

ACCIDENT

Aircraft Type and Registration:	Lindstrand LBL 330A hot air balloon, G-LRGE
No & Type of Engines:	None
Year of Manufacture:	2003 (Serial no 929)
Date & Time (UTC):	22 September 2011 at 1630 hrs
Location:	Micheldever, Hampshire
Type of Flight:	Commercial Air Transport (Passenger)
Persons on Board:	Crew - 1 Passengers - 14
Injuries:	Crew - 1 (Serious) Passengers - None
Nature of Damage:	Damage to pilot's thumb requiring surgery
Commander's Licence:	Commercial Pilot's Licence (Balloons)
Commander's Age:	56 years
Commander's Flying Experience:	2,700 hours (of which 2,000 were on type) Last 90 days - 37 hours Last 28 days - 3 hours
Information Source:	Aircraft Accident Report Form submitted by the pilot

Synopsis

The pilot's gloved thumb became caught in the quick release mechanism at takeoff, causing serious injury. He was able to land the balloon in a field without further incident.

Description of the event

The pilot gave a routine safety briefing to his 14 passengers and initiated balloon launch shortly afterwards. The launch site was a small clearing, sheltered by trees on all sides. After he had operated the quick release mechanism, the pilot's gloved right thumb became trapped by the portion of tether rope fixed to the balloon basket. This was running out through a 4 inch diameter ring, fixed to the second part of the tether rope arrangement which itself was securely attached to the support vehicle.

The pilot's thumb was pulled towards the ring, and jammed the passage of the rope through it, causing him to be dragged partially out of the basket as the balloon rose. Eventually, the upper joint of his thumb snapped back due to the increasing force on it and was released. The nature of the launch site meant it was not possible to land back there. Instead, the pilot landed the balloon in a field about a mile away. He was taken to hospital and detained for relocation and surgery on his damaged thumb.

After inflation, but prior to launch, the balloon basket had shifted to a position whereby the quick release mechanism and the ring were in close proximity, a situation which was not unusual. The pilot did not know why his thumb became caught but considered the

proximity of the quick release line and the ring may have been contributory.

Safety message

The pilot was a very experienced balloonist, who was concerned that the accident arose through no obvious departure from normal procedures or through any obviously unsafe act. The quick release system in use was a common arrangement and, like other arrangements, typically required some tension to be present in the tether ropes to operate cleanly. Consequently, a pilot could find himself manipulating the release arrangement (by pulling on one of the ropes, for example) in order to temporarily create the required tension.

With the basket moving under light and variable winds, the pilot in this case believed he may have attempted to create the required tension by holding onto part of

the securing rope, and that he may have developed this undesirable practice over a period of time without realising the potential danger. He felt this technique may have contributed to the outcome.

The pilot further observed that there was the real danger of being dragged completely out of the basket, although in this case this was averted by his safety harness and the fact that his thumb suddenly released. He believed it was not unusual for some pilots to be in the habit of securing their safety harness only after launch, which in the light of this accident could be seen as having the potential to subject the balloon and its occupants to grave risk.