RESULTS, BUT NO HEADLINE RESULTS


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Challenege Yourself at a Few of These Competitive Affairs for the Heel and Toe Crowd

Sat. Dec 10
5. Km, Kent, Washington (C)
5. Km, Miami, 7:30 am (Q)
10. Km, Columbia, Missouri, 8:30 am (U)
10. Km, Santa Monica, Cal. (B)
5. Km, San Francisco, 8:30 am (C)
5. Km, Boca Raton, Florida 7:30 am (Q)
1 Hour, Fort Monmouth, N.J., 10 am (A)
5. Km, New York City, 9 am (F)
5 and 10 Km, Seattle (C)
5. Km, Salem, Oregon, 10 am (B)
10. Km, Coconut Grove, Florida, 8 am (C)
Todd Scully 10 Km, Long Branch, N.J., 1:15 pm (A)
5. Km, Miami, 7:30 am (Q)
Indoor 3 Km, Waltham, Mass., 12 noon (I)
1 Hour, Ft. Monmouth, N.J., 10 am (A)
10. Mile, Asbury Park, N.J., 10 am (A)
5. Km, Coconut Grove, Florida, 5:45 pm (C)
1 Mile, Salem, Oregon (C)
5. Km, Half-Marathon, Irvine, Cal. (B)
USA T&F National 50 Km, Palo Alto, Cal. (C)
1 Mile Women, 2 Mile Men, Indoors, Hanover, N.H. (C)
Indoor 3 Km, Arlington, Virginia, 8:30 am (I)
10. Km, San Diego (B)
Masters Indoor 1 Mile, Providence, R.I. (I)
10. Mile Handicap, 5 Km, Pasadena, Cal., 8:30 am (B)
Indoor 3 Km, Arlington, Va., 8:30 am (I)
U.S. Women's World Cup Trials, 10 Km, Orlando, Florida (V)
FROM HEEL TO TOE

Bobby Baker comments on the Ultimate Race Walking Seminar In Kingsport, Tenn., Oct. 21–23. “The event was a big success. Dave McGovern and Ian Whatley, two of America’s top racewalkers, presented the seminar. It was 2 days (16 hours) of excellent individual coaching from two of the USA’s finest coaches. Five states were represented, plus one foreign country. The 2 days were filled with instructions on technique, strengthening, flexibility, and how to set up one’s own training schedule. We were very fortunate in having these USA Team members coming to teach and demonstrate racewalking at its finest. The seminar ended with some relays and everyone enjoyed it. Everyone went away with a lot of knowledge and ready to practice what they had been taught. It certainly was a great weekend! There is a possibility that we could have this seminar again next year... Another successful seminar was held in Arlington, Virginia in September. Frank Soby, coach of the Pegasus Walkers A.C. in Detroit, the only coach selected to attend from the midwest, reports: “Belarusian National Racewalk Coach Boris Drozdov provided a 2-day coaching seminar on technique and training of racewalkers. Twelve U.S. college and club coaches attended. The seminar resulted from combined grants from the IAAF, the International Olympic Committee, and USATF with the intent of providing coaching expertise to the U.S. program. Drozdov has been extremely successful with his program in his country. During this year’s European Championships, held in Helsinki, Belarus walkers garnered a silver medal in the men’s 20 Km and a 6th place in the women’s 10 Km. His success has elicited numerous coaching offers from other countries. Currently he is considering a position tendered by Mexican racewalk guru, Jerzy Haulseber, to coach in that country... Tracey Wong Briggs, racewalker and reporter for USA Today got to interview Oprah Winfrey following that famous talk-show host’s completion of the Marine Corps Marathon in October. Tracey’s resulting articles were published on pages 1 and 2 of the USA Today’s Life section on Monday, Oct. 24... Note: In our plug for the fourth edition of Matt Rudow’s excellent book, Advanced Race Walking, we listed the price as $11.50, which is correct, but you also need to include $1.50 for postage if you are ordering direct from Technique Productions at 4831 NE 44th St., Seattle, WA 98105. You can call 206-527-98105 to order the book or Martin’s video on racewalking.

A letter from Martin Rudow, author, coach, judge, video producer, former national-level competitor, and general all-around expert on the sport:

“Over the past few years, I’ve noted with increasing dismay how the development of good race walking technique is being looked upon with a degree of scorn—and I’ve even heard coaches disdain the effort to develop good technique. There seems to be the attitude among some that you’ll probably not be disqualified anyway, and if you are, just blame the judges and quit the sport in a huff. I’ve seen this attitude manifest itself at all levels, at competitions ranging from the Olympic Trials to the Masters’ meets.

“As One of the judges who have had the distasteful job of notifying athletes that they have been disqualified, as well as an ex-coach who has had athletes disqualified and injured as a result of neglecting their technique, I’d like to share some of my thoughts on the importance of developing good racewalking technique.

“Although a competitive racewalker will almost certainly spend more time training for endurance, strength, and speed, "good technique" should be the primary goal of a racewalking training program, and all else should be secondary to that goal.

“We all know that in today’s racewalking competitions, "good technique" does not mean achieving impeccably legal and classic style, which will stand up to a postrace, frame-by-frame videotape analysis. Rather, good technique is the style that results in fast times without disqualification (but maybe a few warnings and even a red card or two), and allows a walker to train and race with the minimum risk of injury. There are benefits that good technique brings to a walker.

“An argument could be made that the walker who wins a race automatically has the "best technique" in that race, since racewalking is a competitive sport, and winning is the goal. (Ed. I guess that is essentially the conclusion the Ohio Racewalker came to several years ago when we quit awarding a style prize at each of the national championship races, something we did for several years in the early years of the publication.) I would not argue with that point, but I still hold that technique development along the standard...
model: low arm action, upright body posture with slight forward lean, high forefoot upon landing, knee straightened most of the contact phase, little lateral variation, etc., all leading to smooth efficient progression is vitally important.

"Once the standard racewalking technique is more or less achieved, walkers can start to modify it as needed to help them take advantage of their own individual strengths or overcome their problems.

"I'm sure we'll hear people say at this point, "But is it worth it?" Yes, and for all the right reasons.

"Besides the most obvious reason for developing good technique--to avoid outright disqualification--there are other equally good reasons for walkers to place technique training at the top of their priority list:

- Good technique is energy efficient, less tiring and less stressful on the body than poor technique. As an example, a walker can do more sheer volume of training than a runner, who will break down first.

- Good technique allows walkers to use all of their speed and strength in a race rather than hold back for fear of disqualification. If proper technique is maintained, walkers can use every bit of power they possess--as opposed to those competitors who complain after a race that they "could have gone faster, but were afraid of the judging." Or, that they were actually disqualified.

- Good technique, by definition, allows you to simply look better than others with poorer technique--and this can be a big advantage. I've often seen a walker who is actually off the ground more than his or her opponents get through a race where others are DQ'd simply because he or she looks so smooth! No, it's not a beauty contest, but in a race with many competitors, judges first notice those walkers with ragged technique, those that are bouncing, swaying, etc.

"Good technique must be developed even in the temporary expense of other training. To illustrate this point, consider a female world-class 10 Km runner who is making a mid-career change to racewalking. Her nervous and muscular/skeletal systems are developed for running. If we could chart this athlete's present level of conditioning and technique, there would be a gap between her level of conditioning and ability to walk with full strength without being disqualified.

"Because the athlete's poor technique puts her in constant danger of disqualification, she must concentrate on improving her racewalking technique, even at the expense of other conditioning programs. This can be frustrating since gains can come slowly, especially if the athlete is fairly tight and has been running for several years. But, after a few weeks, the gap on the chart would begin to narrow.

"Finally, after continued technique training, the ex-runner's technique will improve to the point where further specialized work is needed only to maintain the good habits that she has developed. Now, her training can be as hard as it was during her running career, or even harder, and doing this work with good technique will reinforce itself.

"Needless to say, few walkers start out as world class 10 Km runners. But all walkers must continually upgrade their technique as their conditioning improves--and the gap begins to open again--or they increasingly risk disqualification. For this reason, the achievement of good technique is best thought of as a process, rather than a goal."

From Frank Sobey

... if Michigan Walkers ran personal ads...

Do you enjoy long sunset walks at your target heart-rate, mobility exercises on cold winter nights, treadmill walks on snowy mornings? Then we could be meant for one another.

MW Box 70

Fun-loving threesome looking for a fourth. Mostly aerobic walking. Semi-serious racing. No rebounds, no camp rejects. MW Box 3 or 4.

Walk naked. Not just a T-shirt, but the real thing. You haven't experienced the total freedom and exhilaration of racewalking until you've done it without the strictures of tights, tees, and tight shoes. Feel oneness with our walking environment in a nurturing, non-threatening setting. Write for schedule. MW Box 0-

DWM famous Olympic Champion, 59, seeks tall, attractive, fit 25-25 F who wants to racewalk at Masters Nationals, cuddle while viewing old racewalk films, and listen to stories about the good old days. Must be attractive and good listener. Have own entry fees. Relationship a must. MW Box 59.

Hammer, into lactic acid and oxygen debt training, seeks same for training and '94-'95 circuit. Will relocate, share expenses. No fitness walkers. MW Box 2-pain.

Former racer/East Coast/National qualifier, 40ish F wishes life-choice change to technique person with solid income and compassion. Station wagon, divorce, kid-custody, Little League and Brownies dominate life-style. Swing more important than speed.

Honest, caring, sensitive more interested in stretching and rolling than training and racing. Looking for an old-fashioned guy who enjoys movies, candle-light dinners, and walks in a subdivision. No clubbies. Send photo and stretch routine. MW TINA.

Treadmill racing partners sought. (Walk division) How fast can you go? Unique enterprise requires treadmill with speed shift and calorie counter. Teams to compete against Canada and Mexico in World Cup Exhibition. Interested? Send $20 and foto of your treadmill. MW Box RU12.
**WHAT SEX AND ATHLETIC PERFORMANCE RESEARCH SHOWS**

By Bob Carlson (From the Front Range Walkers News, December 1994)

(Editor's note: This is a subject of grave importance and interest that the ORW has not addressed in a long while, but that the fearless Bob Carlson, with his antennae constantly out for ground-breaking research, frequently features. The ORW first considered the topic in one of the early issues when we made reference to an ancient track and field text by famed USC coach, Dean Cromwell, in which he boldly, and without equivocation, stated: “Sexual gratification is the worst thing for the athlete.” “Wow!” we said, and went on to suggest the possibility of something like a 24-hour race with a mandatory sex break, just to test this iron-clad theory. Then, from time to time, we would make snide references to the Cromwell theory and occasionally come across some tidbit of research we would pass on. But that is all in the dark reaches of our memory. Bob, obviously, has gone into his research much more seriously and has kept the flame alive, while the ORW has lost its sense of mission. Well, that's a much too long editor's note, so please refer back to the last headline so you will know what the following is about.)

Most of what sports scientists know about exercise and sex pertains to how exercise affects sexual desire, fertility, and sexuality in general. Here is a sampling of relevant studies and surveys, including some research on the night before.

- A 1981 survey of 3,140 readers of the Runner magazine found that 90 percent did not abstain from sex before competition, and 19 percent of those respondents claimed sex helped their performance.

- In a 1985 Gallup survey of national health practices and attitudes, 56 percent of respondents claimed their sex lives had improved since they'd taken up an exercise program.

- A 1988 survey by Los Angeles psychologist Lila da De Fillers that polled more than 8,000 women showed that 40 percent found exercise sexually arousing, while 31 percent said exercise led to more frequent sexual activity.

- A 1989 study of married men by exercise physiologist Loren Cordain of Colorado State University showed that sexual activity prior to exercise had no negative effect on strength, reaction time, aerobic power, or maximal uptake.

- A 1989 Swiss study of 16 athletes, including distance runners, found that sexual activity decreased maximal endurance, but the adverse effect lasted for no more than 10 hours following intercourse.

- A 1989 New Mexico Highlands University study of testicular function during endurance training found that when top-level duathletes doubled their running and cycling, their testosterone levels dropped by 25 percent, and their sexual activity declined.

- A 1990 University of California at San Diego study of sedentary, middle-aged men found that those who embarked on aerobic exercise reported greater frequency of sexual activity and more satisfying sex following nine months of working out.

- A 1990 Ithaca College study that analyzed more than 1,000 respondents to a women's magazine survey found that women who exercised more than 5 hours per week reported greater duration of sexual activity.

- In a 1990 study of 66 women ages 21 to 42 at the University of British Columbia, researchers found that exercisers and sedentary subjects experienced the same degrees of menstrual irregularity, in contrast to generally accepted views.

- A 1990 study of triathletes at the University of California at Berkeley found that marked increases in training volume resulted in a reduction in sperm count to levels associated with infertility.

- A 1992 Chicago State University study of 500 active women ages 18 to 45 found that 58 percent reported greater satisfaction with their sexual selves because of exercise, with 97 percent also saying exercise helped relieve menstrual discomfort.

(A final editor's note. My wife and best friend, Mary, and I took a leisurely trip to St. Louis on our honeymoon. It took us 4 days to get there by car and the reason for heading there was for me to compete in the National T&F Field Championships, held 6 days after our wedding. I offer no details on events during the trip out or the two days in St. Louis before the event--a 2 Mlile walk, at that time--but can report that I finished third, beating among other famous personages, Ronald Owen Laird. I have no idea where I would have finished had I not been on the honeymoon, so, I guess there isn't much data to be gathered here.)

**MARK FENTON'S TEN COMMANDMENTS**

(Also stolen from the December 1994 issue of Front Range Walking News.)

Think you're ready to tackle that 10 Km walk, marathon, or long weekend hike? Before you hit the road, better make sure you check out our Ten Commandments of Distance Walking.

1. Build up. Take some progressively longer walks on the preceding 4 or 5 weekends to build your endurance and foot toughness.

2. Break in your shoes. Don't wear a new pair of shoes or boots right before the walk--wear them then for two weeks first.
3. Rest up. Take it easy for the three or four days before the big day.

4. Fuel up. Eat plenty of carbohydrates a day or two before your walk.

5. Drink up. Drink plenty of water the day before and regularly throughout the walk.

6. Take an ounce of prevention. Take some aspirin or ibuprofen with your last meal before, or as you eat or drink after, the walk; it can help keep inflammation--discomfort--down.

7. Lube up. Dab petroleum jelly on know friction points to prevent chafing.

8. Powder your feet. Sprinkle on corn starch or foot powder to reduce friction.

9. Bring dry socks. Replace your wet, bunching socks at the halfway point.

10. Refuel on the fly. Eat carbohydrates during any walk of 2 hours or longer if your stomach can handle it. Otherwise, consider sucking on hard candy to keep energy flowing.

While we are stealing, we picked the following feature up from the New England Walkers Newsletter.

OFF SEASON TRAINING
By Brian Savilonis

It's been a long racing season, and the cold and snow will soon be with us. We should now begin one of the most psychologically difficult portions of the training cycle, recovery. This does not mean vegetating and losing all our hard-earned conditioning, but rather involves two months of "active rest". Racing should be non-existent, and training should be easy. Hiking is fantastic, but light running, swimming, and other forms of exercise are fine. Starting in January is a three to four months buildup period of distance, strength, and mobility, and we need to be mentally and physically ready for the new year.

During the rest period, any "hard" walking should focus on lactate threshold training. We need to understand several terms to fully understand the goal of this training. VO2 max is the maximum amount of oxygen that is consumed under a maximum aerobic effort. The aerobic threshold is the point at which blood levels of lactic acid rise significantly; this occurs at some fraction of VO2 max. The closer the aerobic threshold is relative to VO2 max, the faster we can walk or run.

We do not improve this threshold using Intense training. Rather intervals should be done at approximately 5 percent slower than 10 Km race pace (e.g., 31:30 if you have a 60 minute PR for 10 KM.) Workouts might be a nonstop 5 Km or 3 times a mile with minimal rest. For those with heart rate monitors, try to keep the pulse at 85 percent of the maximum heart rate. One rule of thumb that works well for many runners is one full breathing cycle for four footsteps (R,L,R,L). This will likely not work for racewalking where the cadence should be much faster, but you can likely find your own breath count.

Personally, I prefer just timing the workout or using a monitor.

There are at least four physiological effects from such training:
1. Decreased lactate products at a given workload
2. Better use of lactate as a fuel by slow twitch muscle fibers
3. Reliance on fat as a fuel over glycogen
4. Increasing slow twitch muscle involvement.

This is the only interval or speed work I would suggest on a year-round basis, but it should also be deemphasized during the recovery period to no more than once per 10 days.

As an aside, many coaches use threshold training to get out of shape athletes into race condition quickly. Using it three times per week, one can be ready to race in one month. However, this is far from optimal conditioning and will result in a very short peak followed by poor performances.

Have a nice rest; remember that better performances in he summer of 1995 start now!

LOOKING BACK

25 Years Ago (From the Nov. 1969 ORW)--In the annual Ohio TC Distance Carnival, Gary Westerfield beat Long Island AC teammate Steve Hayden in the 7 miles with a 53:58, but dropped out of the next day's 15 miler, in which Gerry Bocci beat Hayden with a 2:03:18. Steve had 54:40 and 2:05:32 in the two races. The women's 5 mile event went to Detroit's Mary Kefalos in 53:11.5 as Jeanne Bocci, 7 months pregnant, was talked out of trying to defend her title. On opposite coasts of the U.S., Tom Dooley and Canada's Marcel Jobin blistered 10 milers. Dooley, In California, had a 1:12:17 and Jobin turned in a 1:12:30. Ron Daniel trailed Jobin with a 1:16:33. A young Todd Scully showed some potential as a future great with a 14:00 win in a Collegiate 2 mile...The Junior National 50 Km went to Dave Eldahl in 5:16:43. (As we often explain, junior in those days was not an age-related category, but for those who had never won a National junior or senior title.)

20 Years Ago (from the Nov. 1974 ORW)--National AAU "B" titles (by this time, the "B" category had replaced the Junior designation and juniors were, indeed, the youngsters) went to Bob Korn at 10 Km (49:20.6) and Chuck Hunter at 100 Km (12:26:40). The ORW's Eighth Annual Dr. John Blackburn Award for the year's outstanding single effort in U.S. race walking went to Sue Brodock. She had won the women's International 5 Km in a then world's best 24:16.2. In the ORW's 5th Annual World Rankings, the USSR's venerable Vladimir Golubrichiy led the list at 20 Km, with Bernd Kannenberg, West Germany, and Karl-Heinz Stadtmuller, GDR, second and third. Kannenberg had set a world's record on the track, but was beaten by Golubrichiy in the European Championships. At 50, Christoph Hohne, GDR, was a clear choice with a European Championship and a stupendous world best of 3:52:53. Otto Bartsch, USSR, and Peter Selzer, GDR, followed. Jerry Brown, Floyd Godwin, and John Knifton topped the US rankings at 20, with Larry Young, Knifton, and Aigle Hirt ranked 1-2-3 at 50. In a 10 Km race in England, a couple of Mexicans gave a preview of things to come as Raul Gonzalez did 41:59 and Daniel Bautista 43:45.
10 Years Ago (From the Nov. 1984 ORW)--Ultra-distance specialist Alan Price, then 37 years old, continued to dominate any pretenders to his throne, winning the National 100 Km title in 10:48:00. The race was held in Arlington, Virginia. Brian Savill was second in 11:18:09. In the Pan-American Cup, Columbia's Querebin Moreno excited the home folks by winning the 20 Km in 1:25:19. Guillermo Leblanc, Canada, was second, with Hector Moreno, and Jaime Lopez, Mexico, following. Ray Funkhouser was the first U.S. walker in sixth with a 1:38:41. Mexico's Pedro Aroche won the 50 in 4:12:44. Carl Schueler was fourth in 4:20:56. Canada's Janice McCallay (50:15) went one-two in the women's 10 Km. Esther Lopez took third in 50:59. Francois LaPointe was very impressive in winning the Canadian 50 Km title in 3:52:16.

5 Years Ago (From the Nov. 1989 ORW)--Herm Nelson broke the U.S. 50 Km record on the track with a 4:04:24 in Seattle. It put him fifth on the all-time U.S. list for the event, behind Marco Evoniuk, Carl Schueler, Larry Young, and Jim Heinig, the others all getting their times in road races.

Racewalking Sport Science Bulletin 10/94

Circadian Rhythms and Race Performance
Humans exhibit cyclic changes in chemical, physical and psychological factors. These CIRCADIAN RHYTHMS take place over a period of about 24 hours and are the most important cycles affecting competitive athletes. There are other bodily cycles that vary over time periods from milliseconds to one year. The concept that everyone has unchanging physical, emotional and intellectual biorhythms of exact length has been discredited.

Statistics show performances peak between noon and 9.00 pm and athletes are least capable between 3.00 and 6.00 am. Among the factors shown to vary over a day are body temperature, mental sharpness, resting heart rate, hormone concentrations and sensitivity to pain.

If an athlete changes time zones, as may happen in long distance jet travel, the body must reset its internal clocks to the new time zone. Until this process is complete, competition may be poor if the race is at a time when the body is accustomed to inactivity. Less than 10% of the population are unaffected by jet lag when changing time zones. Older individuals, habitual early risers, people crossing more time zones or travelling west rather than east are more affected.

The major cues used to adjust circadian rhythms are light exposure, meal times, body temperature and sleep times. If you will be traveling to a race in a distant time zone, start adapting well in advance. This may be done by travel several days prior to the competition or, if this is not feasible, by adjusting your eating, sleeping and training times to match the destination time. Upon arrival at the race site, maximise your sunlight exposure, especially at dawn, since this activates the chemicals most responsible for adjusting daily biological cycles. Avoid caffeine and alcohol. These chemicals slow the adaptation process.

The reduced air pressure inside a jet increases dehydration so drink plenty of water and juices during and after the flight. If the flight is long, order food in advance that you are used to eating. Inflatable neck pillows are useful if you will be sleeping during the flight. Any sleep or eating should be on your destination's timetable. Get a seat away from the smoking section (there is still smoking on international flights). If available, business class seats are much more comfortable than coach class and there is less stress in boarding and customs.

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ELECTRONIC SHOE CONTACT ALARMS
A Non-Solution to Judging Race Walking Events

In order to introduce technology (electronic sensing devices, video, etc.) to the area of athletics officiation it must be highly reliable, practical in its implementation, and free from the ability of competitors to disengage or defeat its operation. The electronic shoe contact sensing and alarm device being proposed by Dr. Dennis Furlong, M.D. (others have made similar proposals in the past) appears on the surface to be a real breakthrough in the judging of race walking events and a clever idea. However, it is in fact nothing more than an intrinsically unreliable and impractical concept. You simply can't design and build this device reliably enough to overcome all the failure modes and make it a practical solution. The following analysis will help in understanding this assessment.

Reliability Analysis:

The following is a partial list of failure modes associated with the device:

a. Electronic components' susceptibility to electrostatic discharge causing false or no signals.
b. Mechanical shock and vibration causing opens circuits, short circuits and intermittent signals.
c. Mechanical wear on the bottom of shoes where the contact sensors are located causing opens, shorts and intermittent signals.
d. Environmentally induced failures such as moisture contamination and uneven road surfaces such as used in the 1993 World Cup in Monterrey, Mexico.
e. False signals due to noise interference and shielding. (Especially significant if a transmitter/receiver analog circuit communication link is used.)
f. False or no signals due to the uncontrollable variability of the interface media. (If the communication link uses biofeedback technology.)
g. Limitations in correctly identifying signals, especially in large groups of walkers.
h. Component random failures (normal component failures).
i. Signal timing faults (very common) causing false positive and/or false negative signals.
j. Security-related failures (athlete disengaging device, easy to short-out or physically damage device, easy to block biofeedback signals between shoes, etc.).

The combined effect of all these failure modes means the probability of a failure occurrence during an event is almost certainty. This is obviously not acceptable. The requirement is zero failures.

Even if the probability of the circuit not failing is 99% during any competition (a conservative estimate considering the susceptibility to electronic discharge and mechanical shock & vibration causing open, short and intermittent signals) and a 99% probability of no false signals due to noise interference & shielding, biofeedback problems and timing faults (another conservative estimate) and a 99% probability of overcoming other environmental effects such as moisture contamination and uneven road surfaces, and a 99% probability of avoiding sensor failures due to mechanical wear to the shoe bottoms (especially conservative estimate during a 50Km event) and the probability of correctly identifying the alarm signals 99 times out of 100 even in a large group of 50 walkers (a common occurrence in a world championship), then the probability of success (no failure during the race) for a field of 50 walkers (100 shoes) is (.99)^5x100 or 0.66%. Therefore, the probability of a failure occurrence during the race is 99.34% or almost certainty. This is a very optimistic estimate which ignores the security-related failures. Most likely the reliability would be considerably lower resulting in many failures during each competition.

It is important to note that the sport of fencing has eliminated the touch sensor system because it wasn't reliable and it could be defeated. This is certainly an application with less failure modes associated with it than this one.

Demonstration of Furlong Device:

Dr. Furlong demonstrated his device ('Run-Alarm') at the USATF Convention in Las Vegas in December, 1993. The top U.S. 50Km walker, Jonathan Matthews, witnessed this demonstration and wrote the following report:

"Unfortunately, the prototypes that Dr. Furlong brought with him to the demonstration occasionally signaled loss of contact when continuous contact was present and occasionally failed to signal loss of contact when wearers (including Dr. Furlong) were actually jumping into the air, achieving dramatic contact loss. Even during the brief demonstration, wires were pulled out of place, rendering the units inoperable. It is doubtful whether they would survive more than a 5Km race on the roads. This problem may be insurmountable. Durability requirements would necessitate that shoe makers incorporate the Run Alarm wiring and sensors into the upper and sole during manufacturing. And even if this difficult requirement is met, it may not be enough. In a single 50Km race I have ground away the outer sole of a new shoe in the toe region, through torque on pushoff and scuffing during the later stages. This is the same location where the toe-contact sensor is located. So, I'm sad to say that I feel that these limitations to the Run Alarm's design will keep it from being a practical improvement over the current method of detecting compliance with race walking's contact rule."

Practicality Issues:

Quoting a national race walking coach, "I think that the 'electronic shoe' might be an interesting training toy for the affluent, especially if we could build in a pedometer, rate of stride indicator and speedometer! But as a competitive requirement, I think it addresses the wrong problem and would not be helpful." This somewhat joking description has some truth to it. Even if the reliability problems could be overcome, the cost to produce this device would be far too great to make it a practical application, especially at all levels of race walking. Shoe companies certainly would not want to produce this shoe because it surely would be a losing proposition for such small quantities. In summary, the cost to develop and produce this device would be prohibitive.

Some other practicality questions to be answered are:

a. If the device is not used at all levels, how would the rules be adjusted? Is it realistic to expect young walkers to develop without the device and then be forced to change their technique later when reaching the national or international level?
b. It still requires judges to inspect the walkers.
c. It currently takes three independent observations to disqualify a competitor. With the shoe alarm it takes only one unless you have a way to reset the device twice during the race.
d. It is quite likely that all walkers would be disqualified in every race if the device works perfectly (100% reliability). This of course will not be the case, leaving some walkers that should be disqualified in the race and disqualifying some that shouldn't be.
e. One failure to one shoe alarm device will make the entire race void as a fair race. This surely will happen 100% of the time.

Bob Bowman, Chairman
IAAF Walking Committee
Registered Professional Engineer