Bell 206B, G-OPNI

AAIB Bulletin No: 8/99 Ref: EW/G99/04/04 Category: 1.3

Aircraft Type and Registration:	Bell 206B, G-OPNI
No & Type of Engines:	1 Allison 250-C20 turboshaft engine
Year of Manufacture:	1967
Date & Time (UTC):	5 April 1999 at 1100 hrs
Location:	2 miles south of Lyme Regis, Dorset
Type of Flight:	Private
Persons on Board:	Crew - 1 - Passengers - 1
Injuries:	Crew - Minor - Passengers - Minor
Nature of Damage:	Helicopter destroyed
Commander's Licence:	Private Pilot's Licence (Helicopters)
Commander's Age:	37 years
Commander's Flying Experience:	550 hours (of which 120 were on type)
	Last 90 days - 2 hours
	Last 28 days - 2 hours
Information Source:	Aircraft Accident Report Form submitted by the pilot and telephone enquiries

The helicopter was flying from a private site near Teignmouth, Devon to Denham Airport, Middlesex. The pilot's intention was to fly a direct track of 065° using Global Positioning System (GPS) navigation and visual reference. The initial part of the intended route followed the coastline. A few minutes into the flight the pilot made a radio call to Exeter ATC passing the information that he was at 500 feet and requesting a radar service. ATC informed the pilot that they would only be able to offer a flight information service because the helicopter was operating below the level of their radar cover.

The pilot stated that he had been in good visibility at first but had inadvertently flown into mist and become disorientated. Unable to see a way clear of the mist he attempted to climb but in doing so had lost control of the helicopter. He managed to regain control when he came out between layers of cloud having experienced rates of climb and descent of up to 2,000 feet/min whilst in cloud.

The pilot made another call to Exeter ATC reporting that he was uncertain of his position and requesting assistance. He also advised that he was not IMC rated but he was flying between cloud layers. ATC gave the pilot a transponder code and offered a radar advisory service and headings to Exeter Airport where he would be able to carry out a surveillance radar approach. The pilot initially accepted a turn back towards Exeter but found that he would have to descend through cloud and felt that this would be beyond his capability. The pilot then requested radar headings to the east where he believed he would be able to descend clear of cloud. He then discovered that this direction would again take him into cloud so he decided that he would prefer to be directed to the coast and descend over the sea.

The pilot was given a heading of 180° and later 100° and started a descent when clear of the coast. He found that he was unable to maintain a heading while descending on instruments and again lost control of the helicopter. The radar controller saw that the helicopter had turned off the heading onto 030° and was turning back towards cliffs in Lyme Bay. He advised the pilot that he was descending towards the land and that he should readjust his heading. The controller then lost radar and radio contact with the helicopter.

The helicopter descended into Lyme Bay, impacted the sea in a tail low attitude, pitched forward and rolled over. Both the pilot and his passenger were able to release themselves from their harnesses and escape from their respective side doors. The passenger climbed onto the inverted helicopter and after a period in the water the pilot also climbed aboard. Both persons were dressed in lightweight clothing and neither was wearing a lifejacket.

Rescue services were alerted and the Lyme Regis lifeboat was launched but the local police helicopter support unit was unable to assist because of the weather conditions. Witness reports indicated thick fog in the area. A local fishing vessel picked up the pilot and his passenger a mile from the shore about one hour and 20 minutes after the accident, during which time the helicopter remained afloat. Both persons were taken to hospital suffering from mild hypothermia.

Other information

The pilot had watched local television forecasts in the days preceding the flight but did not obtain a specific aviation forecast for the day. The aviation forecast indicated that there would be isolated areas of fog and drizzle in coastal areas with an expected cloudbase of 300 feet.

The pilot had undergone some dual training in instrument flying simulated by the use of a hood. He stated that although useful this had not been sufficient to prepare him for the unexpected flight into IMC.

Several witnesses reported having seen the helicopter along its route. The first was 15 nm west of the accident site where the helicopter was described as flying at a height of 300 feet underneath the cloudbase. A little further along the route the helicopter was described as flying at "head height" over a field in use as a caravan site and then pulling up into a steep climb and just clearing the boundary hedge. The elevation of the land at this site is 450 feet.

Discussion

It was fortunate that the helicopter remained afloat because the survival time in the existing water temperature would have been about one hour. Also, without the added visibility of the wreckage it would have been very difficult to locate anyone in the water.

The pilot had conducted only one flight in the previous 3 months and cannot be considered to have been in current practice. Once the pilot had lost his visual references he would have been forced to transition to instrument flight. In spite of having had some instrument training the added pressure of the real situation caused him to become disorientated quite quickly and to lose control.

Visual Flight Rules (VFR) for flight in a helicopter requires that it remains clear of cloud and in sight of the surface while flying at a reasonable speed with respect to the visibility. There is a CAA proposal, presently under consideration, to introduce a minimum visibility requirement for helicopters operating under VFR.

The available weather forecasts would have indicated a high probability of poor weather along the coast. If the pilot had this information he may have chosen a different route, or have been better prepared when required to make a decision about a continued flight into poor visibility.