

Bell 206B, G-ODIL

AAIB Bulletin No: 3/98 Ref: EW/G97/10/18 Category: 2.3

Aircraft Type and Registration:	Bell 206B, G-ODIL
No & Type of Engines:	1 Allison 250-C20 turboshaft engine
Year of Manufacture:	1974
Date & Time (UTC):	24 October 1997 at 0915 hrs
Location:	Kinder Scout, Derbyshire
Type of Flight:	Aerial Work
Persons on Board:	Crew - 1 - Passengers - None
Injuries:	Crew - None - Passengers - N/A
Nature of Damage:	Extensive damage to structure and dynamic components
Commander's Licence:	Commercial Pilot's Licence (H)
Commander's Age:	33 years
Commander's Flying Experience:	650 hours (of which 307 were on type) Last 90 days - 120 hours Last 28 days - 18 hours
Information Source:	Aircraft Accident Report Form submitted by the pilot and AAIB inquiries

The aircraft was engaged in underslung loadlifting of bags of stone from a rockfall to a path at the western end of Kinder Scout at an altitude of 2,000 feet. The weather was good with a temperature of 8°C and a surface wind from the north east at less than 5 kt. The bags were loaded by the client at the site of the rockfall and were therefore unweighed but estimated to be approximately 1,000 lb.

The pilot reported that the first bags of stone to be lifted were high up on a cliff face in a position which made it difficult for the aircraft to transition directly into wind. The first lift was completed without incident although a sustained 100% torque was required to lift and transition from the hover.

The second bag was positioned adjacent to where the first had been lifted from. However, the bag was heavier than the first and, after initially lifting the bag, the pilot was unable to complete the transition to forward flight within the available power limit. The pilot tried to set the load down by decelerating back to the hover and descending, as the ground had fallen away. The terrain was extremely uneven with a rock outcrop upwind of and above the level of the helicopter. In the course of lowering the load the helicopter began to yaw to the right and, because of the proximity of obstacles, the pilot attempted to release the load. However, the load did not release and he did not have time to operate the manual cargo release adjacent to the collective lever before he lost control of the helicopter.

The helicopter descended onto a 45° slope and rolled to the right, coming to rest on its right hand side and heading 45° to the direction of take off. The engine continued to run so the pilot closed the throttle to the idle position, switched off the fuel valve and switched off the battery and generator switches. The engine stopped as he evacuated the aircraft via the passenger window.

The operator has stated that the cause of the accident was dynamic rollover.