Sky 260-24, G-KTKT

AAIB Bulletin No: 10/2003	Ref: EW/G2003/08/46	Category: 3
Aircraft Type and Registration:	Sky 260-24, G-KTKT	
No & Type of Engines:	None	
Year of Manufacture:	1998	
Date & Time (UTC):	10 August 2003 at 0915 hrs	
Location:	Stockton on the Forest, near York	
Type of Flight:	Public Transport (Passenger)	
Persons on Board:	Crew - 1	Passengers - 12
Injuries:	Crew - None	Passengers - 1 (Serious)
Nature of Damage:	None	
Commander's Licence:	Commercial Pilot's Licence	
Commander's Age:	36 years	
Commander's Flying Experience:	902 hours (of which 773 were on type)	
	Last 90 days - 13 hours	
	Last 28 days - 5 hours	
Information Source:	Aircraft Accident Report Form submitted by the pilot	

History of flight

The pilot was conducting a pleasure flight from York to Stockton on the Forest, approximately 2 nm to the north-east of York City centre. Weather conditions at the departure point were good with the surface wind light and variable at about 3 kt with CAVOK and a slight ground mist. The transit was uneventful and made at about 1,500 feet with the wind at that height generally westerly at about 4 kt. The balloon was descended to a height of 500 feet, and a suitable landing site was identified by the pilot in a large rectangular stubble field. To the right of the intended landing area was another field, bounded on two sides by woods and on the north and west sides by roads and buildings. Also in the field to the right were three power lines: one on the western boundary of the field; another crossing the field diagonally from west to east; and thirdly, a set of pylon suspended wires running south-west to north-east across the field. The balloon was tracking parallel to and on the north side of these pylon suspended wires.

During the approach the balloon was drifted towards the pylon wires and the pilot elected to change his landing point to the area on the far side of the pylon wires. He briefed the passengers regarding his intentions and commenced a slow descent towards the revised landing point. When the balloon was about 50 feet above the pylons, the wind dropped and the balloon became stationary. It remained there for a short time but then the pilot climbed it back up to 500 feet in order to try and gain some assistance from the wind. The balloon drifted across the pylons and progressed towards the intended touch down point but as the pilot descended the balloon into the field, the wind changed direction

180° and the balloon was drifted back towards the pylons. The pilot repeated his previous attempt but moved further into the field before descending but again he was carried back over the pylons. A third attempt was made approaching from a lower level but with the same outcome.

The pilot then elected to climb to 2,000 feet hoping to move clear of the pylons but the balloon remained stationary for about 10 minutes above them. He kept his passengers informed of his intentions and then descended down again to approximately 7 metres from the point where he had previously ascended but in a worse position since the balloon was closer to the pylon wires. The pilot carried out a number of ascents and descents in an effort to move away from the wires but, each time the balloon descended below them, it turned towards the pylons.

These activities were time consuming and the pilot was aware of the gas being used and did not want to use up the supply and compromise his landing. The pilot, sensing that the passengers could see that he was becoming concerned, explained to them what was happening. He then decided to land the balloon in the middle of the field between all the wires; the manoeuvring took some considerable time since there was hardly any movement in the negligible wind conditions. The pilot then briefed the passengers that they were probably going to have a hard, vertical landing and not the drifting movement that he had previously described. This was to prevent the balloon being drifted towards the pylon wires.

When the balloon was clear of the wires, the pilot descended rapidly towards his touch down point passing though 150 feet height with a rate of descent of about 300 feet per minute. The burners were maintained on until about 30 feet and the pilot instructed the passengers to brace themselves. The passenger basket struck the ground heavily and bounced approximately 20 feet back into the air. The balloon touched down again and came to rest. The pilot checked with the passengers to establish if there were any injuries. Only one person had suffered an injury that was later diagnosed as a broken ankle.

During his efforts to land the pilot had noticed some smoke which was being drifted in all directions but after the balloon was prepared for recovery, the surface wind speed increased to between 15 and 20 kt. The intended flight time was one hour but the flight lasted one hour and forty-five minutes leaving eight minutes of gas remaining.

Conclusion

The pilot concluded that the drop in wind generally, probably augmented by some local effects, had prevented him from making a normal approach to his intended landing area. His concern for the proximity of the wires and not wanting to run out of gas meant he was committed to land the balloon as soon as possible and in a positive manner.