

SERIOUS INCIDENT

Aircraft Type and Registration:	Sky 220-24 hot air balloon, G-SPEL	
No & Type of Engines:	None	
Year of Manufacture:	1996 (Serial no: 45)	
Date & Time (UTC):	14 June 2017 at 1945 hrs	
Location:	Bashall Eaves, Lancashire	
Type of Flight:	Commercial Air Transport (Passenger)	
Persons on Board:	Crew - 2	Passengers - 6
Injuries:	Crew - None	Passengers - 1 (Serious)
Nature of Damage:	Passenger's portable electronic device	
Commander's Licence:	Commercial Pilot's Licence (Balloon)	
Commander's Age:	63 years	
Commander's Flying Experience:	1,975 hours (of which 500 were on type) Last 90 days - 11 hours Last 28 days - 9 hours	
Information Source:	Aircraft Accident Report Form submitted by the pilot and further enquires by the AAIB	

Synopsis

The balloon was on commercial passenger flight with six passengers. After an uneventful flight the balloon landed firmly, at a horizontal speed relative to the ground of about 9 kt, and the basket tipped over onto its side, during which one passenger fell out. The passenger was seriously injured.

The operator is considering safety actions regarding how it conducts the passenger safety briefings.

History of the flight

The balloon was on a commercial flight with six passengers, a pilot and a crew member. Prior to takeoff the pilot briefed the passengers about the posture and positions they should assume during the landing. This included instructions to bend their knees enough so that their shoulders were below the top of the basket, grip the rope handles inside the basket and brace themselves with their backs facing the direction of travel. Several passengers stated this was explained at least twice, with the pilot adding that the landing could be bumpy, and it was not unusual for the basket to tip over during the landing. Several friends and relatives of the passengers were in the vicinity during the briefings.

The interior of the rectangular basket was divided by a 'T-shaped' partition into three compartments. Prior to takeoff the pilot and the crew member occupied the compartment

at the top of the T, while three passengers occupied each of the compartments either side of the stem of the T. Each passenger compartment had rope handles on both long sides, to provide hand holds for landings in either direction (Figure 1).

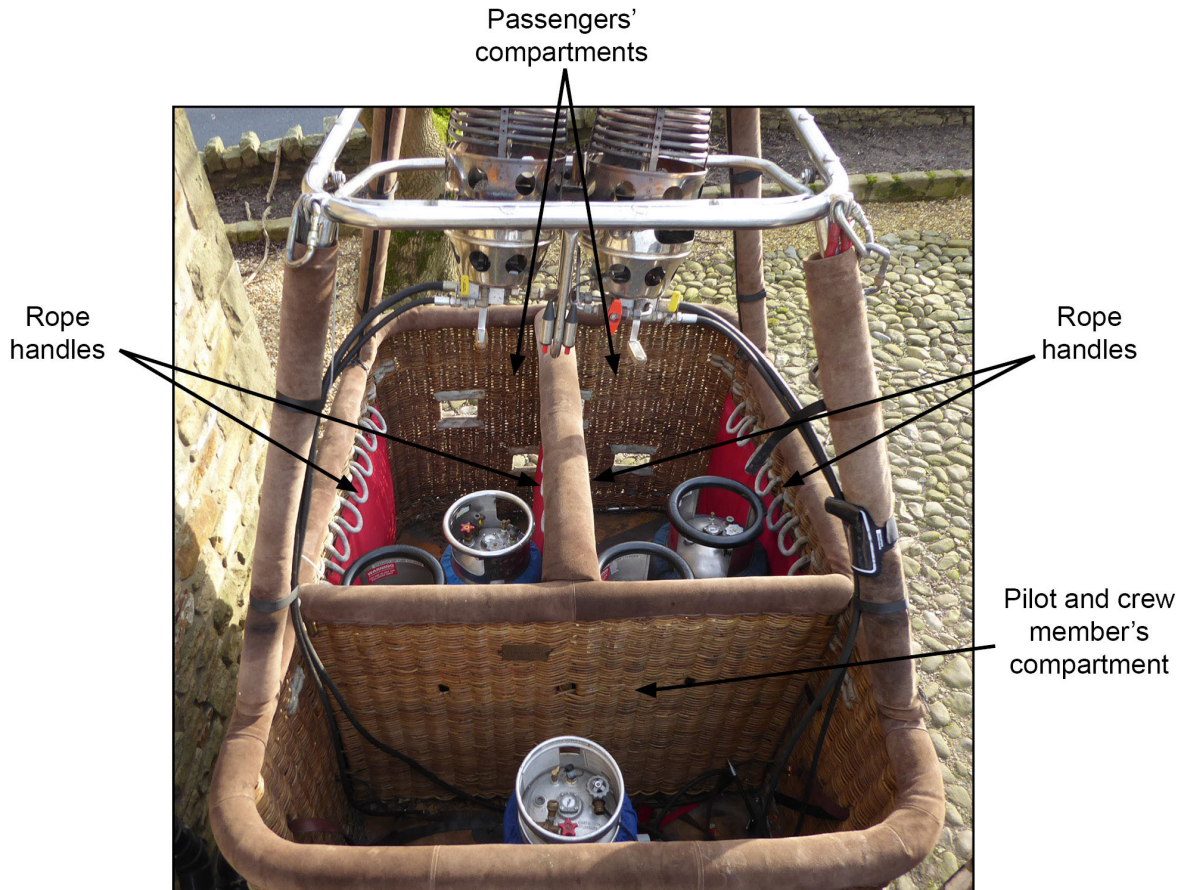


Figure 1
Interior view of the basket.
(Gas bottles would not be in the passenger compartments during flight)

The takeoff from a field near Samlesbury, Lancashire, was uneventful, and the balloon climbed to about 1,000 ft agl and flew in a north-easterly direction towards Longridge Fell, Lancashire. The weather was fine with a wind predominately from the south-west at cruising altitude. During the cruise the crew member was seen to use the gas burners on several occasions, under the guidance of the pilot, and to assist with the navigation with the aid of a hand-held GPS. The crew member stated that the GPS indicated a wind speed of 7 to 8 kt during the cruise but it reduced to about 4 kt in the lee of Longridge Fell.

On the leeward side of the fell, the balloon descended to low level and the pilot started looking for a landing field, noting that the wind speed had increased to about 9 kt. Once a field had been identified he informed the passengers that it was going to be a steep and hard landing, as the wind had increased, and instructed them to get into their landing positions, bend their knees and to hold on tight.

After flying over a tree, at the near end of the selected field, the balloon descended towards the ground, landing firmly on an edge of the basket, and tipped over onto its side. As it did so a passenger in the higher of the two passenger compartments fell between passengers in the lower compartment and out of the basket. One other passenger in the upper compartment found themselves hanging over the partition into the lower compartment and was prevented from falling further by a passenger in the lower compartment. The balloon was then dragged by the wind for about 30 m before coming to rest.

As soon as the balloon stopped the crew member went to assist the fallen passenger who was visibly shaken and was reassured by the crew member. They were then joined by the pilot and the other passengers. The fallen passenger was asked by the pilot if she would like an ambulance called, but this was declined. After a few minutes the fallen passenger sat up and drank some water. A portable electronic device, that was in her handbag was then found to have been damaged.

Once the balloon operator's support vehicle had arrived all the passengers were taken to a local hostelry where the fallen passenger was collected by a relative. On their way home the relative took her to hospital where she was found to have suffered several injuries and showed signs of psychological trauma. The following day the hospital contacted her to advise her that following re-examination of her x-rays she had suffered a fracture in her groin¹.

Passengers' comments

As part of the investigation all the passengers were contacted by the AAIB.

Fallen and hanging passengers' comments

The fallen and hanging passengers stated the pilot did not mention that passengers' shoulders should be below the top of the basket, and that the description of the recommended landing position was repeated. They also did not recall the pilot mentioning during the safety briefing that the landing could be bumpy or that it was not unusual for the basket to tip over.

They added that the crew member was at the controls of the balloon throughout the flight including the takeoff, descent and landing. Additionally, the fallen passenger stated that due to the force of the impact, during the landing, everyone let go of the rope handles. Both these passengers believed the accident could have been prevented had the pilot been at the controls throughout the flight.

Other passengers' comments

The crew member stated that the fallen passenger seemed to be distracted during the safety briefings, given by the pilot, prior to takeoff. This resulted in the pilot asking her to pay attention.

Footnote

¹ The fact that it was later discovered that the fallen passenger had suffered a fracture means her injuries are classified as serious.

Four passengers stated that while the crew member did assist the pilot during the cruise portion of the flight she did not handle the controls during the takeoff, approach or landing.

Four passengers stated that they held onto the rope handles during the landing. The passenger who prevented the hanging passenger from falling further added that he let go with one hand to do so, but maintained a grip on the handle with the other.

Pilot's comments

The pilot stated that while the crew member did operate the balloon's controls at times during straight and level flight, above 1,000 ft agl and under his instruction, she played no part in the landing itself.

Analysis

The investigation could not determine who was controlling the balloon during the landing. The fact that the crew member was at the controls at some point during the cruise appears to have had no bearing on the accident.

The crew member stated that the fallen passenger seemed to be distracted during the safety briefing. If this was the case, she may have missed some of the important information mentioned by the pilot.

It could not be determined why the passenger fell out. However, it is probable she was not holding on to the rope handles firmly enough.

This accident highlights the importance of listening to and understanding the safety briefings and pilot's instructions given before and during flights in any type of aircraft.

Safety actions

The operator stated that it is considering conducting the safety briefings before takeoff with only the passengers present, to avoid them being distracted. He will also give more emphasis on the need to hold onto the rope handles tight during the landing.