Consensus of the UIAA Safety Commission: Statement Regarding the Re-Usability of Via Ferrata Energy Absorbing Systems after a Significant Fall

At the June 2014 Safety Commission meeting, as part of the discussion of via ferrata energy absorbing systems (EAS), delegates deliberated regarding the status of re-usability of EAS after fall arrest. There is consensus about the following assumptions regarding re-usability on which the current VF EAS standard is based:

An EAS is a safety system of last resort. The deployment of an EAS in the event of a significant fall is similar to the deployment of airbags during automobile crashes. Both deployments are violent and can cause severe injury. In both situations, it is of utmost importance that great care be taken to avoid deployment, which must be considered an option of last resort. As such, the mentality of falling on a via ferrata differs significantly from the mentality appropriate to sport climbing or bouldering—sports in which falling may be considered an acceptable risk.

Significant EAS deployment implies that the fallen climber will require rescue. After a significant fall in which a significant deployment of the EAS occurs, the fallen climber will almost surely be injured to the point where rescue personnel are required, whether to attend to injuries and/or attend to extraction of the climber suspended by the deployed lanyard more than one meter below the anchor at the bottom of the via ferrata stage.

Extraction after via ferrata EAS deployment is a problem. Situations that are likely to lead to significant EAS deployment but NOT the severe injury of the via ferrata climber are also likely to strand the climber suspended in overhanging terrain a distance of a meter or more below the anchor. Extraction and self-extraction from such a situation are difficult and require expertise and possibly extraction equipment (for example, prussiks or ascenders—which are not so easy to use on tape/webbing).

Via Ferrata climbing may be an individual pursuit. Soloing a VF entails an acceptable risk, but entails more risk than would be present when climbing as member of a party. Recognition of the risk of injury and/or becoming stranding as a result of EAS deployment must guide via ferrata climbers who choose to climb alone.

If a via ferrata climber is concerned about the re-usability of an EAS, a 2nd via ferrata EAS kit should be brought along or a via ferrata EAS kit with a re-threadable rope braking device should be used. This situation is a little like a mountaineer bringing two helmets in case the first is damaged or installing a 2nd set of air bags in a car to be able to drive away from an accident after the first airbag deploys. Nonetheless, the concern is legitimate and can be addressed; doing so might be especially appropriate for parties that are large enough and/or skilled enough to extract a party member who has become stranded in overhanging terrain after EAS deployment. It goes without saying that although possession of an extra EAS or a re-usable EAS may assist the evacuation of a climber after an initial EAS deployment, possession of an extra EAS kit does not reduce the likelihood of the initial deployment nor mitigate the immediate consequences the initial deployment.

The EAS user must have a degree of expertise. The level of a VF EAS user's "expertise" was controversial. On one hand, the European PPE requires a competent, trained user and the UIAA Tyrol Declaration urges climbers to have "proper training." On the other hand, the delegates recognized that one of the fundamental aspects of the sport of via ferrata climbing is to enable climbers to progress in steep terrain without the degree of expertise required for roped climbing. In any event, there is consensus that awareness and acceptance of the risks of EAS deployment are components of the expertise required for via ferrata use.

These assumptions would deserve reconsideration in the future if there are either significant changes to the EAS/via ferrata standards or significant improvements in the technologies used in via ferrata construction/EAS manufacture. For the time being, physics, human physiology, and the nature of the sport tightly constrain EAS braking force and distance to levels that are likely to result in injury and/or stranding during a fall that significantly deploys the EAS; thus the current EAS standard does not include re-usability as a requirement.