

# Bell 206L-4 Longranger IV, G-WFRD

## AAIB Bulletin No: 3/98 Ref: EW/G97/11/04 Category: 2.3

<b>Aircraft Type and Registration:</b>	Bell 206L-4 Longranger IV, G-WFRD
<b>No &amp; Type of Engines:</b>	1 Allison 250-C30S turboshaft engine
<b>Year of Manufacture:</b>	1992
<b>Date &amp; Time (UTC):</b>	15 November 1997 at 1633 hrs
<b>Location:</b>	Sandon near Chelmsford, Essex
<b>Type of Flight:</b>	Private
<b>Persons on Board:</b>	Crew - 1 - Passengers - 4
<b>Injuries:</b>	Crew - Serious - Passengers - 1 Serious - 3 Minor
<b>Nature of Damage:</b>	Severe damage to airframe
<b>Commander's Licence:</b>	Private Pilot's Licence with Night Rating
<b>Commander's Age:</b>	62 years
<b>Commander's Flying Experience:</b>	322 hours (of which 310 were on type) Last 90 days - 14 hours Last 28 days - 7 hours
<b>Information Source:</b>	Aircraft Accident Report Form submitted by the pilot

In the morning the pilot had completed an uneventful flight from Wickford to Woodbridge via Malden and after lunch he intended to return directly to Wickford. Wickford is located 8 nm northwest of Southend airport. The Southend TAF, issued at 0920 hrs, forecast a weather deterioration between 1500 hrs and 1700 hrs to 5,000 metres visibility in light rain and drizzle with broken cloud at 700 feet; a further reduction in the cloud base to 400 feet was forecast to occur between 1700 hrs and 1900 hrs. The TAF for Stansted, which the pilot checked, also forecast a reduction in visibility between 1400 hrs and 1700 hrs to 3,000 metres in light rain and drizzle with a broken cloud base at 500 feet, with the cloud base reducing temporarily to 200 feet between 1700 hrs and 1900 hrs.

The pilot left Woodbridge at 1525 hrs at which stage he described the visibility as good with a cloud base of 2,500 feet although there had been some recent rain. He contacted Southend ATC at 1528 hrs and requested a Flight Information Service (FIS) for a VFR flight from Woodbridge to Brentwood. As the helicopter approached the Chelmsford area the cloud base had reduced to 1,000 feet and the pilot had consequently descended to 800 feet to remain below the cloud. In view

of the deteriorating weather the pilot then decided to land at Hatfield Peverel and subsequently phoned Southend ATC at 1555 hrs to inform them.

After considering the weather over a period of about 35 minutes, during which time the passengers' clothing became damp in the light drizzle, the pilot took off again and called Southend ATC at 1631 hrs to say that he was routing to Wickford at 1,200 feet VFR and requested an FIS. The radio then remained on permanent transmission until 1637 hrs. At this stage the weather conditions deteriorated further and simultaneously the interior of the helicopter misted up; attempts to clear the windscreens with the blower system or wiping them with a leather were unsuccessful. The pilot then decided to make a precautionary landing. The field that the pilot selected was bounded by a hedge and at a late stage he became aware that there was a fence and some cables at the far end. He described the landing as very heavy; analysis of the structural damage by maintenance engineers familiar with this type of helicopter indicates that the vertical deceleration was extremely high. The pilot and the passengers immediately evacuated the helicopter but one of the passengers was too badly injured to move away from the wreckage; the pilot later returned to shut down the engine. The pilot and one of the passengers suffered serious spinal injuries whilst the other passengers were treated by the emergency services for back injuries and shock.

Sunset had occurred at 1612 hrs and eyewitnesses described the conditions at the time of the accident as dark and gloomy in a light drizzle; this observation is supported by an aftercast obtained from the Meteorological Office. The helicopter was initially seen to be hovering at a height of about 50 feet with the landing light illuminated. It was then seen to fly in a number of different directions for a period of just less than 2 minutes before once again entering a hover at about 50 feet; it was then seen to "droplike a stone" before disappearing behind some cottages.

The controller at Southend had made frequent attempts to contact the pilot both by RTF and on his mobile phone. He contacted the London Air Traffic Control Centre at 1644 hrs at which stage the police had received initial reports of a crash landing. The pilot contacted Southend ATC at 1652 hrs to confirm that he had landed at Sandon, 5 nm to the south west of Hatfield Peverel. The weather at Southend at 1620 hrs was recorded as: surface wind 210 / 04kt, 4,500 metres visibility in light rain and drizzle with some cloud at 500 feet and broken cloud at 800 feet, the temperature and the dew point were coincident at +13\_C.