



Crewmembers Jim Martens and Matt Dehaene keep Albert Martens hydrated in 50-degree heat.

Albert Martens survives blistering Death Valley

By Gwen Blatz

The tops of the hills glowed in amber hues as the sun rose into Badwater Basin, Death Valley, California, not betraying the 49° C/120°F temperatures awaiting us later that day. Monday, July 12, 72 Ultramarathoners lined up ready to begin the 135-mile Badwater Ultramarathon, touted as the most grueling footrace in the world. The race, by invitation only, selects elite runners worldwide based on stringent criteria, which includes a resume of marathons, ultramarathons and excellent health status. The racers ranged in age from 32-70.

Albert Martens, 56, of Steinbach, was among the ones selected to run the marathon, July 12-14, in Death Valley, California. The crew accompanying Albert consisted of his son, Patrick Martens, Jim Martens, Matthieu Dehaene (all technical support), and Gwen Blatz (medical support).

The question people familiar with the Badwater Ultramarathon ask is, "What motivates a human being to subject themselves to such a hostile environment?" This grueling race offers no prize money. One German team used the race to conduct medical research. Over half the runners are devoting their run to raising funds for a charitable cause.

Albert Martens is a staff member with Athletes In Action. His decision to attempt the Badwater Ultramarathon came out of a deep desire to help less fortunate people in Benin, Africa. His goal is to expose the physical and spiritual need in Benin, as well as providing a vehicle to help raise finances for this country lacking in most basic necessities.

Through the collaboration of Athletes in Action and SportAid, (a newly formed ministry of Campus Crusade for Christ), and GAIN (Global Aid Network-an organization able to lend technology and resources to drill

wells), water sources will be provided for villages in this impoverished country.

Logistics

The logistics of a race plan are important to its success. Supplies for the race must be correctly calculated. Support vehicles, water and food for racer and crew, medical supplies as well as any equipment required must be brought by the team. Our team flew into Las Vegas, Nevada, rented two mini vans, and purchased most of the required supplies prior to the race.

Our crew's primary focus included ensuring Martens remained well hydrated, cooled, and fed. The intake of fluid and amount of food need careful monitoring and kept as consistent as possible. To keep the runner as hydrated as possible in an attempt to prevent any heat related emergency, constant intake of fluid is required. A runner requires a minimum of 300 calories an hour to sustain this level of exertion, and a consistent replacement of electrolytes, critical to the runner's health. Martens consumed 41.75 litres of fluid (11 US gallons) and 19,000 calories during the race. The crew also had to ensure other crewmembers were being taken care of. The most medical problems encountered during this race, according to one of the race officials, tend to involve crewmembers. In total, nearly 130 kg/ 285 lbs of ice and 113 litres/30 US gallons of water were utilized and consumed by the team during the event.

Scorching heat

The temperature hovered at 35.5° C when the race began at 6:00 am Monday, July 12, at the lowest point in the continental United States, Badwater, California, elevation 282 feet below sea level. A sign "Sea Level" hung on the cliff 282 feet above the racer's start line. The first 41 miles of course were flat, gaining only 282 feet in elevation to Stovepipe Wells where the elevation is Sea level. Though the section of the course is flat, it is the portion where temperatures soar, defying anything humanly imaginable. That day was no exception, with official recorded temperatures of 49° C/120°F, the highest recorded this year.

One of the most common pitfalls is that racers do not pace themselves appropriately, and "blow up" before the race is even half completed, or they overexert themselves initially and are not prepared to handle the extreme heat. Normal human body temperature is 98.6° F/37° C. The body does not tolerate extremes of heat without leading to heat related emergencies and potentially fatal responses such as kidneys shutting down. Much of the race, ambient or air temperatures exceeded the human body temperature. In addition the human body creates heat through the metabolic processes occurring while running, therefore keeping one's core body temperature down is critical to the runner's health.

Martens loped out of the starting line, clearly pacing himself for the event. As the temperatures soared, Martens wore a white Sun Precaution suit, and a white cap with protective flaps covering his neck. He carried a water bottle,

which had to be replenished with ice water every few minutes. Due to air temperature, the water rapidly heated up in the bottle. Some runners find that their stomachs do not tolerate ice water well, however Martens tolerated the ice water, which aided significantly in keeping the core body temperature regulated. In addition to plying the runner with iced water to drink, Martens wore a specially designed cotton sack of ice around his neck, which constantly needed refilling.

The low humidity combined with high temperature meant that anything wet, dried almost instantly in the superheated wind. In the middle of the day, the wind felt like a blow dryer was being held directly to one's face and the direct sun was so intense, it made one's skin feel like one was standing close to a hot element. He was sprayed down with a mister bottle every few minutes and ice water was poured on his head and ice pieces put in his hat. This constant maintenance kept the crew busy. By the second day, as Martens' suit would dry, the cloth became stiff and rigid, as though it had been starched, due to the sodium and minerals excreted by the body.

Flat tire

Logistical difficulties arose early the first day when a low tire was discovered on one of the support vehicles. Since the runner must be kept focused on the race, it was immediately agreed upon that Martens must not be allowed to notice this. A plan was hatched in which Blatz would take a turn at pacing Martens, ensuring he received his necessities, while the balance of the crew would move the van out of sight to change the tire. Then, in the heat of the day, the air conditioning ceased to work in one of the vans. The temperature inside the van had been steadily maintaining at 41° C, which we agreed felt quite comfortable compared to the soaring temperatures outside. We resorted to opening the windows to create some air movement. We recorded temperatures that day of 49° C/120° F while another crew recorded a temperature (unofficially) of 55° C/131° F.

The sun superheats the pavement, sand, and anything left exposed to the sun. While staying in the area a couple of days prior to the race to acclimatize, Martens burnt the bottom of one of his feet slightly from stepping barefoot onto a hot surface. Though this did not directly result in injuries during the race, he did comment as the race progressed that he could feel where he had burnt his foot. Pavement temperatures can reach nearly 200°F, which greatly increases blister formation on the runner's feet. Martens' feet were no exception. Even with pre-taping, hot spots developed and rapidly turned into blisters. Once blisters form, one compensates by planting the foot differently than normal. This goes on to create blisters in other places, in addition to contributing to muscle/tendon problems. Blatz monitored closely for changes in Martens' gait and running form, which were affected, not only by blisters or muscle strains, but also by fatigue.

Seventeen miles into the race at Furnace Creek, appropriately named, (although I have yet to find the creek), we placed a stake with his race number at the side of the road, (race rules if you chose to leave the roadway) and brought him to a swimming pool. There, Martens "cooled" in the 33°C

pool for a few minutes, had his feet retaped and was off again.

During this stretch, we witnessed a sand tornado develop 1-2 miles ahead of us. The sand ascended in a vortex several hundred feet high and remained suspended as sand continued to be sucked skyward for 10-15 minutes before dissipating.

By the time Martens reached Stovepipe Wells, 42 miles into the race, it was 7:13 pm, (13 hours after starting). He took another short rest, and was cooled with water from a scoop fashioned by Jim Martens. As Albert's feet were patched and retaped again, other racers hobbled around, sighing and sucking in their breath as they attempted to negotiate the premises with their shoes off! We made alterations, changing shoe inserts and configuring extra padding for the balls of his feet.

Extreme demands

One of the important aspects of crew unity is the ability to stay in touch with the emotional needs of the runner. The extreme demands of such a prolonged event leave the racer vulnerable, especially when physical problems set in which may seem insurmountable. The racer expends enormous amounts of physical and emotional energy, whether it be in personal discipline to continue running even when it seems impossible due to pain, or whether it is attempting to make a decision to continue, if doing so does not seem possible. One team withdrew from the race at the 17-mile mark, destroyed by lack of preparation with their supplies and bickering among the crew, which spilled over towards the racer. Realistic encouragement is integral to the emotional well being of the racer. This may come in the form of pacing the racer and engaging in conversation, discussing motives of the race, discussing family or spiritual issues important to the racer, attempting to draw out inspiration to continue. It may come in the form of cheering, or silently accompanying the runner, or leaving them to race alone to spend time in their own thoughts and prayers for a time.

One crewmember, Matt Dehaene, an aviation student at Providence College, and a runner, brought his trumpet to the race. Many times, Dehaene would go ahead on the racecourse, and play songs that Martens requested. The sounds carried incredibly, and served to encourage many a runner. At one point, as two weary German runners passed, Matt played the German National anthem. The smiles on their faces told a story! After Martens had toiled through the night, at sunrise, Dehaene climbed a several hundred-foot cliff and stood at the edge. After catching his breath from the climb, he proceeded to play several songs, which echoed incredible distances across the plain. His rendition of "How Great Thou Art" nearly brought tears to the eyes.



Leaving Stovepipe Wells at sundown, 5000' of night climbing lay ahead, presenting a huge psychological and physical challenge. For the night, Albert removed his sun suit, changed to regular running clothes, and donned the mandatory reflective gear.



Near midnight, 18 hours into the race, the vans were pulled over and prepared for a couple of hours rest. Pulling the equipment out of the vans, we managed to find places to sleep; the van floor, the ground, on a picnic table on seats in the van. The low that night was 33°C, which seemed remarkably comfortable.

At 3:30 am, Martens consumed more food and liquid, and shortly thereafter slipped into the darkness to continue his ascent. In the early hours of the morning a muscle in his inner thigh began to tighten. This, compounded with the blisters, caused more concern. Blatz massaged the muscle, he shortened his stride slightly, and we waited to see what would happen. Chafing had also begun, and the chafed areas were starting to weep. Adjustments were made to the inner lining of his running shorts, which seemed to resolve the chafe. Albert's tongue and mouth were becoming raw from breathing in the dry hot air.

Having climbed Townes Pass through the night presented a huge accomplishment. The descent began around sunrise, 24 hours after the start of the race. This was followed by 12 flat, straight miles. Another pass loomed at 5000' elevation, then a descent into Owen's Valley.

Halfway

Midday the crew was doing mental calculations of his progress thus far, and the distance covered, with half his allotted time having already elapsed. If he were to finish in the 60 hours, his rests would need to be short, and his pace would need to quicken slightly.

The following night found Albert crossing another sand flat. The desert sky was awash with stars and we marveled at the sights, the Milky Way visible as a luminous band across the night sky. Bats flitted about; snatching insects, busy at their affairs, attempting to accomplish all things necessary while the sun was down. Martens spotted a coyote and we heard them barking. A desert mouse scrambled across the roadway in the headlights of the van. I purposely avoided hitting it. If it had the tenacity to survive the climate, why should it die under the wheels of a vehicle? Desert animals such as the Kangaroo Rat go for months without drinking and are adapted to conserve moisture by concentrating urine, and reabsorbing water vapor from breath in it's nasal passages, a feat Martens had not yet mastered! Several meteors flashed across the sky as the night wore on.

The night proved to be exceptionally difficult, physically and emotionally. Fatigue was manifesting itself; blisters and a strained muscle were chewing away at the resolve. His struggle was markedly evident, and as movements became labored, the completion of the race came into question. At this point Martens requested to run alone. Our crew kept a close eye, continuing to deliver water and food, ensuring that the blinking light on his back did not wobble from the road. According to Martens, he had some spiritual things to sort out.

Thirty-two hours into the race, Martens slept 45 minutes. At 1:45 am he

forced himself out onto the roadway, the crew watched as Martens hobbled down the road, attempting to tolerate weight on his badly blistered feet. As his feet adjusted to the demands being placed on them, his gait normalized somewhat. After the rests, short as they were, the act of returning to one's feet became an excruciating act of discipline, making rest stops less appealing. To begin again was almost worse than not stopping at all. In total, Martens slept 4 $\frac{3}{4}$ hours out of the 60-hour race.

As the crew plotted his progress, his pace increased and stabilized, and by nightfall, optimism soared. If he kept his pace in the flats, he had latitude to slow for the last 12-mile ascent, which would bring him to the finish within the 60-hour time frame.

The last stop before the final push was Lone Pine, 51 hours into the race, where a short rest, food and a calf massage were delivered. By this time, there was no point in removing the shoes. Blood was seeping from his feet and soaking his running shoes. If Martens could muster the strength to continue, the damage would be surveyed at the end. Lone Pine to the Finish line was a 12-mile stretch of steep climbing, tight switchbacks cut into the mountainside. Mount Whitney (14,491' the highest point in the lower 48 states) loomed in the western sky, but the finish line lay at the Mt. Whitney trailhead, at 8360'.

End is near

The race became arduous, and Martens' form and gait changed to reflect the efforts of a man nearing the edge of his limits. Every few hundred meters, Marten would ask where the finish line was, and he would be assured that it was nearing. It got to the point where he did not believe, and would stop and gaze into the distance to see if it was in sight, saying, "I don't believe you. I don't believe you." In the spirit of the event, for the last few miles of the race, two of the crewmembers of Monica Scholz, the Canadian woman who finished 3rd overall, joined forces to buoy their fellow Canadian, and encourage him across the Finish Line. With less than two miles to go, too fatigued, he began to refuse food or water. The elevation had climbed back to 8000+ feet, and in his expended state, Martens began to feel like he couldn't breathe and was going to pass out. He rested upright, leaning on a crewmember's shoulder briefly, before plodding on. In total, 46 miles of the racecourse were ascending, for a total of 13,000' of elevation gain.

As he rounded the last bend, craning to see the elusive finish line, which had repeatedly been promised to him in the last meters, he was heralded by the trumpet blasts of Dehaene while his son Patrick bore the Canadian flag. The Benin flag was handed to Martens, who reached for it, then his arms faltered and the flag sagged to his side and was retrieved by another crewmember. He haltingly took the last few steps into the winner's tape, and stood in embrace with his son. Surrounded by elated crewmembers, he was escorted to a waiting chair with a completion time of 57 hours 42 minutes and 50 seconds.

Martens' preparation and training for the run demonstrated a deep

commitment to the cause, and to completing the race. He enrolled the coaching of another ultra marathoner, Lisa Smith from Idaho. However, Martens was quick to say, "Even if you do your best, there is no guarantee that you will make it. When you do your best, you must realize that we can still make mistakes. You don't know if you can complete it unless you try." Martens gave credit to the prayers of friends, to his wife Edna, and to Jesus, his inspiration and motivation and reason for his life.

As part of the ministry of Athletes in Action, and as part of the project, Martens is committed to run across the country of Benin, Africa in 2005. Is Badwater the most difficult footrace on earth? A conversation ensued with an athlete who crewed for one of the teams. This man has competed in every Eco Challenge ever held, and raced the Badwater Ultramarathon once several years ago. Speaking of this race, he declared, "I will never, ever run the Badwater again. It is brutal." Martens agrees.

Fifteen of the 72 runners did not finish the race. The winner was Dean Karnazes of San Francisco in a time of 27 hours, 22 minutes, finishing seven minutes ahead of Ferge Hawke of White Rock, B.C. It was the closest race in the 27-year history of the event. There were only three Canadians in the race.

Gwen Blatz lives in Steinbach. She is a paramedic with South Eastman Health.



Paramedic Gwen Blatz administers to blistered feet at the 43-mile mark at Stovepipe Wells in California's Death Valley.

Death Valley conquered. Albert Martens, one of only three Canadians in the race poses with his Steinbach crewmembers Patrick Martens, Gwen Blatz, Matt Dehaene and Jim Martens.



Sportsline

Ranch Rodeo set for this weekend

The Manitoba Ranch Rodeo Association will host a weekend rodeo this weekend, July 24 & 25, at New Country Ranch, 20 miles south of Steinbach on Highway 12. The Saturday events start at 2:00 p.m. and on Sunday at