

09-14-2021: Memorandum regarding the review of the Firebird USA LLC, harness dislocation issue.

This memorandum is a result of a meeting at Firebird USA LLC regarding a main lift web dislocation and separation involving a Firebird length adjustable harness on an Evo Student harness and container system being used as a rental rig by Square 2 in Eloy AZ.

Parties to the review of the equipment were; Sandy Reid, Tony Frost, Steve Curtis and George Reuter.

This review discovered almost immediately that the let main lift web was routed incorrectly with regard to the adapter hardware. This misrouting allowed the opening load to be carried by the sizing tab and not the friction adapter. Since the rig in question had been in use for several years and had accumulated several hundred jumps it was found to be highly unlikely that this misrouting was a function of improper assembly at Firebird but rather was a result of improper rerouting in the field, probably within the last few utilizations of the rig.

Since it was determined that it was possible for the misrouting to be replicated with some ease; Firebird has determined to take the following preventative actions:

- 1) Contact all the current owners of the same model system and advise them not to jump the assembly until they have inspected the routing of the main lift web at the friction adapter.
- 2) Publish a mandatory service bulleting describing both the proper routing and the misrouting using photographs to illustrate the issues.
- 3) Request through the service bulletin that all the current rig owners take a picture of the affected areas on their rigs and return them to Firebird.
- 4) Offer a modification to all existing rigs to be performed either in the field, or at Firebird to replace the current Type IV blocking wrap with Type XVII s that the main lift web could no longer be rerouted in the field by a user.
- 5) Incorporate the modification in item 4 in all new manufacture rigs of the same model.

Unfortunately considering the current system of repacking of main canopies by various persons with varying experience under varying degrees of supervision by licensed practitioners it is hard to determine who may have rerouted the main lift webs on this particular rig.

Rigs in use as rental or student gear receive varying degrees of scrutiny between uses and users. This misrouting would have been difficult to detect from casual review and may well have happened inside the interim of the last formal review of the rigs condition at the reserve repack. Customarily main packers have little or no time or incentive to perform anything other than a very cursory inspection of the rigs they are packing since many packer pack as many as 75 to 100 main canopies per busy day. It is my opinion (and my opinion only) that main packing for hire should be limited to licensed riggers. Also some form of documentation be kept, at least for a minimum time, of the work performed; particularly for rigs in commercial use such as: Student, Rental and Tandem systems.

In conclusion it is my feeling and I believe the consensus of the group that the issue regarding the main lift web of the rig in question was a result of improper routing of the main lift web by a person or persons unknown, and that the propose preventative actions will with all probability preclude recurrence of the issue.

Respectfully Submitted,

Tony B. Frost
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