

Enstrom 480T, G-TECN

AAIB Bulletin No: 7/98 Ref: EW/G98/03/11 Category: 1.1

Aircraft Type and Registration: Enstrom 480T, G-TECN

No & Type of Engines: 1 Allison 250-C20W turboshaft engine

Year of Manufacture: 1997

Date & Time (UTC): 21 March 1998 at 1401 hrs

Location: Killochries Fold, Kilmacolm, Renfrewshire

Type of Flight: Private

Persons on Board: Crew - 1 - Passengers - 3

Injuries: Crew - None - Passengers - None

Nature of Damage: Extensive, beyond economic repair

Commander's Licence: Private Pilot's Licence (Helicopters)

Commander's Age: 51 years

Commander's Flying Experience: 158 hours (of which 98 hours were on type)
Last 90 days - 27 hours
Last 28 days - 11 hours

Information Source: Air Accident Report Form submitted by the pilot

The helicopter was about to depart from its operating base. It had previously been parked on a westerly heading, facing a hedge and with a barn some 20 metres to the right. The still wind conditions allowed the aircraft to leave the site either by going backwards in the hover or by making a pedal turn to the right and hovering the helicopter sideways to the right to clear obstructions before departing to the south east.

The pilot lifted the helicopter into the hover and made a small pedal turn to the right and held that position. The aircraft was under control and trimmed out. The pilot was aware of no dangers in the vicinity of the tail rotor and was about to continue the pedal turn when the helicopter went out of control.

The pilot's next recollection was of the tail rotor hitting a farm gate which was to the east of the original parking position. The helicopter spun round to the right as it was put onto the ground and it rolled over onto its right side.

As soon as it came to rest, the occupants unfastened their seat belts and vacated the aircraft without injury.

The pilot assessed that the accident was caused by a tail rotor strike.

An aftercast from the Meteorological Office indicated that an anticyclone of 1040 mb had been centred close to the area of the accident. There was a visibility of 50 km with scattered cloud base 3,000 feet. The surface wind and upper wind at 2,000 feet were both calm to variable at 5 kt. The temperature was +11°C.

The Operating Limitations indicated that, for sideward and rearward flight manoeuvring, *'the helicopter is limited to 35 kt. There is no wind azimuth, relative to the nose, that is critical for directional control of the aircraft. Sideward and rearward flight has been demonstrated at 8,000 feet density altitude'*.