Dangerous flaw discovered in via ferrata energy-absorbing systems (EAS, also known as klettersteig sets)

An english language translation of the Alpine Club's press release, *Gefährlicher Mangel*BEI KLETTERSTEIGSETS ENTDECKT

AUGUST 30, 2012

A dangerous flaw has been discovered in a number of via ferrata energy-absorbing devices (EAS, also known as klettersteig sets). This discovery is the result of an investigation into a fatal via ferrata accident in Tirol that occurred in August (2012). In addition to the model implicated in this accident, several other EAS models with so-called "elastic" lanyards that connect the energy absorber unit to the carabiners that clip to the via ferrata cables have also been found to be defective. The German, Austrian, Swiss, and South Tirol alpine clubs are alerting all via ferrata users to use EAS devices with elastic lanyards only if they are listed as "not affected" in the table below.

THE ACCIDENT

On August 5, 2012, a fatal accident occurred on a via ferrata in the vicinity of Walchsee in Tirol. The climber fell several meters and both lanyards on the EAS severed—a failure mode that had never before been observed. Such an accident seemed not be possible with correct use, in the absence of previous damage to the EAS, and without contact with sharp edges. The Innsbruck district attorney's office has initiated an investigation into the cause of the accident. The following information is independent of the Innsbruck DA investigation and instead is the result of the investigation and research undertaken by the German Alpine Club in conjunction with EAS manufacturers.

THE ALPINE CLUB INVESTIGATION AND ITS RESULT

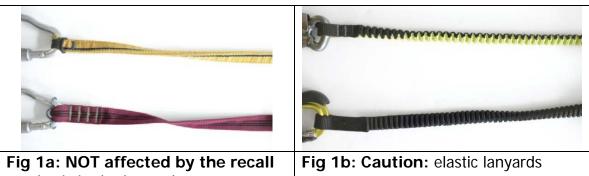
An investigation of the model of EAS used in the accident indicates that repeated stretching of the elastic lanyard leads to a reduction in the strength of the fibers. Such stretching occurs during normal via ferrata travel. When the elastic and strength bearing threads are woven together the two types of fibers move differently and the resulting rubbing commonly causes a reduction in fiber strength. Depending on the construction, it is possible to reduce the strength of the elastic lanyard. The mixing of the elastic and non-elastic fibers occurs not only in the lanyards of the EAS involved in the Walchsee accident but also in models produced by other manufacturers. The manufacturers Austrialpin, Edelrid, Edelweiss, and Singing Rock have issued recalls for affected EAS.

ALPINE CLUBS PROMPT MANUFACTURERS TO TEST THEIR EAS

As an immediate response to the accident, the German, Austrian, Swiss, and South Tirol alpine clubs, in collaboration with the accredited test laboratory TÜV Sud, developed a testing procedure for elastic lanyards. Then, manufacturers were asked to test their EAS models according to the new procedure. Table 1 shows the results of this request.

EAS WITHOUT ELASTIC LANYARDS ARE NOT AFFECTED

EAS without elastic lanyards are unaffected by the recently discovered, dangerous failure mode. To help distinguish between elastic and non-elastic EAS, figures 1a and 1b show examples of unaffected and affected lanyards.



no elastic in the lanyards

EAS with elastic lanyards are in practice constructed in two different ways, and only one construction can be problematic. If an EAS with elastic lanyards is problematic or not is not discernable to the naked eye. Only detailed testing similar to that undertaken by the alpine clubs can determine whether the EAS is affected.

WHICH EAS HAVE RECENTLY BEEN IDENTIFIED AS DEFECTIVE

Table 1 lists all the elastic lanyard EAS models that have been recalled by the manufacturer. Details, photos, and exchange information are listed under "downloads" at: http://www.alpenverein.de/presse/gefaehrlicher-mangel-bei-klettersteigsets-entdeckt aid 11787.html Also listed are all the EAS with elastic bands that according to the manufacturer are not affected by this problem.

Table 1: List of Via Ferrata EAS, those Recently Recalled & Those Unaffected by "Elastic" Problems?

	VIA FERRATA EAS, THOSE RECENTLY RECALLED & T	
Hersteller	betroffen > Hersteller-Rückruf	nicht betroffen
Anlo Mountain		■ Ibex
Austrialpin	■ Colt	■ DB 4
·	Hydra	
Black Diamond	,	■ Easy Rider
		■ Iron Cruiser
Camp		Matrix Rewind
Camp		Martix Gyro Rewind
		Vortex Rewind
	To Chall Code Cod	Vortex Rewind Light Tourish Historian
СТ	■ Top-Shell Spring Set	■ Top Shell Spring
	Classic-K Spring Set	Classic K-Spring
		Revolving K-Set
Edelrid	Cable Lite	Cable Vario
	Cable Lite 2.0	Cable Kit / Cable Kit 2.0
	Cable Comfort	Cable Kit 3.0
	 Cable Comfort 2.0 	Cable Lite 2.1
	Cable Kit 4.0	Cable Lite 2.2
	Brenta Comfort	Cable Comfort 2.2
	 Cable Kit Xtra-Light Schuster 	■ Cable Kit 4.2
Edelweiss	Upsilon EVO	Upsilon
	 Upsilon EVO junior 	- 1
	 Upsilon EVO Swivel Performance 	
	 Upsilon EVO Performance 	
	 Upsilon EVO Swivel 	
Vana	- Opsilon EVO Swiver	■ K.K.L.
Kong		
		KikiLi
LACD		Via Ferrata Set Pro
Mammut		Tec Step Turn
		Tec Step Bionic
		Tec Step Classic
		Tec Step Brenta Classic
		Tec Step Via Ferrata Brenta Turn
		Tec Step Via Ferrata Brenta
		Tec Step Via Ferrata Element
		Tec Step Via Ferrata Turn KL
		Tec Step Via Ferrata KL
		 Via Ferrata Turn Web Key Lock
		 Via Ferrata Step Web Key Lock
		 Via Ferrata Performance Key Lock
Ocún	Via Ferrata Y – form "Harmonica"	■ Via Ferrata Y – form "Trombon"
	 Via Ferrata Rip'n'stop "Harmonica" 	Via Ferrata Rip'n'stop "Trombon"
Petzl	7.a. c. atap stop "marmomou	Scorpio*
Salewa		■ Ergo Zip
SaleWa		
		■ Ergo Tex
		Attac Zip CA Charles Called
		• G4 Classic Cobra
		■ G4 Attac Cobra old (red/white)
		G4 Attac Cobra new (black)
		G4 Attac Premium old (black)
-		 G4 Attac Premium new (red/white)
Simond		Vitalink
Singing rock	Easy Go Xp	
	Easy Go Xp Complete	
	Easy Go Xp Lock	
Skylotec		Skyrider
		 Skysafe
Stubai	 Connect Compact Mod. 1211, SN 498 	 Connect Compact, außer SN 498
	Connect Flex Mod. 1211, SN 499	 Ferrata Connect Flex, außer SN 499
		 Ferrata Connect Basic, alle Serien
Wild Country	■ Via Ferrata Set	

Stand: 13. September 2012

^{*} Petzl Scorpio den Überprüfungsaufruf vom 13.05.2011 beachten

OTHER EAS NOT LISTED:

Similarly, some other EAS are not listed in the table because the manufacturers have not had enough time to respond to the alpine clubs before the issue of this press release. For EAS with elastic lanyards that are not listed in this table, contact the manufacturer to determine the integrity of the EAS model.