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Protective Clothing for BASE Jumping

When I started BASE jumping in 1987, we didn't need no stinkin' helmet, we didn't need pads. We were invincible! And besides, the major hazard was DEATH and a piece of plastic with foam wasn't going to help with that.

I'm glad to say that a lot of that cavalier attitude has given way to a more informed approach. Common practice today dictates we use some form of protective equipment. This is due in part to the sport maturing and also thanks to the sport's leaders taking an active role in promoting helmet and pad use.

BASE jumping is potentially a full-contact sport. We jump next to solid objects, we land in places that definitely were not intended as landing areas and we sometimes get involved in rock climbing, rappelling etc just to reach our exit points.

In any sport one must weigh the pros and cons of donning protective gear. Will it inhibit vision, will it inhibit movement and could it create other compromises such as equipment entanglements or an inability to swim? The norm for BASE jumping equipment is a hard helmet and plastic knee pads. Is this enough? How can we improve on these? To answer these questions we should ask our selves what are the typical injuries we are trying to prevent.

Most common are skinned/bruised knees and palms from poor landings. These are followed by ankle and lower leg injuries. Wall strikes and bad landings often produce broken limbs and, unfortunately, head injuries.

To address the issue of injury prevention we should go further back than just the outer layer. If you want to BASE jump for a long time without getting hurt the first thing to do is set that as one of your priorities and make your decisions accordingly. Next, physical condition should be considered. Being flexible is the single biggest asset in injury prevention. A reasonable amount of muscle mass as support for your bones and joints, complemented by good flexibility is what will let you walk away from a landing that looks like a floor exercise at a gymnastic meet.

What clothing you choose is also relevant. Shorts are comfortable but how protective are they? Well not very, but if you intend to land into the water they are probably a good choice because they will ease swimming. In that same vein, although it is chilly should you be wearing a sweatshirt for that water jump? Wouldn't a light wet suit work better? Choose your clothing appropriately keeping in mind what you are trying to protect yourself from. Shorts work OK if your LZ is a grassy field. If your landing area(s) is urban think twice about how you will keep the skin on your hips if you have to PLF.

Footwear is a critical element. A good choice can go a long way to preventing lower leg and ankle injuries. There are countless choices available but I suggest selecting something that provides the protection you need then look for features such as water proofing and sticky soles.

A good BASE jumping shoe should provide a lot of ankle support. It should not use speed laces. These hooks are taboo in skydiving and their drawbacks are even more relevant in a BASE jumping application. A sturdy toe box helps to prevent stubbed or broken toes when landing in rocks but a good fit is imperative. If the shoe is too loose, that rigid toe box will hurt your toe as your foot slides forward on a running landing. As an alternative to full height boots some prefer using a lighter weight day hiking shoe in conjunction with a commercially available ankle support. Football players go to the trouble of taping their ankles and they hardly get off the ground.

The use of boots designed for paragliding is also gaining popularity. These are rather large and heavy but come about as close as possible to a purpose built product. They have no hooks, they lace well past the ankle and they also often incorporate plastic inserts to add support to the ankle. Their soles are generally soft rubber with aggressive treads and their uppers are leather to add weather resistance. Expect to spend between, \$180 and \$300. Alpina makes a good low cost model.

The next layer is our front line of defense against injury - padding.

By all means wear a helmet. The brain is a very fragile organ but without 100% function we are permanently compromised. The very mention of brain damage has a serious connotation. You just don't think of any other injury in quite the same light. Mention that you had a broken arm in a job interview and see if anyone remembers. Mention that you have brain damage and see what happens. The brain has a very low tolerance for impacts from side to side vs. front to back.. Even the most innocuous looking falls that involved this type of injury have been known to kill people.

Protec™ helmets are the standard at the moment. Gath™ freestyle helmets are also gaining popularity because of their low profile and trendy looks. Neither of these offer much beyond abrasion resistance. Their polycarbonate shells and light foam padding will do little to cushion a real blow. Not that we should all begin wearing motorcycle helmets, but laminated carbon fiber or fiberglass will provide significantly greater protection due to the energy absorbing qualities of these materials and their construction. There are several skydiving helmets available with this type of construction worth looking at as well as some ski racing designs.

Eye protection is another consideration. If you may be landing into trees think about wearing sunglasses or other form of eye protection.

Gloves are another item that gets little attention. Primarily useful to protect against abrasion they are worth wearing if your landing area / conditions are rough or challenging.

The skinned and bruised knees/elbows can be readily addressed by using commercially available skateboard pads. Also downhill mountain biking pads are gaining popularity. These have been adapted from motocross padding but modified to provide lighter weight and mobility. These types of pads are available ranging from simple knee/shin guards to complete body suits with flexible/removable spinal protection. Concerns about pads snagging bridles /lines etc. can be addressed by wearing them under your clothes.

What does the future hold? I believe that high quality pads and structurally sound helmets will become an undisputed norm. Leaving the sandals and skate shoes at home is also less and less common. There will soon be other advancements coming from within the BASE community that will enhance overall safety which will in turn result in less injuries.

The properly protected BASE jumper will not necessarily approach the exit point looking like a gladiator but rather should be wearing a level of protection that is commensurate with the task at hand. It is better to have too much protection and not need it than to not have enough. A minimum should be proper footwear, hard helmet and knee pads. Remember also, we are a small and impressionable group. If you have a following of junior jumpers, they will follow your example. Sometimes it is best to do the responsible thing even if your personal safety is not a concern.

Remember one simple adage when selecting what level of protection is right for you: Dress for the crash not for the ride.

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