10 THINGS TO DO TO KEEP EVERYONE SAFE IN A RACE

(Or 10 tips and hints to help race directors to sleep well at night)

[Now updated with reflections on the Vibram Hong Kong 100 race held on 23 and 24 January 2016, which was affected by icy weather and was halted after 21 hours.]

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10 Things to Do to Keep Everyone Safe in a Race

By Steve Brammar, Co-Race Director, Vibram Hong Kong 100
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Reflections on Vibram Hong Kong 100 held on 23/24 January 2016

This presentation was delivered to the 2nd Asia-Pacific Trail Running Summit on Thursday 21 January at Olympic House in Hong Kong. As fate would have it, the safety measures in place for the Vibram Hong Kong 100 race 2 days later were thoroughly tested by a spell of freakishly cold weather. This resulted in a decision to close the race 9 hours before the scheduled finish and a rescue operation to bring some runners (and even more "frost tourists") down from Tai Mo Shan, Hong Kong's highest peak (just 4km from the finish), because of icy conditions. Directing the race in these conditions reinforced the following points which we thought it might be helpful to highlight, both for ourselves for future reference, and so that other race organisers might benefit from the experience:

- Make sure you have a centralized record of runners who have dropped out of
 the race, so that you can account for each runner as efficiently as possible.
 For us this is achieved by informing the timing team whenever a participant
 abandons the race, although different races might adopt different
 approaches. The crucial point is to have a record that is as
 up-to-date and accurate as possible.
- Emphasise the importance of runners' providing accurate contact details and
 of the need to respond to calls from the organisers and rescue services
 immediately. Mobile phones should be left on and participants should
 ensure that emergency contacts are aware of participants' whereabouts.
- Have a plan for emergencies and reach out to the emergency services before
 the race to ensure efficient co-ordination. Before Vibram Hong Kong 100 in
 2016 we had spoken to the Police numerous times about matters such as
 traffic control around Tai Mo Shan and had reached out to the Fire Services
 Department as to how best to contact them in an emergency. This made
 co-ordination easier when the rescue services' heroics were required.
- Communicate clearly with participants as to potential risks before the race,

both in writing and at the race briefing. In the 2016 edition of Vibram Hong Kong 100 this involved emphasizing in pre-race emails and on the event website and social media the likely weather conditions and the need to dress warmly, as well as offering free warm clothes at the start-line to anyone who felt under-prepared.

- In this presentation I emphasized "be prepared to take tough decisions if
 participant safety requires it." After the 2016 edition of Vibram Hong Kong
 100 I would go further and suggest that if a race organiser needs to think
 hard as to whether a race should proceed, then it is likely best to err on the
 side of caution.
- As race directors and as participants in long distance trail-running events we
 must promote a mind-set of self-reliance. Race directors must of course
 consider participant safety and plan and prepare meticulously, but ultimately
 each participant must take responsibility for his or her own safety and ensure
 proper preparation and appropriate equipment. This self-reliance is a core
 value of the sport and one of its many joys and benefits, which we should all
 promote and encourage (and, indeed, insist upon!)

Here is the original text of the presentation to the Asia-Pacific Trail Running Summit on Thursday 21 April 2016.

Purpose

This session could be sub-titled: "Some hints and tips to help race directors sleep better at night". The main reason for considering issues as to safety during races is obvious: to minimize the risk of injury (or worse) to participants, as well as volunteers, rescuers and passers-by. Quite simply, as race organisers the right thing to do is consider the risks the activity poses and to take steps to reduce them to the extent reasonable. Some risk is of course inherent in an activity that can be almost unbelievably strenuous, and that takes place in nature, sometimes even in the wilds. But as organisers we need to have given thought to what could go wrong, how that can be prevented and what to do if problems arise. Preparing and implementing a sound safety plan is not just the altruistic thing to do – it is also likely to reduce the risk of being found at fault and liable in the event of an accident.

The good news is that there is more and more guidance available to race organisers

to assist in planning races and ensuring their safety. For example, the International Trail Running Association ("ITRA") has recently published Security Guidelines, also known as "Guidelines for the organization of a medical, safety and rescue plan during a trail-running race". And I am very proud today to launch the Chinese translation of these Guidelines publicly, with huge thanks to Ma De Min and Zhu Hou Shuai for arranging the translation. Likewise, a group of trail race organisers in Hong Kong have prepared Guidelines for Trail Events in Hong Kong which borrow heavily from the ITRA guidelines, but adapt them to the Hong Kong context. So there is now help at hand for race organisers in terms of preparing a safety plan for their events. The point to be wary of from a race director's point of view is that, if things do go wrong, these types of guidelines and standards are likely to be used to assess the adequacy of the race's preparation. In other words, if an accident happens and the race organizer has fallen short of the guidance set out in these documents without good reason, there is a likelihood that the race organizer's preparation will be regarded as unreasonable, which might result in liability being imposed. So, whilst it is a very positive development that there is now guidance available for race directors, and we should all be able to increase the quality and effectiveness of our safety plans and procedures, we should also be aware that when things do go wrong it will be easier to assess our preparation and response against a benchmark.

So, during this session I will highlight what I consider to be the most helpful and important guidelines in the ITRA Security Guidelines, as well as discussing our experience with safety issues in organising Hong Kong 100 and as participants in other events. The view we take is that trail race organisers should share information on this type of issue as freely and openly as possible, for the good of the sport and for the benefit of all involved. This approach applies generally (as you have just heard from Janet in relation to the ethics / spirit of trail running), but is more important than ever in the area of safety. This spirit of co-operation is one of the most heartening aspects of race organizing in Hong Kong – the organisers see each other as friends and colleagues rather than competitors and help out at each other's events (if we aren't running in them). In this respect I would like to think that Hong Kong serves as an example to be followed, although of course we could always do more and could always do better.

In addition, there is one other reference material which I have leaned heavily on in preparing for this session, namely the 2012 parliamentary enquiry into the Kimberley Ultra Marathon in Western Australia. I hesitate to refer to this document because

of the sensitivity of the events, out of concern for those injured and because I count some of those involved as friends and supporters of the trail running community. I want to emphasise that my attitude to this tragic accident is "There but for the grace of God go all of us" – but we would be failing in our duties as race organisers not to seek to learn from these events what we can to ensure our races are as safe as possible. We can also see how an investigation analyses this type of occurrence - what is emphasized and what is expected of event organisers in both event planning and in responding to an emergency.

What follows is a summary / distillation of the ITRA and Hong Kong organizer guidelines, with additional observations based on our experience as organisers of the Vibram Hong Kong 100 and as participants and observers at other races in Hong Kong and abroad. Of course nothing can guarantee an entirely safe event and no amount of planning and preparation can remove entirely the risks inherent in trail running in remote locations. But planning and preparing along the following lines can certainly contribute to reduction of the risks, and should help race organisers to sleep peacefully at night.

Taking each topic in turn:

1. Course Planning

- Race directors should choose a route that they consider manageable and strike a reasonable balance between "adventure" and safety. For example, the original Vibram Hong Kong 100 route was to include the trails close to Sharp Peak which, when run during the summer seemed manageable because the wet weather kept the terrain compact. A recce during the dry season closer to the event suggested that there would be so much loose gravel, shale and rock that the risks were considered too high and the course changed. The Police, whose first priority when approving events is safety, called us to commend the decision and considered that it showed a responsible approach.
- When designing a course there is no substitute for local knowledge. For example, it was only on the second edition of Hong Kong 100 that we realized that at high tide the trail beyond Tai Tan village can be underwater to above knee height. We now choose the date of the race after checking the tide chart, but during the first edition we were surprised to hear that the back-markers had to wade through shin-deep water at about 30km as the

tide came in! As a further example of the importance of local knowledge, we took part in a 100km race in Cornwall in the UK where the organisers intended to move the course each year. The second edition inadvertently required participants to cross a river where the water was neck high because the organisers had not factored in the changing tides. Participants had not been warned, and, whilst no one was hurt, the risk was high, and some participants were angry and questioned the organisers' preparation and competence. In addition to tides, other local factors such as presence of dangerous animals (bulls, crocodiles, bees, dogs), trail closures, disgruntled residents and climate can be better understood and managed where there is local expertise involved in the organization. This was a finding in the Western Australian hearing. It is very common for race organisers to present events in areas other than their "home turf", and there is of course nothing wrong with this at all. But it does involve an increased risk that a lack of knowledge of the local environment might lead to problems, and steps should always be taken to reduce this risk, such as spending considerable time getting to know the area, using the same race course at the same time each year and involving local partners who do have the required local knowledge.

2. Course Information

- Race organisers should ensure that accurate and detailed information about the course is available to participants. This should include detailed maps, but also a description of the profile, elevation gain and loss, type of terrain and any specific difficulties, the location of checkpoints and what food and drink (if any) is available at them.
- Any important information which might affect the safety of participants should be repeated at the race briefing. For example, if there is a section where extra food, hydration, or clothing might be required, or where busy roads must be crossed, this should be highlighted. Weather information may be important. In addition, at checkpoints before difficult sections, this type of information can be repeated to ensure that participants are prepared.

3. Communication

 In addition to the clear information to be provided to participants as to the course, terrain, checkpoints, etc, the pre-race briefing should always remind

- participants that they might be the first person available to help an injured runner. Participants should be encouraged to stop and offer help, to assist with notifying the organisers and (if needed) the emergency services.
- In preparing for the race, organisers should establish contact with emergency services such as Police, Fire, Ambulance and Search and Rescue services so that they have been briefed as to the route and timing in case their help is required and so that a communication protocol can be established. The Western Australian inquiry stated that this had not taken place prior to the Kimberley Ultra Marathon and that this was a major contributory factor to the outcome in that case.
- Organisers should also consider the effectiveness of communications between runners, CP leaders and the Race HQ as well as with the emergency services. For example, if there are areas on the course where no mobile phone signal is possible, are radios, landlines or satellite phones required? It should be noted that the Western Australian inquiry focused on the communication between checkpoints, organisers and emergency services and stated that the effectiveness of communications should have been checked along the route before the event.
- Emergency contact numbers should be printed on the race bib.
- Volunteers should be informed of what to do / who to contact in an emergency.

4. Mandatory Gear

- If the race is in an environment or of a duration which makes certain items of equipment essential, then this should be specified and checked to ensure compliance. Examples include lamps, food quantities, warm or rainproof clothes, quantities of drink, maps, GPS devices, location beacon, flare, etc.
- The mandatory gear requirement has been questioned over the years at Hong Kong 100, but each year we have numerous participants call for assistance on their mobile phones or use their safety blankets to stay warm, and we are convinced that these items at least should remain obligatory.

5. Course Marking

 The importance of good course marking to the safety of an event is under-estimated. This is not just an issue of convenience for runners, but a genuine issue of safety and security. This is not least because runners provision for the time they believe they need to reach the next CP (not factoring in time spent trying to re-locate the course) and because a runner who is off course could stumble into dangerous terrain. The winner of the race in Cornwall I referred to earlier was off course during the night (the course marking was inadequate) and ran over the edge of a cliff, catching himself on a ledge.

- If a course is not marked or is not marked sufficiently clearly that a racer will be able to follow it without using a map or GPS then this should be made clear to participants.
- In addition to course marking, a solution to concerns about participants getting lost is to have marshals at junctions. This is labour-intensive, but effective, and is the approach Hong Kong 100 tries to adopt. Likewise, UTMF in Japan is famously well-marshaled.
- Another helpful solution to concerns as to participants getting lost is a tracking system. These are currently expensive, but becoming cheaper, and are a good idea if the event takes place in very remote areas or is particularly difficult to navigate. These were used by our team in PTL (La Petite Trotte a Leon a 300km unmarked "run" around Mont Blanc) in the Alps in the summer. The UTMB (Ultra Trail du Mont Blanc) also uses a chip timing system with sophisticated software that predicts time of arrival of each runner at the next CP, and raises an "alarm" if a runner's progress stalls. This type of software is becoming more widely available, and is clearly of great help in accounting for all runners in an event.

6. Checkpoints

The distance between CPs is an issue which approving authorities focus on. Obviously, the more CPs the more secure the race. It is a little known fact that when we first applied for the Police permit for Hong Kong 100 the Police suggested we should have CPs every 5 km, whilst we proposed to have them every 15km or so. The "happy compromise" was 10 CPs over 100km. The Western Australian inquiry stated that the CPs were too far apart taking into account the vehicular access between them.

7. Medical Support

- It is important that a team of medically qualified staff or volunteers is involved and that they are in locations where help is most likely to be

required. The ITRA guidelines are prescriptive and set out the type of medic and the required location depending on the number of participants and the remoteness of the environment. Hong Kong 100 has medics at each CP and the finish line. We are very fortunate to have comprehensive support from the Hong Kong St John Ambulance Brigade. In our first edition we were not so lucky and were only able to ensure that there was one person with a medical qualification at each CP. From 2016 Hong Kong 100 will also have teams of "roving" first aiders at different parts of the course.

8. <u>Transportation / Rescue</u>

- Consideration should have been given as to how an injured runner might be rescued. This might involve ambulance, helicopter, stretcher bearers or a combination. In the Western Australian inquiry it was stated that the arrangements for a helicopter were made too late and were not adequate because the helicopter was not properly equipped.
- Hong Kong 100 has (through the St John Ambulance Brigade) 7 ambulances deployed, and roving first aiders, but in the event a helicopter rescue were required we would need to call the emergency services.
- There should also be a plan for transporting runners who pull out of the race at each CP so that they can be kept warm and comfortable until transport arrives.
- Arrangements should also be made for "real-time" updating of the participant list to show that participants have pulled out of the race and where they stopped.

9. Adverse Weather

- Race directors should be prepared for adverse weather and re-routing or cancelling the race. The most extreme example of this must be the UTMB races which we understand have 3 different routes for all eventualities. The race was stopped and re-started in 2010, partially re-routed in 2011 and almost entirely re-routed in 2012 and the organisers monitor carefully the weather conditions constantly during the race to see whether the course remains safe.
- In the Hong Kong context the obvious risk is typhoons and each race should have a policy and implement it. Over the years there has been controversy with an event (Raleigh Challenge) being cancelled a few years ago for a

- typhoon which never eventualised and with a Lantau race going ahead in difficult conditions in late 2015 and attracting media attention when a participant needed to be rescued from a hillside.
- The key is to have a policy, apply it, and to be prepared to take tough decisions if participant safety requires it.

10. Road Safety

- If the race course crosses or is alongside busy roads, race organisers should ensure that signs are in place to alert road users to the presence of runners.
 Runners should be warned of the need for care and marshals should be stationed to control both runners and traffic
- By way of example, at Kei Ling Ha (Sai Sha Road) Hong Kong 100 has signs to warn the cars, signs to warn the runners and has 2 marshals "armed" with "lollipop sticks" like school crossing guides.

11. (Bonus Item) – Closing / Sweeping the Course

- A mechanism needs to be in place to ensure that no registered runners are left on the course when the CPs close. This generally requires a team of "sweepers" to "bring up the rear". Sweep teams should comprise at least 2 people and the role involves monitoring the progress of the back-markers and keeping in contact with Race HQ as to location and progress.
- Experience sweeping at Translantau taught me that the sweepers' role needs
 to be divided up so that at each cut-off a new sweeper team sets off with the
 new back-markers, otherwise the sweepers become detached from the new
 back-markers if they arrive with runners who have missed the cut-off by a
 long way.
- Like US Marines, the sweepers' mantra is no one gets left behind!

Hopefully these points provide some helpful guidance for race organisers and something to build on or check against when preparing for an event. I would certainly encourage you to download the ITRA Security Guidelines from the ITRA website and can't tell you how pleased I am that they are now available in Chinese!

Wishing you all enjoyable, speedy and, above all, <u>safe</u> time on the trails and in the outdoors.

Gar yau!

Steve