AAIB Bulletin No: 5/93 Ref: EW/G93/03/11 Category: 5

Aircraft Type and Registration: Cameron N-90 Hot Air Balloon, G-TEDF

No & Type of Engines: 2 Super Mk 4 Burners

Year of Manufacture: 1991

**Date & Time (UTC):** 13 March 1993 at 1310 hrs

Location: Stainton Vale, near Middlesborough, Cleveland

Type of Flight: Private

Persons on Board: Crew - 3 Passengers - None

Injuries: Crew - 1 Serious Passengers - N/A

2 Minor

2 Mine

Nature of Damage: Twelve panels in the balloon envelope damaged,

requiring replacement. Minor abrasive damage to basket. Minor damage to private residence at Newport,

Middlesborough involving roof tiles, fence and

telephone lines.

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

Commander's Age: 35 years

Commander's Flying Experience: 38 hours

Last 90 days - 6 hours Last 28 days - Nil

Information Source: Aircraft Accident Report Form submitted by the pilot and

further inquiries by the AAIB

The purpose of the flight was to enable a pilot under training (PUT) to increase his flying experience towards qualifying for the issue of a Private Pilot's Licence (Balloons). The commander reports that she obtained a weather forecast from the Leeds Weather Centre and with this information it was decided to launch the balloon from a suitable site in the Knaresborough area for a planned flight of 60 minutes. The forecast was for southerly winds at 10-12 kt, broken cloud with a base of 2,500 feet, and visibility between 8 and 15 km.

A suitable launch site that was clear of down wind obstructions was selected at Great Wood, near Knaresborough and, following the normal safety checks, the balloon was launched at 1140 hrs. The flight progressed normally and, as the balloon approached Dishforth, the PUT contacted Leeming Approach on VHF radio and advised their position and intended transit through the zone. The balloon

continued drifting to the north and, as it approached Osmotherley, the crew started looking for a suitable landing site. None was immediately apparent and, as they were approaching the Teesside Special Rule Zone (SRZ), an attempt was made to contact Teeside Approach. This was not successful, however, shortly afterwards what appeared to be an ideal long field for landing was observed near Stainton Vale.

The long field was in line with the surface wind and bounded by trees at either end. A slow descent was initiated and, as the balloon crossed the upwind line of trees, the PUT made a positive pull on the rip line. The basket made a firm landing without bounce about one third of the distance into the length of the field and almost immediately began to drag along the ground. The dragging motion quickly became erratic and violent to such an extent that the commander and PUT were thrown out of the basket. The PUT maintained his hold of the rip line but was dragged across the ground until he was forced to release his hold. At the same moment the third crew member was thrown out of the basket and the balloon took off again. All three crew members sustained injuries during the accident sequence but the PUT managed to get to a nearby farm house and alert the emergency services.

Following the accident the unmanned balloon took off and drifted north for a further 3 nautical miles until it descended towards Newport, a suburban area to the north west of Middlesborough. On landing it struck a private house causing damage to roof tiles, telephone lines and a garden fence. There were no injuries to persons on the ground.

The commander reported that she had no clear explanation of what had gone wrong but she did recall that the surface wind in the landing area was significantly higher than that forecast.