

## Townend fall casts doubt over frangible pin efficiency

**C**ONCERN over the efficacy of frangible pins has been raised following Oliver Townend's rotational fall at Lexington. The frangible pin on the first rail at the Hollow did not break and produced three falls – two of which were rotational. None of the horses or riders was seriously hurt but many have been asking why the pins did not break.

BE's national safety officer Jonathan Clissold, though, remains positive about the value of frangible pins.

"There's no guarantee that the pins will break and they are not a solution but they have been tested and we know that in certain situations they will decrease the risk of a rotational fall," he said, listing examples in the recent past of frangibles doing their job – at Belton, Larkhill and Badminton. "If the rotation is over a fence, the fence should evaporate. However, it looks like Oliver's horse did a somersault over his own foreleg and therefore the load was

insufficient to break the pin. Frangibles were particularly developed to deal with horses leaving a forearm and falling slowly from a great height."

Lexington course-designer Mike Etherington-Smith also believes that a pin could not have prevented this particular fall.

"Those who have seen slow-motion footage have said that the pin was not loaded so it would not have activated," he said. "Pins will help to reduce the possibility of a rotational fall but they cannot take away that risk altogether. It all depends on the loading and the direction of forces.



Ashdale Cruise Master's fall at the Hollow fence did not trigger the frangible pin, possibly because the horse "somersaulted over his own foreleg"

"[The frangible pin not breaking] demonstrates to me the absolute need for people around the world to keep thinking of further ideas," added Mr Etherington-Smith. "Pins are a solution for a certain situation but not for every one and this should be an incentive to develop further answers."

Frangible fences were a hot topic even before Lexington. The Competitive Measure project, which is comprised of four years of safety research by the sports engineering company, has just come to an end and is currently being reviewed by BE. Jonathan Clissold revealed that one aspect

of the research has concluded that the specification may be changed so that a lower load would safely be able to break a pin.

'Reverse pinning' has also been tested this season in the field. This is where the pin is used behind the post, allowing for slight horizontal movement, which could be more versatile at times when the fence is hit at different angles. The reverse pins were tested at Larkhill and broke in two instances.

Another development is that a second-generation pin has been manufactured. It behaves in a more brittle way and therefore breaks more quickly.