positioned a ballast weight, which would help counter the effects of flying without the instructor's weight in the helicopter. The instructor observed the student's first circuit, which appeared good but with the comment that the transition to the hover was a little fast and the landing itself was not at the specified point. The second circuit was very similar to the first initially, with a similar slight overshoot of the desired landing area. As the helicopter descended to a low hover it began to yaw to the left and right by up to 10° in each direction. The student was not happy with the hover so he increased the hover height to 6 to 8 ft whilst stabilising the helicopter.

The helicopter then descended and again began to yaw to the left. The rear part of the left skid touched the ground and caused the rate of rotation to increase as the helicopter pivoted about the contact point. The helicopter struck the ground, and the skids broke away while it continued to yaw while the fuselage body remained upright. It stopped rotating after about 400° of yaw and started to settle to one side. At this point the

main rotor blades struck the ground and were destroyed, while the rotor head and main gearbox assembly were ripped from the fuselage and the tail boom detached. The student shut down the engine and secured the helicopter whilst his instructor rushed to the scene to assist. There was no fire, but the student sustained a head injury which required stitches.

Crash rescue

Once the instructor had helped the student to a safe place away from the helicopter wreckage, he tried to attract the attention of staff in the control tower, situated across the runway near the terminal buildings. Initially all he could do was to wave a high visibility jacket but, when no help was forthcoming, he ventured back into the helicopter to retrieve a mobile phone which he used to call the tower directly.

Having cleared the student pilot to '*land at your discretion north of runway*', the ATC aerodrome controller saw the helicopter come to a low hover in the expected place. He then turned his attention to an aircraft on final approach to Runway 06 and was not aware that the helicopter had crashed. He was only alerted to the fact when the Airport Fire Service contacted him by radio to request clearance to attend the accident on the 'north grass'.