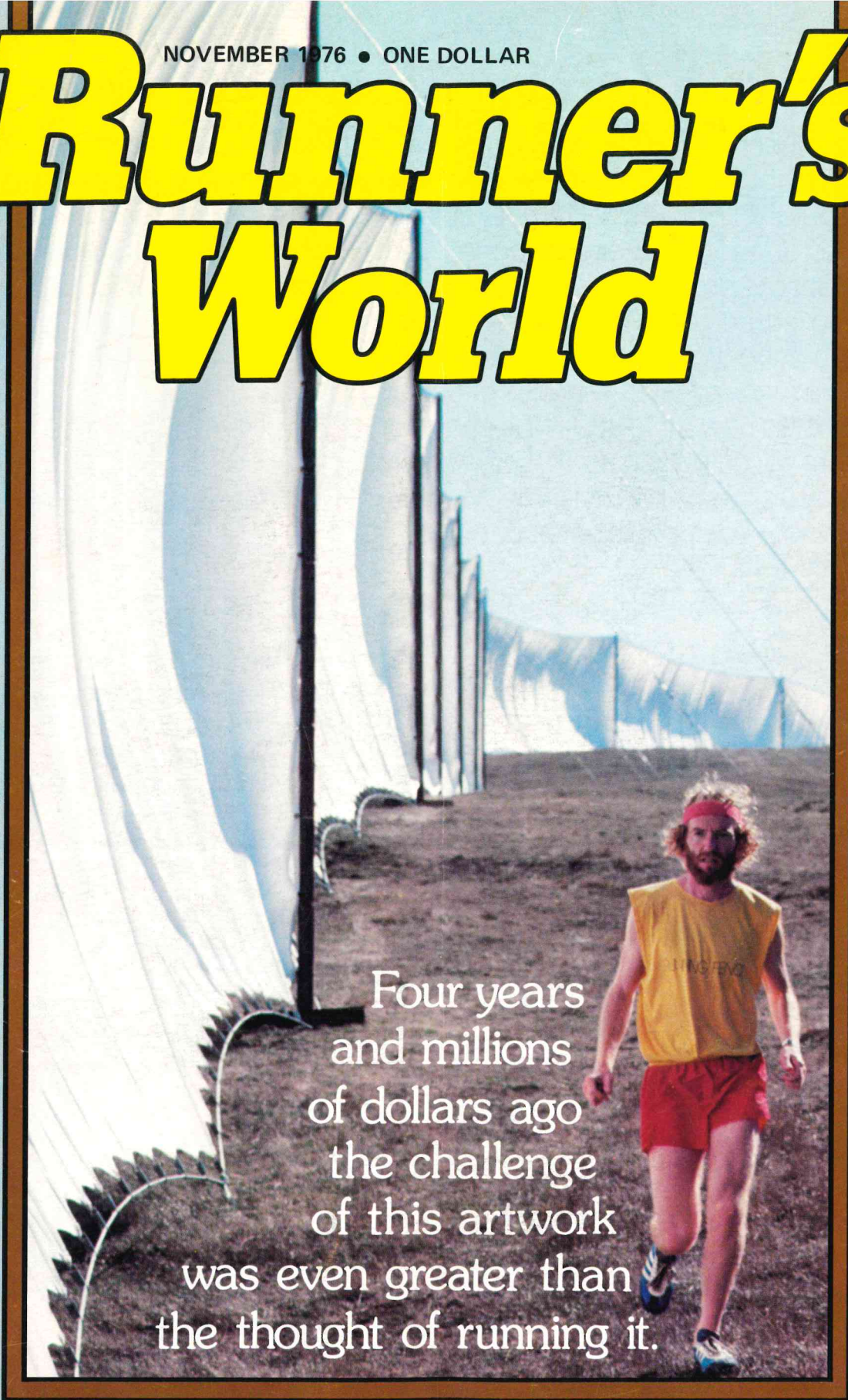


NOVEMBER 1976 • ONE DOLLAR

# Runner's World



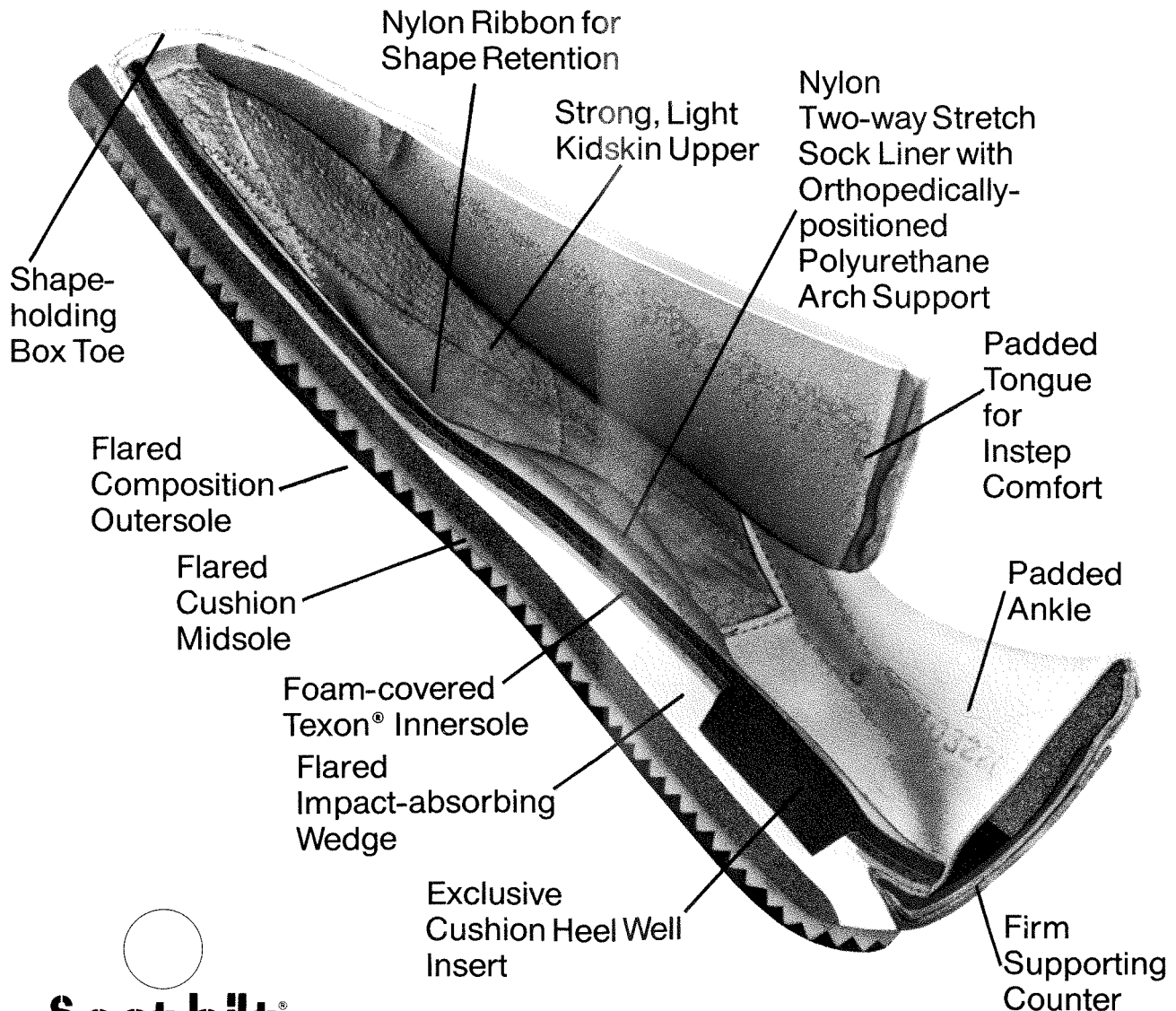
Four years  
and millions  
of dollars ago  
the challenge  
of this artwork  
was even greater than  
the thought of running it.


## The Running Fence

# Spot-bilt introduces a running shoe that's miles ahead.

If you took other running shoes apart piece-by-piece, you wouldn't find what we have. You might find good materials and workmanship (almost as good as ours), but you wouldn't find the special heel cushion system that makes our new Style 880 the best shoe for the serious runner. That new heel design protects your heel and foot like no other shoe can. It prevents bone bruises and ankle injury from jarring impact. And, because your heel is better cushioned, your stride is more even—you can run further, faster, with less effort.

Spot-bilt's new Style 880 is the shoe our competitors will be pulling apart. But, why wait 'til they copy us? Spot-bilt Style 880 "World Record" is now available at better sporting goods dealers.



  
**Spot-bilt®**

Send for Spot-bilt's "Training Table" Runners Chart. Send \$1.00 (to cover postage and mailing) to: HYDE Spot-bilt, 432 Columbia Street, Cambridge, MA 02141. Spot-bilt shoes are sold only through sporting goods dealers who can give the product knowledge and service that athletes, coaches and equipment managers require.

# Dan Hill runs better with Body Ammo. So could you.

August 15, 1976  
3021 - 49th  
Des Moines, Iowa  
50310

Protein Research Labs  
Gentleman:

Please fill another order of Body Ammos 1 + 2. Your stuff is the best thing I come along in all the 16 years I've been at this damn long-distance game! I'm finally at peace with everything physically and mentally.

Best regards,  
H. Dan Hill

Dan Hill ran an average of five miles a day for years. With Body Ammo, he's now running 8-10 miles a day. Easily.

In the interest of all serious runners, Protein Research Laboratories has developed Body Ammo - a unique system of two products designed to help athletes increase their stamina, train harder, recover faster, and in general enjoy running more.

Body Ammo 1 and 2 are non-drug, non-toxic natural products that have been specially prepared to help maximize athletic performance under strenuous physical conditions. Both are recommended for use in the carbohydrate-loading diet.

### Body Ammo 1

Body Ammo 1 is a complete amino acid supplement made from milk protein. By replenishing amino acids, the "building blocks" of the body (which are normally depleted during strenuous exercise), Body Ammo 1 helps to promote stamina and speed recovery time.

### Body Ammo 2

Body Ammo 2, a combination of the sugars glucose and fructose, offers readily available energy in concentrated form. By keeping blood sugar high, it also helps minimize fatigue.

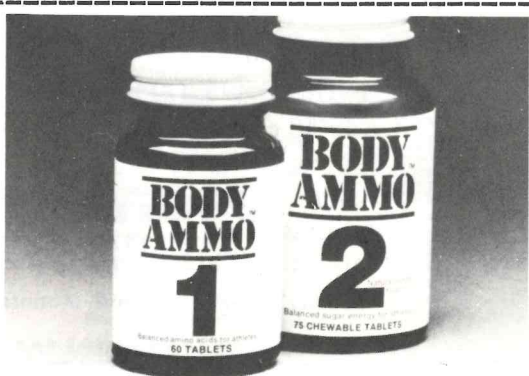
PLEASE SEND \_\_\_\_\_ BOTTLE(S) BODY AMMO 1 @ \$4.50  
\_\_\_\_\_ BOTTLE(S) BODY AMMO 2 @ \$3.50  
Enclosed is check or money order for \_\_\_\_\_

NAME \_\_\_\_\_  
ADDRESS \_\_\_\_\_  
CITY/STATE/ZIP \_\_\_\_\_

Protein Research Laboratories  
P.O. Box 7962  
San Francisco, Ca., 94120

Price includes postage and handling, California residents please add 6% sales tax.

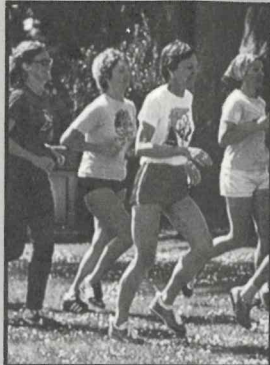
Team rates available upon request.



Give Your Wife This Book For Christmas...

# WOMEN'S RUNNING

**Dr. Joan Ullyot**, a woman, physician and runner, all wrapped up in one, has just completed her fascinating new book, *Women's Running*. A breakthrough in modern running literature—the first book of its kind to take a serious look at women of all running levels. Beginning jogger to competitive long distance runner. After age 30, Dr. Ullyot developed herself from “the ultimate creampuff” into a world ranked marathoner.



**Four separate sections** entitled “Training Plans,” “Aids and Advice,” “Running Medicine” and “The Results” are broken into fact-filled chapters, covering specific running questions. Emphasis on the mature woman who runs for fitness and long distance competition. Medical advice for avoiding or correcting the ailments women encounter in running. Tips on shoes, clothing, diet and more. Training routines for women at all stages of running. And women-related research findings (Dr. Ullyot specializes in exercise physiology).



Please send \_\_\_\_\_ copy(ies) of *Women's Running*.

( ) Hb., \$5.95 ( ) Ppb., \$3.95

Add 40 cents postage per book. Calif. residents add 6% tax.

Name \_\_\_\_\_

Address \_\_\_\_\_

City/State/Zip \_\_\_\_\_

Runner's World, Box 366, Mountain View, CA 94040

**New Balance Athletic Shoes are available at these fine stores:**

- Arizona**  
Phoenix: Pinney & Robinson
- Arkansas**  
Little Rock: Cullem & Boren
- California**  
Alameda: Alameda Sporting Goods  
Berkeley: Jim Davis Sporting Goods  
Costa Mesa: Loeschhorn's New Balance Athletic Shoes  
Encino: All Pro Sporting Goods  
Escondido: Stub Five  
Haywood: Acme Trophy  
La Jolla: Body & Sole  
Oakland: Sports, Inc.  
Pico Rivera: T.R.S. Sporting Goods  
Sacramento: McIntosh's; Sargent's  
San Jose: Valley Athletic  
San Francisco: Matchpoint Tennis; Olympic Sporting Goods  
Torrance: The Athlete's Foot  
Ventura: All Pro Sporting Goods  
Westminster: The Athlete's Foot  
And all 18 Oshman's stores in California.
- Colorado**  
Aurora: The Athlete's Foot  
Boulder: Sporting Feet  
Denver: Front Runner; Metro Sporting Goods
- Connecticut**  
North Haven: Bensen Athletic Supply  
West Hartford: Clapp & Treat
- Florida**  
Jacksonville: Birmingham's Running Shop  
Tallahassee: Phidippides
- Georgia**  
Atlanta: Phidippides; Reeder & McGaughey
- Hawaii**  
Honolulu: Andy Mohan Fashion Footwear
- Idaho**  
Boise: Idaho Sporting Goods
- Illinois**  
Chicago: Front Runner; Morrie Mages Sporting Goods;  
The Athlete's Foot  
Evanston: Front Runner  
Northbrook: The Athlete's Foot  
Schaumburg: The Athlete's Foot
- Kansas**  
Manhattan: The Athlete's Foot
- Louisiana**  
New Orleans: Cullum & Boren
- Maryland**  
Bethesda: Athletic Shoe Box; Racquet & Jog  
College Park: Varsity Sport Shop  
Lutherville: The Athlete's Foot
- Massachusetts**  
Attleboro: Gob Shops  
Boston: Bob Smith  
Greenfield: Clark's  
Lynn: Muzinsky's  
Northampton: The Runner's Shop
- Minnesota**  
Minneapolis: Steichen's  
St. Paul: Gopher
- Nevada**  
Reno: Mount Rose Sport Shop; Sport Shack
- New Hampshire**  
Concord: Kings Shoe Shop
- New Jersey**  
Bound Brook: Effinger's  
Elizabeth: Solomons Sporting Goods  
Paramus: The Athlete's Foot  
Ramsey: Marcel's  
Rutherford: Rutherford Sports  
West New York: Levy's
- New York**  
Cazanovia: Scholastic Sport Sales  
Huntington: Supershoe on Tour  
New York City: Long Island Track Equipment;  
Paragon; Wantagh  
Rockville Center: Wolf's
- North Dakota**  
Grand Forks: 4 Season Outfitters
- Ohio**  
Berea: Great Northern Lights Co.  
Delta: Dave's Running Shop  
Kent: All Pro Sporting Goods
- Oregon**  
Coos Bay: Bay Area Athletic Supplies  
Eugene: Luby's Sports Center; Sugar Pine Ridge  
Medford: Cascade Athletic Supplies  
Portland: Oregon Athletics; Sport Shoes Unlimited  
Salem: Bill Beard
- Pennsylvania**  
Newtown: Sportsman  
Philadelphia: I. Goldberg  
Pittsburgh: The Athlete's Foot (all stores)
- Rhode Island**  
Providence: Alpine Ski Shop
- Tennessee**  
Johnson City: Runners Dream Shoe Supply  
Memphis: Joyner Sporting Goods
- Texas**  
Dallas: Aerobics Activity Center; The Athlete's Foot  
Houston: Oshman's  
And all Cullem & Boren stores in Texas.
- Virginia**  
Falls Church: Power Athletics  
Tyson's Corner: Irving's Sport Shop
- Washington**  
Seattle: The Athlete's Foot; Washington Athletics
- Wisconsin**  
Oshkosh: The Athlete's Foot  
Madison: Petrie's Sports  
Milwaukee: The Athlete's Foot; Milwaukee Sporting Goods
- District of Columbia**  
Georgetown Sports Inc.; Irving's Sport Shop

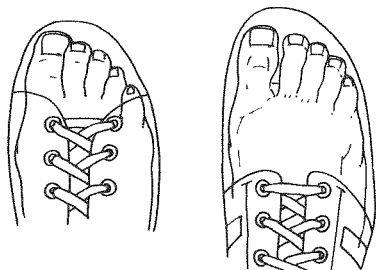
For additional information about our dealers in your area write: New Balance Athletic Shoes, 38-42 Everett Street Boston, Massachusetts 02135 617/783-4000

# The race goes to the fit.

We believe that at New Balance, it's the corollary to our basic theory of width sizing for athletes ("Show me a runner whose shoes don't fit, and I'll show you a loser"). More and more athletes seem to be agreeing with us too. In the past year, runners wearing New Balance shoes placed third in the Boston Marathon, first in the New York Marathon, third in the National 30 Kilometer Championship, and first in the New England AAU Three-Mile. In fact, the present number three- and number five-ranked runners in the world train and race in New Balance.

Here's what they're getting: for more than 20 years, we've been manufacturing athletic shoes in width sizes as well as lengths. A perfect fit for comfort, greater protection, and enhanced performance. Training shoes with special sole/midsole/wedge construction and sufficient weight to be fully protective. Flared heels in some cases and a unique new Achilles tendon pad on all training models. Lacing that runs only the length of our special supportive saddle over the instep. A seamless, lined upper that prevents chafing or binding of the toes.

That's New Balance. We'll fit your foot perfectly — provided your foot falls somewhere in the 3½AA to 15EEE range. After that, it's up to you. Like we also say: If the shoe fits, run in it.



Lacing to the toe constricts the toes and may cause blistering on top of the foot.

The New Balance method restricts lace tightening to our saddle over the instep, which avoids chafing, assures toe freedom, and eliminates the need for shoe break-in.



**320** The complete training shoe for beginning jogger and Olympic runner alike. "best I've ever worn," according to one of the country's leading doctors of sports medicine. Two layers of thick Softee cushioning in the wedge/midsole combination, plus width sizing and a leather-reinforced, flocked nylon upper to encase the foot in a nearly frictionless environment. A flared heel and molded plastic counter for maximum cushioning and great lateral stability, and our new Achilles tendon pad for maximum protection and support coupled with light weight. Men and women, 3½AA to 15EEE, in Royal blue with white trim.



**Trackster III** The most protective of all training shoes, with a molded Ripple sole to absorb up to 40 percent of road shock. Unique foxing construction for greater lateral stability, a foot-conforming soft suede upper for comfort, and our new Achilles tendon pad for protection from strain and chafing. Men and women, 3½AA to 15EEE, in Royal blue with white trim.



**305** Tough but lightweight; durable enough for training, yet light enough for racing. Leather-reinforced nylon upper with flocked nylon lining. Protective midsole plus heel-elevating Softee wedge to reduce extension of the Achilles tendon and cushion the leg. With our new Achilles tendon pad incorporating a molded plastic counter, above a flared heel to stabilize the foot during heel strike and reduce ankle-roll injuries. Men and women, 3½AA to 15EEE, in Royal blue with white trim and red midsole. One of the top five running shoes available, according to *Runner's World*.



**220** A new training shoe with a unique wedge and midsole combination incorporating two 18-Iron layers of Softee cushioning. With our new Achilles tendon pad for protection and the conventional rounded heel for maximum cushioning on heel strike. Full midsole protecting both the ball of the foot and the metatarsal head area. Lightweight, extremely durable "octopus" sole for maximum traction on all surfaces. Men and women, 3½AA to 15EEE, in Royal blue with white trim.



**Competition** The totally new idea in racing shoes: a perfect fit for maximum performance. Width sizing, plus ultra-light 7½ oz. weight (size 8D). Knobby sole for excellent traction on all surfaces, and New Balance's unique-at-the-price wedge/midsole combination to keep weight forward and absorb shock. Men and women, 3½AA to 15EEE, in Royal blue with white trim. The shoe that placed third in the Boston Marathon and took first at New York.

pair 320 at \$26.95      length      width  
 Size: \_\_\_\_\_  
 pair 305 at \$24.95      Size: \_\_\_\_\_  
 Size: \_\_\_\_\_  
 pair 220 at \$23.95      Size: \_\_\_\_\_  
 Size: \_\_\_\_\_  
 pair Trackster III at \$29.95      Size: \_\_\_\_\_  
 Size: \_\_\_\_\_  
 pair Competition at \$18.50      Size: \_\_\_\_\_  
 Size: \_\_\_\_\_

I enclose a total of \$ \_\_\_\_\_. I am also enclosing a foot tracing taken while standing, in sock (if worn), to help you guarantee me a perfect fit. Yes, I remembered to hold the pencil vertically when I took the tracing.

\_\_\_\_\_ name  
 \_\_\_\_\_ street  
 \_\_\_\_\_ city  
 \_\_\_\_\_ state      \_\_\_\_\_ zip

Spare Pair resoling service information  
 free New Balance catalog  
 I will include \$1.75 per pair for postage and handling.

**new balance  
athletic  
shoes  
usa**

38-42 Everett Street  
Boston, Massachusetts 02134  
617/783-4000

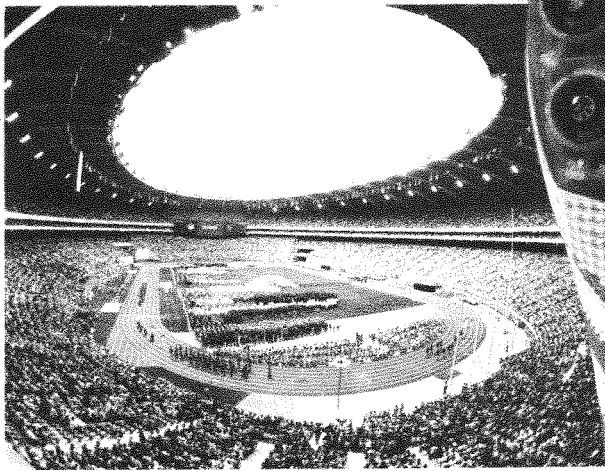
# Montreal wins were fixed

Most of the successful athletes at Montreal "fixed" their adistar 2000 Track & Field Shoes before competing.

With this new generation of shoes, the revolutionary concept of interchangeable elements guarantees each athlete optimum performance on any track in any weather.

At Montreal too, adistar 2000 shoes provided a decisive edge in traction as these could be adapted to the weight and running style of the individual competitor. More than 20 combinations are possible through the interchange of the unique adistar star profiles and cones.

Two models of adistar 2000 cover specific athletic disciplines – sprint and medium and long distance running. adistar 2000 – another first from adidas.



**adidas** 

More information available at your nearby adidas dealer or write to:

**Libco**  
1 Silver Court  
Springfield,  
N. J. 07081 U.S.A.  
(201) 379-1630

**Clossco, Inc.**  
2200 Martin Avenue  
P. O. Box 239  
Santa Clara, Ca. 95050  
(408) 246-8350

**Vanco**  
5133 W. Grand River Ave.  
P. O. Box 17039  
Lansing, Michigan 48901  
(517) 485-1726

**Hughesco, Inc.**  
2830 Merrell Road  
Dallas, Texas 75229  
(214) 358-4291

**adidas (Canada) Ltd.**  
550 Oakdale Road  
Downsview,  
Ontario M3N 1W6  
(416) 742-3872-6

# Runner's World

## EDITORIAL STAFF

Editor: Joe Henderson  
Assistant Editor: Dave Prokop  
Editorial Assistant: Kevin Shafer  
Medical Editor: George Sheehan, M.D.  
European Photographer: Mark Shearman

## PRODUCTION STAFF

Production Manager: Paul Butzler  
Art Director: Jeff Loughridge

## EXECUTIVE STAFF

Publisher: Bob Anderson  
Marketing Director: Virgil Morrow  
Advertising Sales Director: Roger Leen  
Advertising Manager: J. Madden Magruder  
Subscription Manager: Rhonda Swan  
Circulation Director: Debbie Boyle

## CONTRIBUTING PHOTOGRAPHERS

M.J. Baum                    Horst Muller  
George Beinhorn            Stan Pantovic  
Tony Duffy                    Doug Schwab  
Harrison Funk                Paul J. Sutton  
Jeff Johnson                  Steven E. Sutton

## SPECIAL CONTRIBUTORS

Marc Bloom                    Hollis Logue III  
Ben Buckner                  Jerome McFadden  
Alan Claremont                Ron Somers  
Jack Daniels                    Tom Sturak  
Matti Hannus                  Jon Sutherland  
Janet Heinonen                Hugh Sweeny  
Hal Higdon                    Kathrine Switzer  
Ian Jackson                    Dave Theall  
Kaj Johansen                  Joan Ulliyot  
Brooks Johnson                Ken Young



Christo's creation of the Running Fence blends the art of sculpture with the natural beauty of California to create an unbelievable setting for runners.  
(cover photo by David Madison)

**Runner's World** is published monthly by World Publications, Editorial and Executive offices: P.O. Box 366, Mountain View, CA 94042; phone (415) 965-8777. European Office: Box 247, Croydon, Surrey CR98AQ, England. Second class postage paid at Mountain View, CA 94042 and at additional mailing office (Burlingame, CA 94010). Postmasters: send form 3579 to Mountain View address. US and foreign subscription rates: \$9.50 per year, 18.00 two years. Single copies, \$1.00 and back issues, \$1.50 each.

Copyright World Publications 1976. No material in this magazine may be reproduced in any form without written permission.

Volume Eleven—November 1976—Number Eleven

## Contents

### ARTICLES

Does the Sport Need New Blood	24	Russell Pate, Ph.D.
A Fence Made for Running	28	Chris Knipp
New Coaches, New Approaches	32	David Whitson
Making the Right Racing Moves	34	Hal Higdon
Winding Roads That Seem to Beckon	41	Paul Fetscher
Germany's Runs for the People	42	Mike Spear
A Visit to the Land of Viren	44	David Chanoff
Daws' Path to Greatness	46	RW Staff
The Cross-Country Police Chase	48	D. Dudley Walker
Little Old Ladies in Track Shoes	50	Walt Belcher
Best of the Country's Milers	52	Jim McFadden
Where One Lap Can Be a Victory	54	John Schultz & Greg Shivers
Sizing Up the Olympics	56	RW Staff
Cindy Dalrymple Works It Out	58	Romona Klinger

### DEPARTMENTS

Runner's Forum . . . . .	6	Best of Times . . . . .	72
Running Commentary . . . . .	12	Highlights . . . . .	74
Medical Advice . . . . .	14	December Coming Events . . . . .	77
Interview: Kenny Moore . . . . .	20	Fun-Run Update . . . . .	78
City Series: Anchorage . . . . .	65	Club Notes . . . . .	82
Technical Tips . . . . .	66	Good News . . . . .	84
Looking at People . . . . .	71	Readers' Comments . . . . .	88

## From the Publisher

I have a number of comments I would like to share with you this month.

When we did the special shoe issue, we were not aware that the Nike Special Marathon shoe was not being produced. We have since found out that it is not going to be available until March. For the time being the Nike Sting or the Tiger Jayhawk will make good substitutes. Next year we only want to include shoes already in production . . .

This issue (November) is one of our biggest non-special issues. Readers and advertising support are the reason. Our circulation is 65,000 now and we are shooting for 100,000 by June of next year. More readers will mean more,

bigger issues. Christmas is a good time to turn your friends on to *RW*. See page 79 for details . . .

We are starting to plan 1977 and we would like to get some feedback from our readers. Do you like all our columns? Could you tell me what ones you like and ones you don't like? Maybe you would want to see new ones? What article ideas do you have? What are your over-all feelings concerning *Runner's World*? How can we improve? Thanks for your feedback . . .

I am looking for a business manager. Top money for right person. Write for more information.

Bob Anderson

HEADQUARTERS FOR STOPWATCHES  
AND ELECTRONIC DIGITAL TIMERS

## NEW WRIST TIMERS



### APOLLO 644

7 Jewel-1/5 Sec.  
w/30 min. register  
Side button for  
time-out. **\$32.50**



### LEMANIA 501.218

Easy to read dial  
Lightweight  
Fiberglass Case  
60 Sec. sweep  
60 Min. center reg.

**SPECIAL \$47.50**



### HEUER 775.901M

1/5 Sec. central-60 Min  
Rotating elapsed  
time bezel,  
shock protected.

**\$68.00**



New from Cronus

## Cronus 2D

Dual-Display Stopwatch  
Dual-Display Stopwatch



Dual display stopwatch; times  
to 59:59.99, both Splits and  
Interval Times, displays both  
simultaneously! Complete  
with disposable batteries,  
lanyard, 2-year warranty.

**\$125**

We feature a complete line of Cronus  
Digital Stopwatches and Timers.



## QUARTZ ELECTRONIC DIGITAL TIMER

STT II timer has the exclusive mem-  
ory allowing you to retrieve both  
total time splits and interval splits  
for the same event (totalize Taylor  
splits). The STT II also has the abili-  
ty to time two different events  
simultaneously. For example you  
can time a mile run and time sev-  
eral 100 yard sprints at the same  
time.

- Liquid quartz display
- Battery life — over 1500 hours
- LARGE 1.2" HIGH DIGITS can be read in direct sunlight
- Solid state electronics —
- Accuracy of 99.999% —
- Timing range of 59:59.99 min



**STT II \$149.50**

STT III (Without Taylor  
lap totalizer) ...\$99.50

We have a complete selection of Quartz  
Digital Electronic Timers and Stopwatches —  
Send for FREE Brochure.

CRONUS • ACCUSPLIT • MICROSPLIT  
LEMANIA • HEUER • MINERVA  
RACINE • HANHART • GALLET and others

COACHES • ATHLETIC DIRECTORS: We invite  
requests for bids on volume timer purchases.

WE SPECIALIZE IN STOPWATCH REPAIRS.

**FELDMAR WATCH CO., INC.**

9000 W. Pico Blvd., Dept. RW

Los Angeles, Calif. 90035, (213) 272-1196

# Runner's Forum

The free exchange of opinions, ideas  
and information.

## RACING THOUGHTS

When you get right down to the es-  
sence of serious racing, the series of  
track events simply may be seen as a  
continuum of opportunities for, and at-  
titudes toward, fast running. Some men-  
talities are geared more toward the  
"sudden burst" feeling of pure sprint-  
ing and some rather toward the "ex-  
tended surge" experience of the dis-  
tances.

Still, I think everyone's first con-  
ception of racing is the "dash" concept,  
and this primitive attitude always  
must be maintained if one is to be  
serious about racing at any distance. It  
is quite simple: merely whip your body  
into a frenzied state of forward motion  
as rapidly and efficiently as possible.  
For distance runners, this means getting  
from one geographical point to another  
as fast as you can on your own two legs.  
Or, to cover the entire spectrum of rac-  
ing, no matter what the distance, a  
serious racer is always at maximum  
speed, relative to the psycho-physio-  
logical and experiential parameters of  
his distance.

For someone like myself, the thrill  
of racing the distance events is not so  
much the commonly (and I believe  
falsely) understood idea that one can do  
without speed or that one can get by  
on endurance alone. Rather, it is some-  
thing else which is difficult to voice.  
There comes a point in racing (I think  
it is somewhere around 600 yards for  
most runners) where one must admit to  
oneself that the mere "dash" concept  
has taken on another dimension. Some-  
thing highly unusual is going on and one  
is venturing into a somehow absurd (yet  
appealing) enterprise which defies  
common conception.

The primary addition is the element  
of rhythm. Of course, this element is  
present in the short sprints, but in the  
long races its power and beauty grow  
wild. It creates a hypnotic effect.

Then there is the element of pacing,  
which gives birth to the possibility of  
experimenting with the pace, or making  
tactical use of it, and thereby creating  
much more opportunity for the "in-  
telligent" runner.

Perhaps most intriguing is the ele-

ment of time dilation which the dis-  
tances impose in an almost surrealis-  
tic way. It is an experience commonly  
shared by long-distance runners that the  
elapsed time of a long run often seems  
less than what it actually is. A really  
vibrant body rhythm on a good day can  
cause a distance run of more than 10  
miles to go by in what might seem to be  
a few minutes.

These elements combine to form an  
attraction which the short sprints can't  
offer.

Perhaps it is for these reasons that  
there are people like Greg Fredericks  
and Bob Thomas. Fredericks has  
verified 47-second quarter-mile speed,  
but prefers the 10,000 meters, occasion-  
ally dropping to the 5000. Bob Thomas  
considers himself a cross-country and  
marathon type, yet he ran the 100 in  
9.7 while in high school and the 440 in  
49 seconds as college freshman.

The fact is that there is nothing to  
compare with the sensation of running  
a distance race at a pace fast enough to  
convince you that you are still "dash-  
ing." It is almost a megalomaniacal feel-  
ing to know that you can run 26-plus  
miles at a constant pace which is faster  
than the average American can "sprint"  
one lap of a regular outdoor track.

There comes a point in being fit to  
race at which your legs become so toned  
and powerful that you feel you are "rid-  
ing" on top of them, just as you might  
sit atop a motorcycle and merely choose  
directions. I could watch videotapes of  
Frank Shorter and Steve Prefontaine for  
hours on end, simply because they ride  
with such enviable comfort on (and  
with eerie detachment from) their legs.

It has occurred to me that the re-  
cent breakthrough in world-class miling,  
initiated by Filbert Bayi, might provide  
a fascinating scenario for studying at-  
titudes derived from generally accepted  
racing strategies. It seems that Bayi's  
"dash limit," by a quirk of African gen-  
esis, extends to the full range of the  
mile, rather than that 600-yard figure  
mentioned earlier. When he hears the  
gun, he "sees" the finish line directly  
ahead of him and he experiences the  
"one-mile dash."

The uniquely intoxicating appeal of



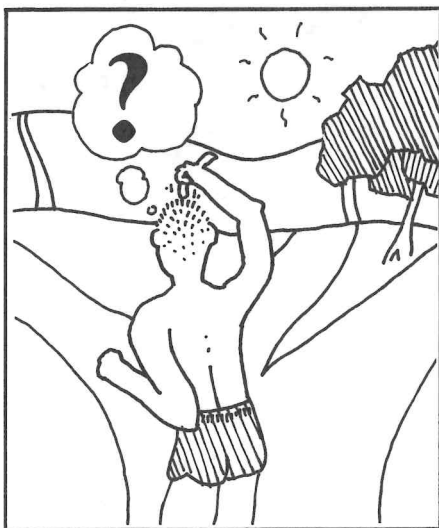
distance racing is to be able eventually to fuse the concepts "distance" and "dash" (two concepts which would seem at first to beg mutual exclusivity).

Dan Brannen

## ONE WRONG TURN

Every so often, a runner will take a wrong turn during a distance race on the roads. I've regarded such unfortunate runners with a certain amount of disdain. But then I became a "wrong turn victim" and suddenly my perspective changed radically.

Here I was, running at a personal record pace in the local AAU 50-kilometer championship. At about 17 miles into the race, I came to a fork in the road where doubt, panic and rage engulfed me. The correct direction was in doubt. Runners in front were too far ahead for me to see which road they took. Those behind me were more than a half-mile back and I wasn't keen on waiting for them. No one was at the fork to tell me as to which way I should go.



Prior to the race, I explicitly asked the race director about turns and forks on the course. Being harried and pressured in the minutes before the race, the director may not have paid much attention to my question. But an answer, nevertheless, came forth.

"At any point in the race, when in doubt," the director said, "go straight."

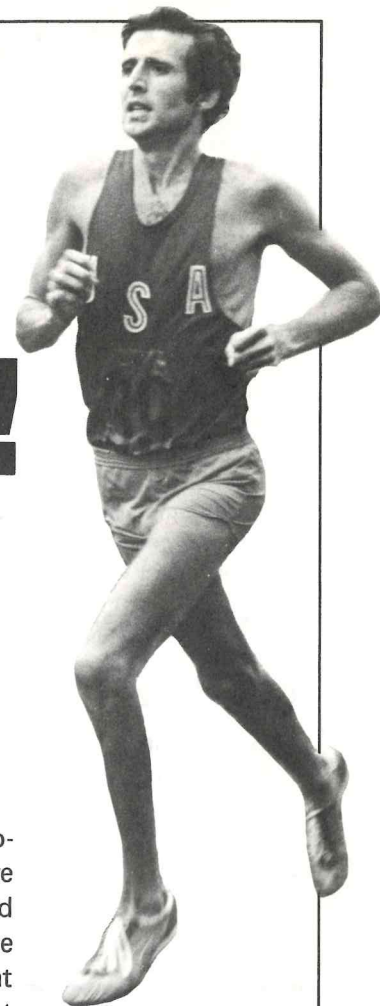
So that's what I did at the moment of truth. I went straight ahead.

As I made my decision and took the straight ahead direction, I had a vague, but haunting, feeling that my good race effort was going down the drain, or more appropriately, down the wrong road. This ill-defined feeling was induced by a sporadic and faintly-chalk-

*(continued on page 8)*

# WE WERE THERE!

July 17 to August 2  
in Montreal for  
The 1976  
Olympic Games



Bob Anderson, Joe Henderson, Dave Prokop, Mark Shearman and Matti Hannus were all there. We have done a book and would like to send you your 256-page copy. The 1976 Olympic Games "A Close-up Look at the Track & Field Events" presents an event by event summary with over 100 photos illustrating the exciting action in Montreal.

But we don't stop with summaries. Don Kardong presents an inside look at the marathon. Brooks Johnson has an analysis of the sprint events. Joe Henderson's daily diary is most informative. Matti Hannus tells us more about double gold medalist Lasse Viren. And of course we have complete results of all the events.

This is a book you'll enjoy and keep. This big 256-page book is only \$3.95. Or you can purchase it for just \$2.00 if you enroll in our Runner's Book Series and take this as your first selection. See the ad on Page 73 for details.

## Rush me my Olympic Book

I am most interested in getting your new book—the 1976 Olympic Games "A Close-up Look at the Track & Field Events." Please send me \_\_\_\_\_ copies at \$3.95 plus 40c per copy for postage and handling. Send me \_\_\_\_\_ copies of the hardback edition at \$6.95 plus 40c postage. California residents add 6% sales tax.

Name \_\_\_\_\_

Address \_\_\_\_\_

City/State/Zip \_\_\_\_\_

Runner's World, Box 366, Mountain View, Calif. 94040

## adidas

SL76 Training Shoe

Sizes: 4-13

Colors: Blue with red stripe \$24.95

## TIGER

Jayhawk Training Shoe

Sizes: 6-13

Color: Yellow with black stripe \$18.95

## nike

Waffle Trainer

Sizes: 4-13

Color: Blue with gold stripe \$23.95

All orders received with certified cheque or money order shipped same day. Please enclose \$1.50 per order to cover postage + handling.

## ELGIN CYCLE & SPORTS

256 Elgin Street  
Ottawa, Ontario  
K2P 1L9  
Canada

Send for free brochure of over 25 different models of shoes plus training suits.

# LIVE LONGER NOW

Live Longer Now, Leonard, Hofer & Pritikin. Don't sit on your hands waiting for science to invest some miracle drug that will let you live longer. You can live longer now if you follow the prescription in this book. **Live Longer Now** takes atherosclerosis, cerebrovascular disease, arterial hypertension and other timely medical topics and translates them into language you can understand, complete with daily plans for exercise and diet that you can follow to prevent them. Ppb., 232 pp., \$2.95.

Please send me \_\_\_\_\_ copy(ies) of **Live Longer Now**. Enclosed is \$2.95, plus 40c postage per copy. California residents add 6% sales tax.

Name \_\_\_\_\_  
Address \_\_\_\_\_  
City/State/Zip \_\_\_\_\_

Runner's World, Box 366  
Mountain View, CA 94042

ed line leading in the direction of the roads I didn't take.

As I came to the fork, I decided that such a lame and worn-out directional line couldn't possibly be intended for the present race. If it were, surely that line would have been more definite. How wrong I was.

Finally, after a half-mile on the wrong path, a motorist and a bicyclist came to tell me of my mistake. Broken hearted, I turned around and got back on the course after a mile of wasted running.

My spirit was broken, but I ran to finish and still managed a sixth place. (On the basis of my 6:27 per mile pace for 50 kilometers plus one mile, I would have taken third and posted a personal record by about 7½ minutes.)

When runners spend much time and energy training for a distance race that they can only run once a year, it is imperative that race directors go to great lengths (and pains, if necessary) to avoid the agony and despair that befalls a "wrong turn victim."

Using a well-defined chalk or painted line/arrow, and when possible having people assigned to doubtful turns, are most positive steps in the right direction.

If the races are for the benefit of the participants, then surely a little time and effort can be put forth thus guaranteeing that the runners' time and efforts will not be dissipated on a wrong turn to futility and frustration.

*Jon Brower*

## NATIONAL SYSTEMS

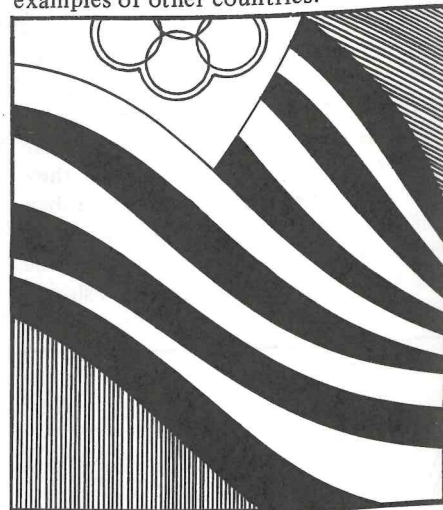
Now that the Olympics are over, and the US team seems to have "failed" to produce enough medals to satisfy all those fervent nationalists who become track fans once every four years, we'll hear the screams and moans about socialist-bloc professionalism, nasty steroid-popping stories, blood-packing and the like. The comparisons of our system with those of the USSR, Cuba and East Germany made by Shirley Babashoff, Mac Wilkins and the others will generate some ill-informed debate (the usual conclusions of smug satisfaction with our sports, political and economic systems) and then snores of apathy until our next national "embarrassment."

Why not use the occasion for a little self-examination? Why not begin a debate, meaningful and informed? Is our approach so excellent, so morally superior?

Any sports program should rest upon two basic principles: every individual should have a chance to participate in

some physical activity and every gifted individual athlete should be encouraged to develop that gift to the fullest. At the national level, a third principle is that, the success of the individual athlete reflects credit on the nation as well as upon the individual who succeeds.

None of us would quarrel in the abstract with any of those three statements. It's in putting those first two principles into practice that we fail and the socialists appear to succeed. Their programs offer more to the individual than our own. They achieve more individual self-realization than our athletes, and we could learn a great deal from the examples of other countries.



Consider the applications in our own country of the first two principles, and compare with the applications in the socialist states. Our practical approach is really that every individual boy should have a chance to participate in some physical activity, so long as it's *football, basketball or baseball*. In a very few places, girls can participate in basketball, swimming and tennis on an organized basis.

All the other sports and activities are unknown. If an individual isn't skilled in any of the activities I've mentioned, he is out of luck, although he may be tremendously gifted.

By contrast, a much greater variety of individual differences and aptitudes seems to be realized in other countries. A correspondingly greater variety of activities is made available to all (not only available but with equipment, coaching, encouragement and recognition). More than that, efforts are made to spot and direct talent from an early age, so that a gifted individual may quickly find a suitable sport and get on with developing talent and gaining skill, competitive experience and recognition.

If an individual succeeds, is encouraged and keeps improving, that individual probably will stay with the

activity. While if the individual is bored, tired or plain not interested, then, regardless of latent talent, he or she won't succeed. By making the variety of activities available early, and helping gifted individuals to find their best activities early, those individuals are encouraged to success, self-esteem and self-realization. Those not gifted will be steered into something more suited to their talents.

What about every gifted individual athlete being encouraged to develop that gift to the fullest? Here, our practice falls short of the ideal, for what we really mean is that every individual gifted in a sport *played professionally* should be encouraged to develop that gift to the fullest. Everyone else is out of luck when it comes to money, coaching and organized competition after high school or college. Discouraged and unrewarded, even the persevering athlete of international caliber eventually becomes inactive and winds up doing something else, or wasting hard-won skills and experience which might be enormously productive and appreciated in a coaching career.

If we're really interested, in ourselves, in each other, in humanity as a whole, wouldn't we be better off encouraging the sort of mass exposure and participation available in the socialist countries, rather than the elitist, professional jocks and flaccid fans of our own way of life? Wouldn't it be better to take just one-half of the amount spent in this country, each and every year, on paid admissions to one small professional sport, or in prize money for something like pro bowling, and spend it on a decent national sports system? You bet it would.

*Desmond O'Neill*

### "I'M THE GREATEST"

*Athletic arrogance.* Do these two words go hand in hand? I've asked myself that while watching athletes (particularly track athletes) over a number of years. There was always the swagger of the high school football hero: he was good, he knew it and he wanted everyone to know about his power and prowess. But he was a stereotype that I thought I dismissed when I discovered track. But the football hero has his imitators in track.

At a small college I attended was an outstanding sprinter. Bob has been an athletic "nobody" in high school, but as a college runner he blossomed. Rarely did he lose a 100, 220 or mile relay

*(continued on page 10)*

# Introducing your old running shoes.

If you're like most of us, you hate throwing away an old pair of running shoes. And for some good reasons. You paid good money for them. It took more than a few hard miles to break them in properly. And there's probably a lot of wear left in every part of them but the soles. So don't throw them away.

Send them away. For \$11.95 (plus \$1.50 for postage, handling, and guaranteed safe delivery), we'll replace your worn-out soles with factory-fresh equivalents.

And to make sure your old tops last as long as our new bottoms, we throw in a few extras when necessary:

**Reinforce weak or torn stitching.**

**Replace worn shoe laces.**

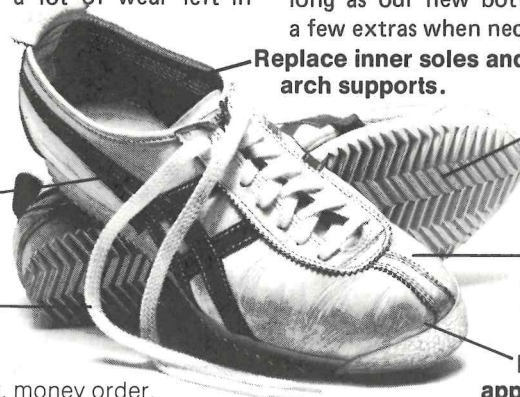
**Replace inner soles and arch supports.**

**Replace worn soles with factory-fresh originals.**

**Repair tears in canvas, nylon or leather outsides.**

**Exclusive Tred 2 application process guarantees a perfect, long-lasting bond.**

Place your check, money order, or BankAmericard/Mastercharge account number and signature, along with your name and address, inside a shoe and mail them to: Tred 2, Dept. 125, 2510 Channing Avenue, San Jose, CA 95131. We'll have them back to you promptly. And already broken in.



## 1976 Melbourne Marathon

AND  
MINI-MARATHON

Sunday, December 26  
8:00 am Wickham Park,  
Melbourne, Florida

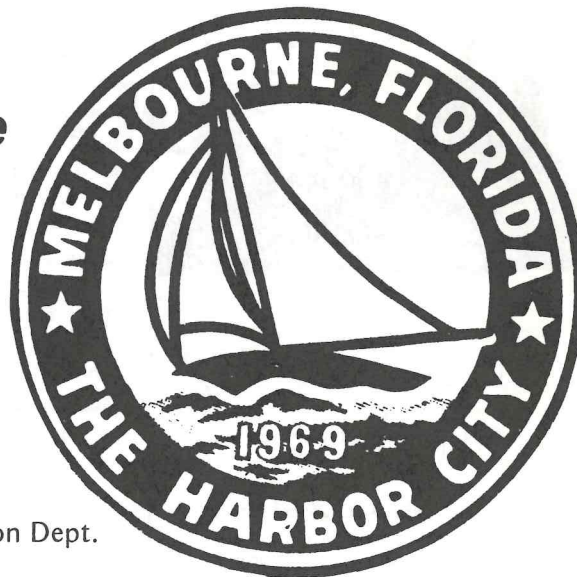
Sponsored by:  
The Melbourne Recreation Dept.

Entry Fee:  
\$4.00 (late entry, \$5.00)

Entries close:  
December 20, 1976

For entries and information:

CARL MEYER, DIRECTOR  
MELBOURNE RECREATION DEPT  
MELBOURNE, FL 32935



Awards:  
Trophies ● T-Shirts ●  
Ribbons ● Age Groups ●  
Women ● Team awards  
*(Note: identical awards for the  
Marathon and the Mini-Marathon)*

The constant pounding of athlete's feet means extra protection is needed.



## M-F Heel Protectors

Prevent Injury!  
Provide Comfort!  
Allow Injured Athletes To Compete!

Best way to prevent callouses, bruises, spurs, shin splints, blisters and ankle sprains.

**M-F ATHLETIC COMPANY, INC.**

P.O. Box 8188  
Cranston, Rhode Island 02920

**\$10.50**  
doz.

at your athletic dealer or order direct.

leg. And when running against decent competition he had the disconcerting habit of making race car noises ("varoom, varoom") as he sped by. Occasionally, he would hang out his tongue like a dog the last few yards of a race in mock exhaustion as he breasted yet another tape.

Bob's biggest loss came at the NAI A national track meet late one spring. His 46.9 time for a 440 was only good enough for seventh place. Was his arrogance daunted? No. He returned to campus to proclaim himself the fastest white quarter-miler in the NAI A.

After college, I started coaching. Recently, I've been appalled and impressed by the athletic arrogance and excellence of a hurdler and distance runner.

The hurdler, Will, is a natural. I'm sure he was watching Edwin Moses, knowing that could (or would) be him in 1980. In his first year of competition, Will would have 330 intermediates won halfway into the race. At this point, his upraised index finger would indicate to the crowd where he stood in the world of track. He also had the habit of jogging the last 10 yards of race backwards so he could see where the competition was, thus possibly being the first hurdler to butt, rather than breast, the tape.

Fortunately, Will has outgrown the need for such shows and has responded to the competition as it has gotten more fierce. But now he talks of scholarship offers that he expects from USC, UCLA and others.

A distance runner I know just never saw himself as finishing any place other than first. He is extremely talented and probably watched Lasse Viren knowing that could (or would) be him in 1980. He only failed to take first (including the California State Meet) four times his senior year.

He like to give himself (and the observant track crowd) a quiet smile while following other runners who were about to experience his devastating kick.

Before and after races, he was very vocal about what would and what did happen in a race. "Don't worry, coach," and "What did I tell you!" became expected before and after race comments. My biggest trouble with this athlete was keeping several of his talented, but not great, teammates from strangling him.

I guess we all know examples of athletic arrogance (perhaps, in the case of Dwight Stones, "arrogance" is too polite of a word). Distance runners all have stories about the pitter-patter of feet running across the car hood of a driver

who ventured too far into the crosswalk. And I guess we've all kicked some dogs, thrown some stones and let various drivers know what we think about them.

Is such arrogance a natural outgrowth of athletic pursuit? Do we feel (or know) we're better because we're doing what others are only watching? And is there a positive correlation between amount of arrogance and extent of athletic excellence?

These aren't earth-shattering (or even track-shattering) questions. But they may provide 10 miles worth of arguments for you and your running buddies.

Bruce Jones

## HIGH NOON

I am a noonday runner. In the past, and still from time to time, I have run in the morning or evening, but almost always these days I run in the early afternoon.

You might think this choice of when to run is simply a matter of convenience, of fitting it in when time becomes available. Most people believe running is running regardless of when it is done. But I know this is not so. There is a time, as Ecclesiastes wrote, for every purpose under heaven. There is a time for running. Mine is midday. I run at midday because I must. I run at midday because my body and soul tell me to.

This command begins, as does everything else, with the body. My body is at its best in early afternoon. Like the sun, my energy is at its zenith, my fields of force at maximum. Whatever I do, I do best at this time of day.

Numbers of scientific studies have been done which confirm this. The rotation of the earth, the alternation of night and day have a remarkable effect on the human body. Analysis of body functions, hormone production and performance levels shows a daily peak in the early afternoon and a fluctuation in activity sometimes as large as 70%.

In the morning, I am not the runner I am later on. When I arise, flank speed to the bathroom is a crawl. And when I finally get out on the roads, the same effort I exert at midday gives me a pace a minute a mile slower.

The morning run is also a challenge to my willpower. It is even more of a challenge to my capillaries. Mine go into spasm at any temperature below 70 degrees. When I take a swim in the morning, I have to drive home from the beach with my hand in the heater to get the blood back in my fingers.

For much the same physiological

## MOSCOW



## Don't Be Left Home

Would you believe it? Since our last ad 100 more people have signed up for Moscow. We now have 293 on our list and it just keeps growing. If you want to go with us to the 1980 Olympic Games in Moscow, I do suggest that you sign up now. We don't know how many we can take and we sure don't want to leave anyone at home that would like to go.

Right now we need a deposit of \$50 per person to hold your place. Don't take any chances sign up now and be assured of going. Write: Bob Anderson, *Runner's World*, Box 366, Mountain View, Calif. 94042.

reasons, evening runs are difficult for me. My energy has begun to ebb. The great tides of body functions have started to recede. Yet the approaching night, the chill in the air, actually demands more of the body. So midday is the time my physiology has selected for my running.

Unfortunately, as time has become more and more precious, it has become less and less sacred. Time is now too expensive to be thrown away on an hour's run or to be wasted on a period of silence and meditation, particularly at midday.

Daybreak and sunset have similar implications. The morning run speaks for rebirth and the new life. And the evening run is for those who have fought the good fight and now desire only the peace an hour's run at a slow steady pace will give them.

From this perspective, the morning run is my youth. Running in the morning is to wear the bright morning face. It is for health and fitness and making the team. It is accepting discipline, obeying duty and acquiring self-control. Small wonder Dr. Kenneth Cooper found morning runners persist better than others. The morning run is all that Michael Novak said of the Protestant tradition. It links goodness to duty, obligation, command and will.

But midday is adult. The run is in pursuit of goals, the making of the self, the looking for something to leave behind.

If that is so, the evening run is toward that ancient acceptance of things as they are, that mature wisdom with which we see a world which has order and sense.

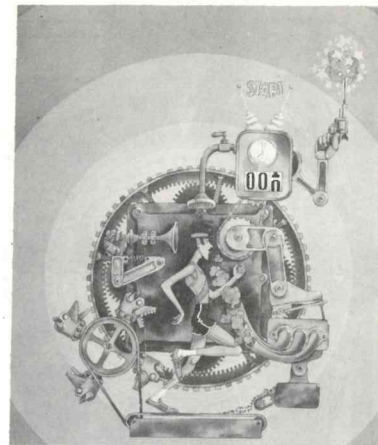
*George Sheehan*

## CONTRIBUTORS

Interesting ideas and new viewpoints on running are always welcome at *Runner's World*. However, we are often faced with the situation of receiving several articles on a similar topic, or on a topic that was recently covered in the magazine. Although the material may be well written and informative, we are just unable to use it. This is unfair to you, the contributor, and extra work for us, the editors. To avoid duplication of materials, we ask that potential contributors with subject matter for possible publication check with the editors before submitting their material. Guidelines for potential writers and photographers with material for publication are available from the editors. Write to *Runner's World*, Box 366, Mountain View, Calif. 94042. ●

# Sport Painting

*The perils of training for the big race surround this runner as he attempts to overcome all obstacles to stay in shape.*



Beautiful sport paintings will liven up any room of your house. This popular painting has appeared as a cover of one of the recent issues of *Runner's World*. Now, a superb four-color reproduction of this painting is available on fine Hammermill paper with a handmade finish, mounted, ready to hang. It will look great on your family room, bedroom or den wall.

This sport painting sells for \$9.95, postpaid. It is also available unmounted for \$2.45, postpaid. More paintings, involving other sports, will be available soon. You can order your painting today by using the handy order form in this ad or by calling (415) 965-3240 and charging it to your BankAmericard or Mastercharge.

Please send me \_\_\_ sport painting(s).

Enclosed is \$ \_\_\_\_\_

Mounted, \$9.95, postpaid.

Unmounted, \$2.45, postpaid.

Name \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_

State/Zip \_\_\_\_\_

Starting Line Sports, Box 8, Mountain View  
CA 94042

IMPROVED

## SHOE PATCH

...repairs holes and worn spots on all athletic shoes. A shoe repair compound developed after two years and \$50,000 worth of research. Durable, long lasting, made of Kraton rubber, SHOE PATCH will give hundreds of miles of extra wear to your running shoes. Try the only shoe repair compound for runners, developed and tested by runners. We think that SHOE PATCH is the finest shoe maintenance product on the market today, and we want you to try it. If you don't agree, we will gladly refund your money.



— ORDER COUPON —

\_\_\_ TUBES at \$2.50 \_\_\_\_\_

POSTAGE .75

TOTAL ENCLOSED \_\_\_\_\_

CALIFORNIA RESIDENTS ADD 6%

SEND TO: ONE MORE COMPANY, INC.  
558 SANTA CRUZ AVE.  
MENLO PARK, CA 94025

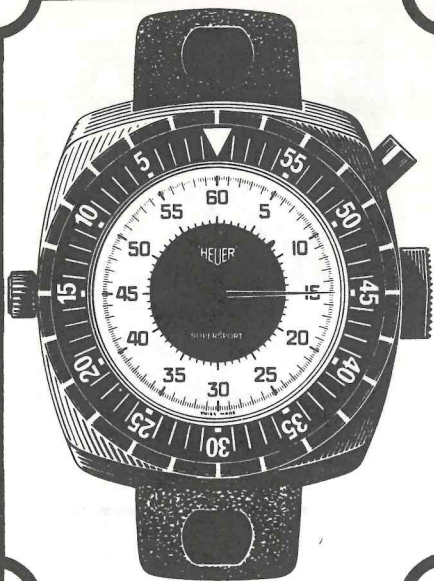
NAME \_\_\_\_\_

ADDRESS \_\_\_\_\_

CITY / STATE \_\_\_\_\_ ZIP \_\_\_\_\_

# Running Commentary

by Joe Henderson



## Time yourself while you train

There is no reason to depend on someone else to do the timing now that Heuer has introduced the Supersport Chronograph. You can take this stopwatch right along with you as you work out—on your wrist!

The Heuer Supersport Chronograph is the perfect watch for all runners. It is attractive, but rugged enough to take all the abuse you can give it. Comfortable, easy-to-read and there is no fumbling with the Supersport's large stop and start buttons. And, to top off all that, the watch has a one-year guarantee. Order yours today.

### order form

Please send me \_\_\_\_\_ Heuer Supersport Chronograph(s) at \$67.95 each. Enclosed is \$1.00 for postage and handling. (Calif. residents add 6% tax.)

Name \_\_\_\_\_

Address \_\_\_\_\_

City/State/Zip \_\_\_\_\_

Runner's World, Box 366  
Mountain View, CA 94042

Item from Associated Press, post-Olympics, 1976: "The day of the weekend athlete is over. Despite the successes of its men swimmers, America can no longer remain so set in its ways of training high-performance athletes. A Jim Thorpe or a John Naber may still come along, purely by chance. But why leave the future to chance? Top athletes require better training opportunities, better social and medical care. East Germany doesn't have the vast pool of talent available in the US. But it has the technology to produce high-performance athletes."

Item from the *New York Times*, post-Olympics, 1976: "The United States Olympic Committee has quietly approved the formation of a panel of experts to study the scientific and medical aspects of sports and their effect on the performance of world-class athletes. The success or failure of the panel could determine America's future role in international sports competition."

\* \* \* \*

American athletes are hoping to shake loose East Germany's grip on world track and field supremacy as they prepare for the 1984 Olympic Games later this summer in Miami.

Miami continues the Games' "M" tradition begun way back in 1968 at Mexico City. The name of every Olympic site since then has started with "M."

There have come to be two more "M's" to the Olympics: money and medicine. So important and expensive have these Games become that only national treasuries can support them and only full-time, well-paid athletes can afford to participate. And so critical is the health of the athletes that it is monitored around the clock.

A major change in the thinking of American Olympic officials came eight years ago. That was after the Games of Montreal in which little East Germany took the lead in the running events.

The first reaction was bitter. A marathoner said he would continue competing only if "I find some good doctors." A woman said she didn't want to win if she had to look like a man to do it. Eventually, however, the US athletes and officials decided they

couldn't be losers so they would do everything necessary to win.

They copied the East German system, or what they thought this system was. They dropped the *laissez faire* way of training and competing and adopted a more disciplined, single-purpose approach built around a permanent national team.

They dropped all pretense of amateurism, thereby joining most of the rest of the world. The national team candidates were selected (according to scientific procedures) years in advance of international meets, were paid to run and were housed in special centers.

Not since 1976 has a "walk-on" (an unsupported athlete) been able to qualify for a national team. Such are the demands of racing at this level, and such are the sophisticated techniques employed at the training centers.

The distance runners—800 meters and up—now are training high in the Rockies near Colorado Springs. Little hard information is known about the methods being employed there. But reports filtering down from the mountains are that the doctors there are developing runners who make the Six Million Dollar Man look like a physical retard.

The sports medicine specialists have had special problems with runners. Running is a basic sport. The technique of laying down one foot after another hasn't changed in millions of years. Training is rather simple. "Equipment" is limited to shoes and surfaces.

There weren't likely to be any new running techniques akin to the "flop" high jump, "flip" long jump or "spin" shot put. Probably no revolutionary training methods would come from the research. And at best the advances in shoe- and surface-making would cut only a few seconds from distance running times.

So the national team doctors decided that advances would have to come from other directions: (1) more careful identification and recruiting of prospective champions; (2) increased amounts of training; and (3) manipulation of the runners' bodies and minds. These things were, after all, what the East Germans appeared to be doing.

The Colorado training center sits at

an elevation of about 8000 feet, and runners can climb to more than 10,000 feet. Researchers have found that this produces the optimum altitude training benefit.

Overseeing the work of the distance runners is a staff of coaches, exercise physiologists, physical therapists, psychologists and dieticians. Although visitors are not permitted inside the center, and athletes and staff are sworn to secrecy, I have talked with an expelled marathoner.

He said, "We were linked 24 hours a day to computers which processed the raw data from telemetric devices measuring all body functions and reactions to exercise. Warning signals sounded in the control area at the first hints of overstress as well as understress.

"Based on this input, the computer spit out a perfectly tailored daily program for each athlete. This generally averaged about 250-300 miles a week for me, portioned out into 3-5 daily workouts.

"Back in the early '70's, a runner named Gerry Lindgren attempted a crude version of this training. But without expert coaching and computer monitoring, his experiment failed. Now there are no mistakes."

I asked my source, "If there are no mistakes, why are you no longer at the center?"

He explained, "It was this needle business. The doctors were always wanting to shoot something into us or take something out without telling us what the effects were. I balked."

"You mean they kicked you out for that?" I asked.

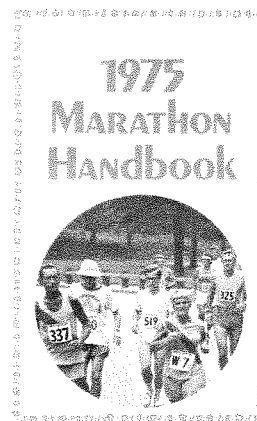
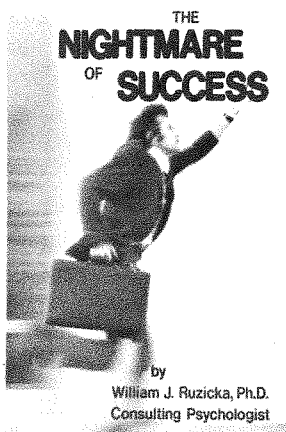
"No, not exactly. But without whatever it was they were giving the runners, I couldn't keep up during races. I couldn't meet the performance standards set by the coaches, so here I am on the outside."

He thought for a moment, then added, "I only ran a 2:06 marathon. It would have been a world record eight years ago. But this is 1984, and it isn't good enough any more. It will take below 2:04 just to get a medal this time.

"Now that I've washed out of the national center, I probably won't run anything fast again. I may not even break 2:10. But at least I'll be failing on my own instead of succeeding at the hands of my doctors and my computer programmer."

Meanwhile, behind the fences of the training center in the Rockies, preparations to face the East Germans in the Miami Olympics continue. •

# Big Close-out Sale



We are not going to reprint any of the following books and we need to clear our warehouses for new books. Many of these books are in limited supply and if you want a copy for your library, we suggest that you order now. Once these go, there will be no more.

Marathon Handbooks	Retail	Sale	Other Books	Retail	Sale
1970 Marathon Handbook	\$1.50	\$1.00	Thoughts On The Run	\$2.50	\$1.95
1971 Marathon Handbook	1.95	1.00	Gerry Lingren Story	1.00	.90
1972 Marathon Handbook	1.95	1.00	Dave Wottle Story	1.50	1.00
1973 Marathon Handbook	1.95	1.00	Shoes For Runners '74	1.95	1.75
1974 Marathon Handbook	1.95	1.00	Nightmare of Success HB	6.95	3.50
1975 Marathon Handbook	1.95	1.00	All about D.R. Shoes '70	1.50	1.50
			Nordic Skiing Gear '74	1.75	1.00
			Bicyclist Diary	1.50	.75
Runner's World Almanac			Runner's World Pictorials		
1972 RW Almanac	2.50	2.00	1972 RW Pictorial	1.75	1.25
1973 RW Almanac	2.50	2.00	1973 RW Pictorial	2.00	1.00
1974 RW Almanac	1.95	1.00			

## CLOSE-OUT ORDER FORM

Please send me the following books. I have enclosed full payment plus 40c per book up to \$2.00. Calif. residents add 6% sales tax.

QTY	BOOK	PRICE
Subtotal		
Postage		
Calif. 6%		
Total		

Runner's World, Box 366, Mountain View, CA 94042

# 50

There are just fifty days left until . . .  
February

Yes, you only have fifty days to place your advertisement in the Big, Expanded, February Marathon issue of *Runner's World*.

All marathon runners read this annual special issue. You will want to be certain that information on your product, service, up-coming marathon run, or meet is read by the over 175,000 readers of this Marathon issue.

Fifty days from now, December 20, 1976 is the advertising deadline for our February issue, so act now. Contact:

**Advertising Sales Director  
Runner's World Magazine  
P.O. Box 366  
Mountain View, CA 94042  
(415) 965-8777**

A proven prescription for better health and longer life in only three hours per week.

### Would you like to . . .

- Be more physically fit while strengthening your heart against heart attack?
- Feel more relaxed?
- Increase your energy?
- Improve your sex life?
- Heighten your senses?
- Decrease your smoking or drinking?

### THE JOY OF RUNNING by Thaddeus Kostrubala, M.D.

"Dr. Kostrubala has shown that running does important things to our minds as well as our bodies. He takes us to the point where running is no longer a chore but rather a reward in itself. Beginners should read *The Joy of Running*; experienced runners can learn from it."

—Thomas J. Bassler, M.D.,  
American Medical Joggers Association

J.B.LIPPINCOTT COMPANY, Dept. SS  
E.Washington Sq., Philadelphia, Pa. 19105  
Please send my copy of Dr. Kostrubala's THE JOY OF RUNNING. My check or money order for \$8.95 is enclosed, plus 75¢ for shipping.  
Name \_\_\_\_\_  
Address \_\_\_\_\_  
City, State, Zip \_\_\_\_\_  
Residents of AR, CA, ID, NJ, NM, NY, NC, ND, PA, TN, WA, and WI please add state and local taxes. RWNG6

# Medical Advice

## George Sheehan, M.D.

### LOW-BACK PAIN

**Q:** How important of a problem is low-back pain?

**A:** Impairment of the low back is the main cause of limitation of normal activity in the under 45 age group. "It is the condition," states Dr. Howard Rusk, "That causes more discomfort, more loss of time from work and disability than any other."

**Q:** What causes low back and sciatic nerve pain?

**A:** This is a result of two factors. The first, structural instability, is due to congenital or acquired faults in the bones and ligaments. The second postural instability is due to strength-flexibility imbalance of the muscles.

**Q:** Where is the structural instability?

**A:** Most often at the lumbo-sacral junction. Often X-rays disclose supposedly minor congenital anomalies or spondylosis which usually occurs at or before the age of five years. In addition, two other forms of structural weakness are frequently encountered: (1) biomechanically weak feet, most often Morton's Foot (short big toe, long second toe) or some degree of flat feet and (2) leg length discrepancy one leg shorter than the other.

**Q:** Where is the strength/flexibility imbalance?

**A:** Mostly between the spine and the belly muscles. Almost every low back sufferer has weak stomach muscles. A study at Iowa University showed that the spine muscles of people with low back pain were 9-10 times more powerful than their stomach muscles. In addition, athletes and especially runners overdevelop the iliopsoas, hamstrings and calf muscles. These become tight, short and inflexible, accentuating the lordosis or sway back. Usually unrecognized is the fact that the tight calf muscle increases the tendency to flattening of the feet and therefore their bad effects on the spine.

**Q:** Can I test myself for this imbalance?

**A:** Quite easily. First try to do a bent-leg situp with your hands clasped behind your neck. That will settle your strength problem. For flexibility there

are three tests. To test the back muscles, stand with your back against the wall and flatten the hollow of your back. You should be barely able to get your hand in the space. I have seen some people with room there for a fist. To test the hamstrings, sit upright on a table with your legs extended and see if it hurts the back of your legs. To test the calf, try to touch the floor without bending your knees.

**Q:** I have an abnormal X-ray, one leg is shorter than the other and I have a Morton's foot. What do I do?

**A:** The whole aim of treatment is to reposition the pelvis so the hips are back, the pubic bones forward, the back flattened. Your program should start with negative-heeled shoes. They shift the center of gravity back toward the hip joint. Next, wear a small light back support. One such is the Futuro Sacrogard obtainable at the drugstore. Minor problems in the feet usually respond to a Dr. Scholl's "610" which you can buy at a Dr. Scholl's shoe store. If the heel lift is needed, a half-inch or less of surgical felt will most often do the trick.

**Q:** I also have weak abdominals, and tight back, hamstring and calf muscles. What do I do about that?

**A:** Since the main reason for low-back pain is weak abdominal muscles, the heart of the treatment is in correcting them. The two most effective exercises are bent-leg situps with the back flat against the floor and Kendall's isometric lumbar flexion exercises. Flexibility difficulties will respond to wall pushups, hamstring stretching and the backover, lying flat on the floor and bringing your legs with the knees locked to touch the floor behind your head.

**Q:** What are the Kendall exercises?

**A:** Contract your abdominal muscles as hard as possible pulling your navel toward your spine. Relax. Contract your seat or buttock muscles as hard as you can. Relax. Do both together. Hold each for 15 seconds. Repeat 15 times and as often as you think of it during the day. The exercise can be done at any time walking sitting or even driving a car.

**Q:** What about manipulation?

**A:** Manipulation is a valuable initial therapy. It frequently gets the patient



back in alignment which then can be maintained by the procedures already outlined. Unfortunately, it is either never used or over-used. Nevertheless, it has a definite place in the treatment of low back problems.

**Q:** Any other advice on handling my back and sciatic pain?

**A:** Sleep on your good side with the bad leg pulled up toward your chest and a pillow under the knee. Sit with your knees higher than your hips and the hollow out of your back. Preferably, sit sideways in a large armchair with your knee over the arm of the chair. Drive a car with bucket seats or put something under your thighs to raise your knees.

**Q:** Any final words?

**A:** Continue running or playing your sport. Avoid speed work and hill running. Avoid straight-leg situps. They can cause back trouble. Do your exercises before and after each training session. Remember you control your situation. You have a special susceptibility to this problem. Only by diligence and perseverance in your exercises and the other measures can you avoid recurrences. Once a low back always a low back.

### "MAGIC-SIX" PAIN

**Q:** About a week ago, I was doing one of your "Magic Six" exercises, the backover, and, much to my chagrin, I got an excruciating pain in my lower back. I attempted to run with this and my efforts were in vain.

Since that time, the pain has traveled to my hip. I not only can't run, but also get shots of pain when I cough and when I excrete and defecate. I have done some individual research on the matter and I am guessing that it has to do with the sciatic nerve with depressing suspicious sounds of a slipped disc. I have a doctor's appointment in the near future but typical of their antagonistic attitude towards distance running, I expect a prescription of non-activity. I would like your opinion on the matter, a suggestion of a doctor in my area who is favorable to sports medicine and your advice on alternative activities.

*R.A., New York*

**A:** You are the first known victim of the "Magic Six" or at least the only one who has corresponded with me.

The road back will depend not on flexibility of the spine (if only because these exercises bother you). It will depend on developing strength in the abdominals. You have definite sciatic

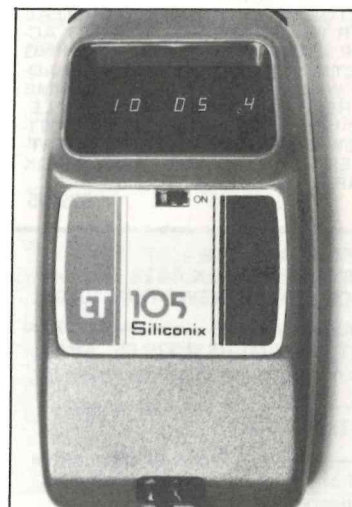
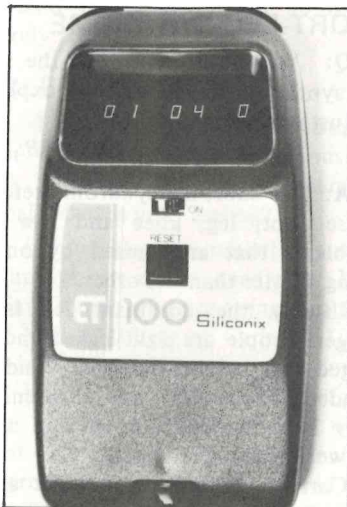
*(continued on page 16)*

IMPROVE YOUR TIME WITH . . .

# SILICONIX

## DIGITAL STOPWATCHES

YOU ALWAYS GET CORRECT TIME WITH THESE ELECTRONIC TIMERS



### SILICONIX ET 100

This fine hand-held rechargeable watch times to 59 minutes, 59.9 seconds. Has an automatic recycle and is designed for use in one of several modes: Start/Stop; Time In/Time Out; or Split Action for partial event times. An exclusive feature of this watch is that it times in one-tenth second increments rounded off from the nearest one-hundredth second. Recharge it at night and be prepared for the next day's events. It's the perfect electronic for all your timing needs. Price \$79.95.

### SILICONIX ET 105

It's a low cost quality electronic digital stopwatch for use in all events. This hand-held watch times to 59 minutes, 59.9 seconds, with an automatic recycle. It is very easy to handle and comes in a non-breakable case. Included with the watch is a neck strap and set of batteries. Price \$49.95.

Dear Runner's World, I'm eager to improve my time. Please send me \_\_\_\_ Siliconix ET 100 stopwatch (es) at \$79.95 each and/or \_\_\_\_ Siliconix ET 105 stopwatch (es) at \$49.95 each. Enclosed is \$1.00 for postage and handling for each stopwatch ordered. (California residents add 6% tax).

Name \_\_\_\_\_

Address \_\_\_\_\_

City/State/Zip \_\_\_\_\_

Call the Runner's World Hotline and charge to your BankAmericard or Mastercharge card. (415) 965-3240. Runner's World, P.O. Box 366, Mountain View, CA 94042

## HEUER MICROSPLIT 430



SUPER ACCURATE 1/100 SECOND ELECTRONIC QUARTZ DIGITAL TIMER FEATURES BOTH "SPLIT ACTION" AND "TAYLOR" TIMING FUNCTIONS' GIVES SPLIT READINGS WHILE CONTINUING TO TIME ENTIRE RACE. MAKES OLD STYLE, WIND-UP STOPWATCHES PRACTICALLY OBSOLETE. INCLUDES BATTERIES, SUN SHADE AND NECK STRAP.

**\$79.95**

ALPINE IMPORTS  
POST OFFICE BOX 441  
BRONXVILLE NEW YORK 10708

PLEASE SEND ME \_\_\_\_\_ MICRO-SPLIT 430 TIMERS @ \$79.95 each. I enclose my check or money order for \$\_\_\_\_\_ (N.Y. residents add sales tax please)

\_\_\_\_\_ Please send me a free brochure of HEUER electronic timers, chronographs and stopwatches.

## KEEP YOUR HEART RUNNING

by Paul J. Kiell, M.D., and Joseph S. Frelinghuysen



A total health book and more! Includes comprehensive chapters on nutrition, electrolyte management and the relationship between physical and mental health besides a fully-rounded exercise program. It is the answer to man's

need to express himself with renewed health of mind and body. Here's what Joe Henderson, Editor of *Runner's World* says about it: "It's significant that a running psychiatrist and a man in his sixties who has run ten marathons have teamed up to write this fine book, because running is the best form of mental therapy to clear away minor troubles before they become big ones. Readers can derive real physical benefits from this book, plus a psychological bonus they may not have expected."

Please send me \_\_\_\_\_ copy(ies) of *Keep Your Heart Running* at \$8.95 each, plus 35 cents postage and 5% tax (NJ residents only) per copy.

Name \_\_\_\_\_

Address \_\_\_\_\_

City/State/Zip \_\_\_\_\_

J.S. Frelinghuysen  
P.O. Box 608  
Somerville, N.J. 08876

nerve irritation and have either ruptured a disc or caused further slippage in a spondylolisthesis.

Keep up your conditioning for two or three weeks with cycling or swimming and do bent-leg situps as your major exercise.

I had a similar experience almost 10 years ago doing interval 300-yard dashes. On the 12th or 13th one, I got the pain but refused to stop. I weathered a three-week siege but still get back and sciatic pain if I neglect my exercises.

## SHORT-LEG SYNDROME

**Q:** You have mentioned the short-leg syndrome but never fully explained it. Just what is it?

*P.B., Ohio*

**A:** The short-leg syndrome refers to those foot, leg, knee and low back problems that are caused by one leg being shorter than the other.

Usually the dominant leg is the longer. People are right-legged and left-legged just as they are right- and left-handed. Frequently, the shortening is only from the ankle down and caused by weakness in the foot.

Correction through heel lift and/or an arch support will, in many instances, give quite astonishing relief of long-standing aches and pains. Oddly enough, the symptoms are frequently in the longer rather than the shorter leg.

\*\*\*\*\*

I would like to thank you for giving my father the name of a podiatrist in this area to help me with my knee problems. I went to him and he measured me for Sporthotic inserts which I received about a month later. Apparently the problems were being caused by my right leg being one-half inch shorter than the left one.

However, the inserts completely cleared up the problem, and I have been training for three months without any pain. That was my first serious injury in nine years of competitive running, and I never realized how depressing it could be not being able to run for nearly five months. I only wish that I had gone to a podiatrist in the first place instead of wasting time and money seeing other kinds of doctors.

But now I'm just glad to be back running again and I'm hopeful of being in top shape for the upcoming cross-country season.

*S.P., Michigan*

## DO OR DIE DIETS

**Q:** Yes, I'm confused. Kenneth

Cooper says it doesn't matter what you eat, as long as you get your exercise. Ian Jackson recommends the Waerland diet and fasting along with a program of yoga and running. Adelle Davis is against fasting and recommends a high-protein diet. Carlton Fredericks and Herbert Bailey seem to favor a high-fat and protein diet with low processed carbohydrates. Herbert Shelton is very much in favor of fasting. Van Aaken recommends frequent fasting in order to teach the body to use fat as fuel. It has recently been reported that there is no way to unclog arteries. It also has been reported (in your column) that people with good health habits don't eat between meals. No marathoner has ever been known to suffer a heart attack within six years of running a marathon.

Now to add to this confusion is Donald Monkerud's article in the August '76 *RW* entitled "How Diet Can Change You." He tells us that marathon running will not protect us, marathoners do die, fasting is catastrophic even if your cholesterol is normal, on the reversal diet people eat eight meals a day, burning fat as fuel can be dangerous and yes, Virginia, arteries can be unclogged. I would appreciate your comments on this. I've tried fasting, my cholesterol is normal, I don't eat between meals and now I'm told I'm in trouble. Whom do I believe?

*N.M., California*

**A:** The late Dr. Henry Cabot, one of the greatest minds in medicine, once remarked that what would embarrass doctors the most when the Last Trumpet sounded and they heard their Final Judgment would be the diets they had prescribed.

I personally prefer the lean hungry look and the most palatable diet that will go with it. There are certain minimal daily requirements of protein, carbohydrate, protein minerals and vitamins which may stand the test of time, although I am not certain. I am certain, however, we eat too much. Too many calories, too much salt, too much sugar, too much distilled liquor. But a lot of this may be psychological. Gandhi said if we are to restrain ourselves and control our life, we must start with the palate.

Anthropology, which shows us people thriving on very odd diets indeed, should make us as tolerant of another's nutritional behavior as we have become of his economic, social and political activities. There are, it appears, many roads to the promised

land. Life, liberty, the pursuit of happiness and a maximum productive life span may be found in three visits a day to McDonald's.

The best judge is still your body. How does it look? How does it feel? How does it perform? Find these things out for yourself.

## DMSO

**Q:** I recall some years back that a chemical called DMSO was hailed as the answer to musculo-skeletal problems. What happened to it?

**A:** Dimethylsulphoxide (DMSO) has never been accepted for general use by the FDA. Its main feature is almost immediate absorption through the skin, appearing in the breath in a few minutes. It can be used, therefore, as a vehicle to bring other therapeutic agents into the injured area. It has, however, been shown to have some toxic effects on laboratory animals.

At present, it is used in veterinary medicine in the form of Fluvet DMSO which is used for skin diseases in dogs and musculo-skeletal problems in horses.

## CIRCADIAN RHYTHMS

**Q:** I have read that most of our body functions peak at the same time as our natural body temperature. If so, athletic performance should be best in the late afternoon. Has anyone investigated this possibility?

**A:** Your supposition may well be correct. Three Irish investigators have tested the performance of 22 swimmers of national and international caliber first at 7 a.m. and then at 5 p.m. Their results clearly show better performance in the afternoon effort. In addition, the difference is of sufficient magnitude to be of practical importance in setting personal best and national records.

## MONONUCLEOSIS

**Q:** I am a 17-year-old runner who developed mononucleosis during the last outdoor season. After six weekly tests, I was finally diagnosed negative and given the go-ahead to run. Now I am worrying about a possible relapse. Is that possible? If so, how can I avoid it? (P.R., New Jersey)

**A:** We have yet to get the full story on mononucleosis. At one time I didn't think it was an infection at all, just the way some people reacted to stress and exhaustion. Certainly those coaches noted for severe training schedules always seem to have cases of mononucleosis on their squads.

At any rate, infection or not, mononucleosis or identical symptoms can recur when an athlete again stresses himself to staleness or exhaustion. The symptoms of staleness and mono are so alike that they are difficult to distinguish.

The runner who has had mono should come back slowly, building up a "bottom" of slow distance running on a long-day, short-day program. He should be alert to fatigue and exhaustion and particularly careful about getting enough sleep.

Interval training and competitive racing should be avoided until he feels absolutely right.

## MUSCLE MACHINE

**Q:** I read recently of a Russian wonder machine for restoring muscle power. American physicians seemed skeptical. What is your feeling?

**A:** I think this instrument is a real breakthrough in sports medicine. My Canadian friends who are using it in the Sports Medical Clinic at Carleton University in Ottawa tell me that they don't know how they got along before without it. It is in almost constant use.

What this machine does differently is to produce a 10-second (instead of one second) full tetanic contraction of the muscle. In treatment, this is followed by a rest period of 50 seconds. The muscle is then stimulated 10 times each session and treatments are scheduled every other day for a maximum of 20 treatments. Results in strength and muscle size are superior to anything we are doing now.

If I were doing physio-therapy. I would turn in everything (except possibly the ultrasound machine) and get a Neuroton 627. This is one gadget that has visible and measurable results.

## DUMPING SYNDROME

I am writing in regard to Dr. Sheehan's reply to the marathoner who suffered a vagal attack (cold sweat, feeling faint) after drinking juice at the end of a 15-mile run.

Prior to my becoming a runner, I suffered similar attacks after drinking juices on an empty stomach. It is caused by a swelling of the intestines and may be associated with reflex slowing of the heart to the point of fainting.

This phenomenon usually is associated with patients who have had their stomach surgically removed and is known in medicine as "dumping syndrome."

(continued on page 18)

# LIGHT ON YOGA

Light on Yoga, B.K.S. Iyengar. No longer regarded as some mysterious exercise done only by oddballs, yoga is now recognized as an excellent path to good health and agility. Leading authority Iyengar sheds light on yoga by blending very detailed explanations with hundreds of photos so you can see exactly how you can adapt yoga to fit your needs. Ppb., 342 pp., \$4.95.

Please send me \_\_\_\_\_ copy(ies) of **Light on Yoga**. Enclosed is \$4.95, plus 40c postage per copy. California residents add 6% sales tax.

Name \_\_\_\_\_

Address \_\_\_\_\_

City/State/Zip \_\_\_\_\_

Runner's World, Box 366  
Mountain View, CA 94042

## Fleet-Fleet co.

The newest in running shoe repair and at half the cost, we resole any kind of shoe.

FLEET FEET CO. now offers the long distance runner as well as the jogger a break from expensive repair houses. At \$8.00 you can't go wrong.

FLEET FEET CO. will resole your shoes, repair any small tears, put in new shoe laces, send them prepaid back to you for \$8.00 in seven days or less. So hurry send those shoes to

FLEET FEET CO.  
612 Emery  
Longmont, Colo.  
80501

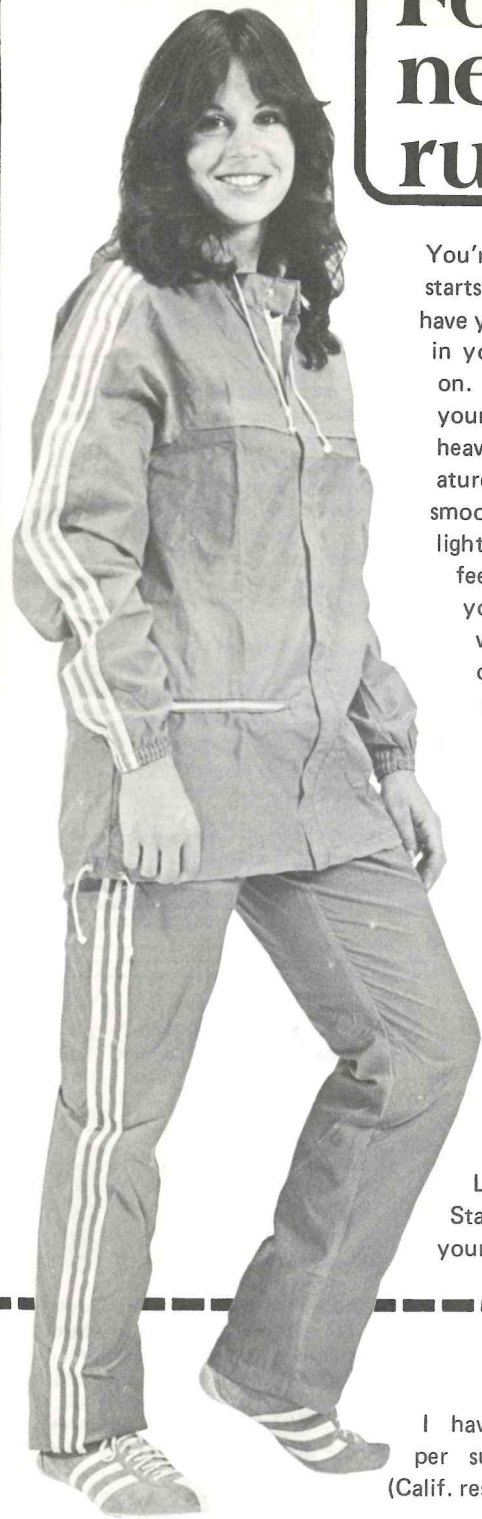
Name \_\_\_\_\_

Address \_\_\_\_\_ zip \_\_\_\_\_

kind of shoe \_\_\_\_\_

(please return this form)

# For your next dry run...



You're out there and the stride is right. It starts to rain, but you are prepared. You have your new Adidas Rainsuit packed neatly in your jacket pocket. You stop to put it on. Now, you're all set. You know that your sweats won't get soaked and become heavy. You know that your body temperature will not rise. The rain will slide smoothly off as you continue to run. Your lightweight rainsuit of 100% polyamide, feels as light as a second skin and gives you a layer of protection against cool weather and wind. The jacket has its own hood and the trousers have leg zippers. Now that the weather is uncertain, you won't be without it. You'll even take it with you when you are wearing shorts and a T-shirt. You may want to wear only the jacket. In any event, you are ready.

The Adidas Rainsuit is for the runner, it's for you. Make sure to order your fully wind resistant and weatherproof suit today by filling out the handy order form provided below. Colors: navy blue with white stripes or yellow with green stripes. Sizes S (5'3"-5'7"), M (5'8"-5'10"), L (5'10"-6'), XL (6'-6'2"). Call the Starting Line Sports Hotline and order yours today (415) 965-3240.

## ADIDAS RAINSUIT ORDER FORM

I have enclosed \_\_\_\_\_ (\$27.95 per suit. Add \$1.00 per suit postage. (Calif. res. add 6% sales tax).

Color \_\_\_\_\_ Size \_\_\_\_\_

Will you accept 2nd choice? yes no (circle one)

Send to \_\_\_\_\_

Address \_\_\_\_\_

City/State/Zip \_\_\_\_\_

( ) Charge it to my BankAmericard or Mastercharge by calling the Hotline Number (415) 965-3240

STARTING LINE SPORTS, BOX 8, MOUNTAIN VIEW, CA 94042

In addition to the earlier symptoms, I had crushing chest pains and pulse as low as 42 beats per minute. I have not had a repeat of these attacks (after suffering through six) by avoiding sweet drinks on an empty stomach.

*Herbert Hindler, M.D.*

## SCRUB RUBDOWNS

**Q:** When I compete in major meets, I frequently see athletes being massaged by trainers before their races. Does this help?

**A:** What helps most in the period before the race is elevating the temperature of the muscles you are going to use. This can be done by 5-10 minutes of brisk activity, stopping when sweating occurs. A hot shower of about 10 minutes duration will apparently do the same thing, although I have found such a practice enervating.

Danish researchers Asmussen and Boje have shown that after a warmup or hot shower, cyclists had higher muscle temperatures and better work capacity. They also discovered that massage had no such effect. Fifteen minutes of vigorous massage of the legs and buttocks failed to elevate muscle temperature or improve work speed or output.

Massage is one of those many rituals that survive in sport because no one has really challenged its value. Its main help is probably psychological. Its main benefit relaxation.

## KNEE PAIN

**Q:** Thanks to your column, I am back to running after seven months off because of a very painful knee injury.

I had developed unbearable pain on the outer side of my right knee, and was not able to run over one third of a mile. Several trips to the doctor and X-rays revealed nothing. All the doctor could tell me was to quit running.

Then I saw your column, and read about the possibility of knee problems beginning at the feet. So I went back to my doctor. This time he noticed a very flat metatarsal arch and, at my insistence, prescribed some special metatarsal supports.

I was able to run several miles with absolutely no pain whatsoever, and have been doing great ever since by building up the miles.

You should urge all your readers to explore this possibility since many doctors are still unsure about running ailments and can discourage a good runner. (C.F. California)

**A:** Amen, and God bless you. ●

# Train in Tigers ...Triumph in Tigers



Tiger Shoes are the choice of World Class runners in AAU, and Olympic Competition.

At the AAU Championships in Los Angeles, competitors in Tiger Shoes took the top three places in the Women's 3000 meter run and set a new American and AAU record. Tiger runners took first in the Men's 5000 meters, 3000 meter steeplechase and a smashing 1, 2, 3, 4 sweep in the 10,000 meter run.

At the '76 Olympic Trials in Eugene, Oregon athletes in Tiger Shoes qualified for the U.S. Olympic Team with wins in the Men's 5000 meters, and Women's 100 meter hurdles, second place in the women's 1500 meters, third in the Men's Decathlon and a 1, 2 victory in the Marathon.

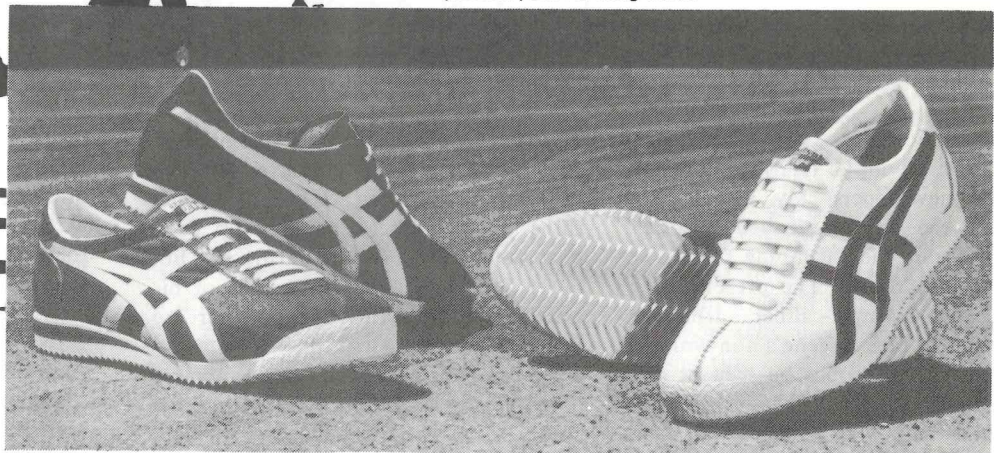
At the '76 Olympics in Montreal, runners in Tiger Shoes won Gold Medals in the Men's 5000 meters, 10,000 meters, and the Silver Medal in the Marathon. In the Women's 400 meter dash a runner took the Gold Medal and set a new World record in Tiger Shoes. In addition, Tiger Shoes made the finals in the Men's Javelin Throw, Hammer Throw, Pole Vault, 800 meters, Steeplechase, Decathlon, 20k Walk and Women's 1500 meters.

These triumphs in Track and Field have been made possible through extensive training. Training that is now possible because of the development of modern equipment. Tiger Training Shoes are designed to enable the runner to train longer with features like a high density rubber sole, built-up heel, and extra cushioning to virtually eliminate leg shock and achilles tendon strain. This means less stiffness and soreness after extended training sessions and less chance of injury.

The molded heel collar, ankle pad, arch support and terry cloth-foam insole combine with high quality leather uppers making the Tiger Corsair a comfortable and rugged training shoe.

The lightweight Tiger Montreal features cool breathable nylon uppers with a special heel counter and wide heel for extra stability.

Tiger Competition Shoes – for Track and Field, Marathon, Long Distance, Cross Country, Soccer-Football, Volleyball, Basketball, Gymnastics, and training shoes to develop and perfect your running skills.



T-28 Montreal

T-24 Corsair

*For the Tiger Dealer nearest you, contact the Distributor in your area.*

#### U.S. DISTRIBUTORS

Buckley & Co., Pete  
650 Great Southwest Pkwy, Atlanta,  
Georgia 30336  
(404) 349-7220

Florida, Alabama, Georgia, Tennessee,  
Kentucky, Virginia, North & South  
Carolina, Mississippi and West Virginia

Curley-Bates Co.  
860 Stanton Road, Burlingame, Calif. 94010  
(415) 697-6420

Washington, Oregon, California, Montana,  
Idaho, Nevada, Wyoming, Utah, Colorado,  
Arizona, New Mexico, Alaska, Hawaii & El  
Paso

Davis, Inc., George A.  
7205 Hibbs Lane, Levittown, Pa. 19057  
(215) 943-3300

Pennsylvania, New York, New Jersey,  
Maine, Vermont, New Hampshire,  
Massachusetts, Connecticut, Maryland  
Delaware, Rhode Island, Washington, D.C.

General Sports Corp.  
c/o Demco (Dana E. Morrison Jr. Co.)  
5121 N. Ravenswood Ave., Chicago,  
Ill. 60640  
(312) 561-0861

Ohio, Indiana, Illinois, Missouri,  
Wisconsin, Iowa, North & South Dakota,  
Nebraska, Minnesota & Michigan

Olympic Sports  
2607 National Circle, Garland, Texas 75041  
(214) 271-1583

Kansas, Oklahoma, Texas, Arkansas &  
Louisiana



#### EXCLUSIVE CANADIAN DISTRIBUTOR

Vikski Canada Ltd.  
2058 Trans Canada Highway, Dorval, Quebec  
H9P 2N4  
(514) 683-4020

Canada

# Moore's More Than a Runner

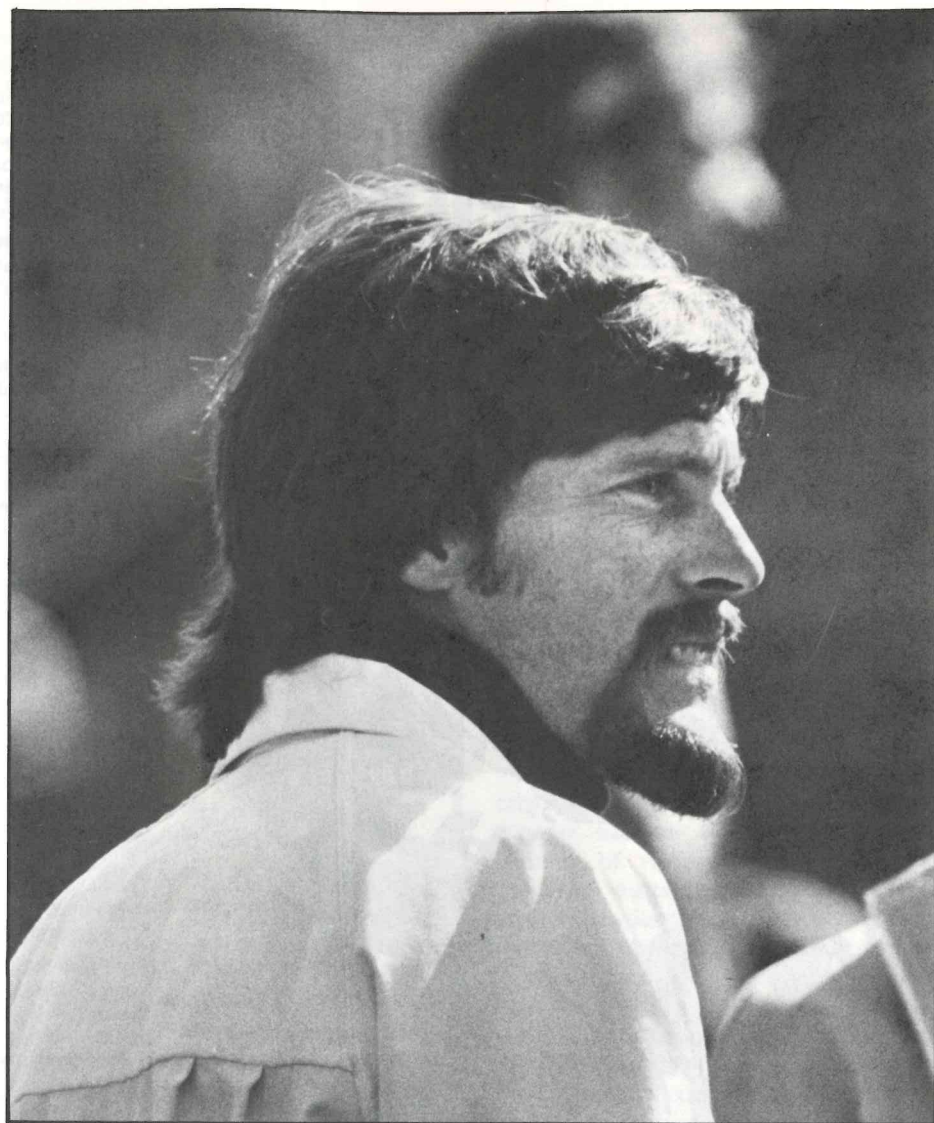
No Other Writer Explains the Sport More Skillfully or Moves More Readers

by Ruth Laney

I first visited Eugene, Ore., last June to cover the Olympic Trials for several Louisiana newspapers. My initial appraisal of the city confirmed what I had read about the "Running Capital" of the United States. The presence of dozens of Olympic-caliber athletes didn't seem to faze Eugene's non-world-class runners who could be seen at all hours putting in their daily miles.

Running garb was *de rigueur* on the streets of Eugene. It looked as though rioters had looted a Nike store and passed out the spoils to all passers-by. After a day or two, my head stopped swiveling at the sight of Harvey Glance genially signing autographs or Frank Shorter bounding across the University of Oregon campus wearing blue shorts and mirrored sunglasses.

Synonymous with Eugene in my mind was the name of one of its residents, Kenny Moore, whose skill as a marathoner (he was fourth at Munich) is equaled by his ability to detail the inner life of a runner.



Warren Morgan

After reading Moore's memorable description of his Olympic experience in *Sports Illustrated*, I became something of an addict, snapping up each new issue of *SI* and haunting the libraries for back issues in search of his articles. Moore's fine eye and ear are evident in evocative descriptions of place and capsules of dialogue. He combines a journalist's gift for local color with a philosopher's detached, sometimes bemused, thoughtfulness.

A sample of Moore's style from his profile of Peter Snell: "He moved by a series of crashing bounds with the awkward, low arm action characteristic of New Zealand runners, calling to mind the carrying of heavy buckets."

And from an article on Olympic small-bore rifle champion Lanny Bassham: "There passed across his face an expression of concern. Perhaps he felt like a man who on reaching a destination finds it a barren place—the ineffable sadness of all thoughtful victors."

Prevented from entering the Mara-

thon Trial this year by a bout with pneumonia, Moore was nevertheless much in evidence at the Trials, covering the women's events for *SI* and calling races for ABC television. Despite this hectic schedule, he readily agreed to an interview.

We talked early in the morning on June 28, the day after Cyndy Poer had snatched a 1500-meter victory from Jan Merrill. While Moore's wife Bobbie, their cat Hayward and assorted house guests (Frank Shorter among them) woke up and wandered in, we sat in the kitchen eating soft-boiled eggs and drinking tea, and talked about the side of Kenny Moore that most interests me—his life as a writer on running.

**RW:** I understand you went to law school for a while.

**Moore:** Yes. I got my BA in philosophy, then I went to Stanford Law School for about six months. In the middle of the second semester, I figured that I didn't want to be an attorney, so

I came back that spring and started work in the master of fine arts (MFA) program in creative writing here at the University of Oregon. I started in 1967, but then I went off. I went to the Olympics in 1968, then I was drafted.

I spent 21 months in the Army. I spent about half the Army time running in California, Europe and Japan, and half working in public information in Ft. Lewis, Wash., where we kept information from the public. I didn't get back to school until the fall of 1970. I was a teaching fellow here in 1971-72.

**RW:** Did you intend to write fiction?

**Moore:** Yes, my training is in fiction and drama. I've never really had a very clear idea what I wanted to do the most. There's been a lot of pragmatism in this, and laziness. When I'm writing and expressing myself journalistically, it seems to take away a lot of the urge to write good fiction. I keep these journals on all the trips I take and people I meet. I've got stacks and stacks of things, but I never really do anything with them.

But when I was doing my MFA thesis—they call it a thesis, but it was a bunch of short stories and a screenplay—I drew from letters and journals that I'd kept earlier, from 1968 through the Army years. I'm really loath to get rid of any of those papers, because it's all grist for the mill. It sometimes seems wistful and hopeless, but someday I'll get back to making something intelligent and creative out of that.

**RW:** Is there a book in your future—a novel?

**Moore:** That's my dream. That's all Gil Rogin (assistant managing editor of *Sports Illustrated*) and I ever talk about. He says it's miserable, hard work. He says as long as you're well-adjusted and having fun running and living pretty places, you don't have to suffer. He says, "You'll have to suffer soon enough." He's written two novels. He has this inevitability in his viewpoint.

**RW:** There doesn't seem to be much fiction written about running. I know of one novel called *The Front Runner* . . .

**Moore:** I've read it. Paul Newman bought it to do the movie, which is a terrifying prospect. I'm on the verge of writing and asking them—hell, just *telling* them—they need a technical consultant, someone who can look at the script and say, "Look, this is crazy. You can't do this." If they've got some fancy screenwriter who doesn't know anything about running, it could come out to be a mess.

There was this movie called *The Games* which everybody knows—Ryan

O'Neal as a marathon runner! I saw it when it came out. The book was terrible. At least with *The Front Runner*, the book is not bad. It's nice. There are a lot of finely drawn characters who might be difficult to transfer to the screen. You might have to simplify things a little bit.

But I think she (author Patricia Nell Warren) solved one of the basic problems in all sports fiction, in that you don't want to set it up. Everybody'd done this, from the Frank Merriwell stories onward. You either win or you lose. It's predictable, sort of 50% one way or the other. How can you make fiction hang on something that cut and dried? Any time you try to make winning into a vehicle for cementing or carrying values, it's going to be so obvious that it's going to be a tract. Like religion, you're either saved or you're not.

*(The Front Runner)* is certainly a cut above most sports novels, because Warren knows her subject so well. I don't know anything about the gay community, but from the confidence with which she writes about it it seems to me that she knows as much or more about that as she does about running. But she goes on beyond that.

The runner dies, and I thought that would be the end of it, but it isn't. She shows how he affected people later. The coach gets back into Masters running. The last scene is of him running a Masters race. I'm sure Paul Newman will cast himself as the coach.

**RW:** You mentioned writing a screenplay yourself, for your MFA thesis.

**Moore:** Yes, I wrote this play about the Army. After I had finished it, I had it in the car one night when I went to a party. It was a runners' party, and Jim Ryun was there. The play dealt with running to some extent. It was about the Army track team and some of the wacky experiences there.

Some of the people in the play were at the party, and they said, "Let's all take parts." So we got it out and passed scripts around. I gave parts to everybody. We gave Ryun the part of the effeminate lieutenant who'd gone to Davidson. He didn't know anything about track, but he was the manager of the team. Ryun played him, and Ryun was just beautiful. He'd had a beer or two, he was uninhibited, and he really got into it. Anne Ryun was shocked. That's probably my fondest memory of Jim.

The script is in the library here (at Oregon). They have a copy of everybody's thesis. The librarian told me

once that it was the most checked-out thesis, not so much from around here but all these people around the country had heard about it. They ship it to the University of Colorado, the University of Florida. The librarian thinks I ought to get it copyrighted. "If we get this much action on it, there must be something to protect."

**RW:** Gil Rogin told me he first assigned you to write for *Sports Illustrated* on the basis of a short story you'd sent him.

**Moore:** Rogin has that mixed up. He didn't see that short story until after I had done my first piece for the magazine. What happened was, I ran in the Pan-American Games in '71, and I was sending stuff back here to the *Register-Guard* (Eugene's newspaper). The Colombian people wouldn't let me do it collect on the telephone. I didn't have a telex credit card, and I was stuck. So I went over and borrowed *Sports Illustrated's* telex credit card and used that.

That let Pat Putnam, who covered the men here at Eugene, know I was doing something. He said, "Maybe I can help. Let me see your copy, because I know a million ways to save words."

I remember saying, "I know how to save words, and I can write my own copy. Just mind your own business."

I don't really remember much talk about writing there. But a month or two after I got back, Gil Rogin called and said they had all these cross-country pictures and needed an essay, and would I like to take a crack at it? So I said "Sure!" and wrote it up.

**RW:** How easy is it to freelance for *Sports Illustrated*?

**Moore:** Oh, it's easy. You write what you want to write, and if they like it, they run it and if they don't, they don't. I've got two pieces out of 40 they haven't run.

One was written in a sort of emotional state of mind. We went to Hawaii in '73 just to do a fluffy travel piece, walking along the Kalalau Valley on the north side of Kauai. All kinds of horrible things happened. The guide got kidney stones, and I had to run out and signal for a helicopter. Bobbie (Mrs. Moore) was attacked on the trail and had to fight off this maniac Japanese guy. It was just awful.

So instead of writing this fluffy travel piece, I called back and told them all that was happening, and they said I should write that. I did, and it was terrible writing about a terrible experience. The whole thing was a mess, and to their credit they didn't go near it.

The other piece I wrote just recently. It was about Bill Exum, and this one I was a little more upset about. The managing editor thought it was dull. Rogin said, "It's not dull. It's subtle." Bill Exum is not known as a na-

**Moore:** Cyndy Poor messed my story up incredibly (by winning the 1500). But the story was on Jan Merrill and Francie Larrieu, and their coaches. I know Preston Davis, Larrieu's coach. We were in the Army to-



Warren Morgan

tional figure. He's black, and the head manager of the track and field team at Montreal. He's probably the most revered and respected of all the coaching and managerial staff.

He's been on teams before. I was with him twice, and he was level-headed, articulate and the kindest, warmest person. I just loved him, and I wanted to get a lot of that across. I wrote a lot about his home life, making antiques. His wife is 60 years old and a French professor. His son is a professor of sociology at Williams. It's just an incredibly stimulating, educated family.

I stayed with him; he's a good friend. I was down there last Halloween and spent the better part of a week there right after the Pan-American Games and had a wonderful week. I hoped some of that would come out in the piece. Rogin liked it, and a lot of the staff liked it, but the managing editor thought it was dull.

**RW:** Do you have a favorite among your stories?

**Moore:** I really don't. There are certain things that I've been proud of. I don't know if it's because it's good writing or what, but I feel an affection for them. I like the Fukuoka (Japanese marathon) piece, which was the second thing, and the first long piece, I did for *Sports Illustrated*. They anthologized it, putting it in their book of best stories from that year.

**RW:** How did you handle the story on the Women's Olympic Trials?

### *Kenny and Bobbie Moore on their home track in Eugene.*

gether. And I know Norm Higgins (Merrill's coach) to some extent, because we were marathon runners together. Even then he was known as a flake.

People were very outspoken about Higgins. Ken Foreman (coach at Seattle Pacific) just thought he was a raving slave-driver, an austere, demanding man who will ruin people. They'd say these things, and I had to run around and get some balancing remarks.

I think Higgins is sincere to the point of obsession. But he's not an evil man. He's not using her (Merrill) for his own ends, I don't think. I think he really, sincerely cares about what is best for her. It's just that his system and his almost paranoid feelings about the world seems to say, "Nobody is an expert," and, "You cannot judge," and, "Go away, you unsophisticated press."

That makes it look like he's being possessive and living through her. I really don't think he is. I wanted to have a balance. But I came to that realization a little bit late. I was almost on the verge of castigating this guy for not letting her grow and live and express herself. It turns out it's probably as much her decision as his.

**RW:** How do you handle the reluctant interviewee who talks in monosyllables?

**Moore:** A lot of it is time—and love. We had the problem with Merrill. I just knew her coach. I went to dinner with them the night before the race, but she's got such a wall of privacy around her. Higgins rambled on and on about coaching, and how he admires the German system, and how some of us transform it into art.

What this does is allow the athlete sort of to gaze out the window and not have any problem. But it was the night before the race, and I certainly didn't want to upset her if she didn't want to talk. The most animated thing she said was when I told her I'd been swimming that morning and I had chlorine in my eyes. I complained about it and she was very sympathetic. She comes from a swimming family.

Aside from that, she didn't seem to have anything to say. She's studied computer science, but she's going into education—nuts and bolts things, things that are easy. Mainly what I got out of her was a sense of her face, just looking at her. She has a little way of wrinkling her brow, just that portion between her eyes. She'll do that at moments when she's off somewhere else. But she's sweet, and very direct, and I think she's very, very intelligent.

**RW:** I assume that you attempt to approach an interview without preconceptions.

**Moore:** Oh, yeah. A lot of times you don't want to feel you know anything at all about the person, even if you've read a lot. So many of the things that I've read about people I know do go off on tangents. That article about Shorter by Frank Deford in *Sports Illustrated* this spring—it went off on some of Deford's tangents. The quotes were Frank Shorter's, but Deford didn't understand that Frank Shorter does not represent a cross-section of distance runners. Frank is relatively peculiar among distance runners.

**RW:** Would you have an advantage if you wrote about Shorter?

**Moore:** Sure, but the enormous disadvantage would be that I'd get so bogged down I wouldn't know what to emphasize or what would be most important with Frank. Probably, Frank and I would just sit down and block it out. Here's this and this and this. What's most important? I think he'd be a better judge of what he was most influenced by.

It's not very often that I write about people who are not articulate, who are



not capable of answering the question, "Is this important to you?"

Say I was with Steve Williams for a week. I'd observe him for four days, take him to dinner, learn his background, talk to his coach. I work up sort of a worksheet, little notes, and we'd sit down and have a talk on the last day. You can almost get people to help you fit the thing together so you're not going to distort. But that doesn't mean you have to get their okay for everything.

Filbert Bayi stole my notebook once. He wanted to see what I'd written. He and (Suleiman) Nyambui had the greatest laugh. He'd never been interviewed by anyone who wanted to know about his life and town and girl friends, get a sense of his environment. They had a great time with that notebook, because they thought it was going to be all track stuff. They stole it thinking they were going to learn about running.

RW: What do you do when someone tells you something interesting, then says, "Don't print that"?

Moore: What you do is put it in the story somewhere and say you said it, instead of them saying it, if possible. It can be a measure of trust. I had a story, my best story this week (at the Trials), I couldn't print.

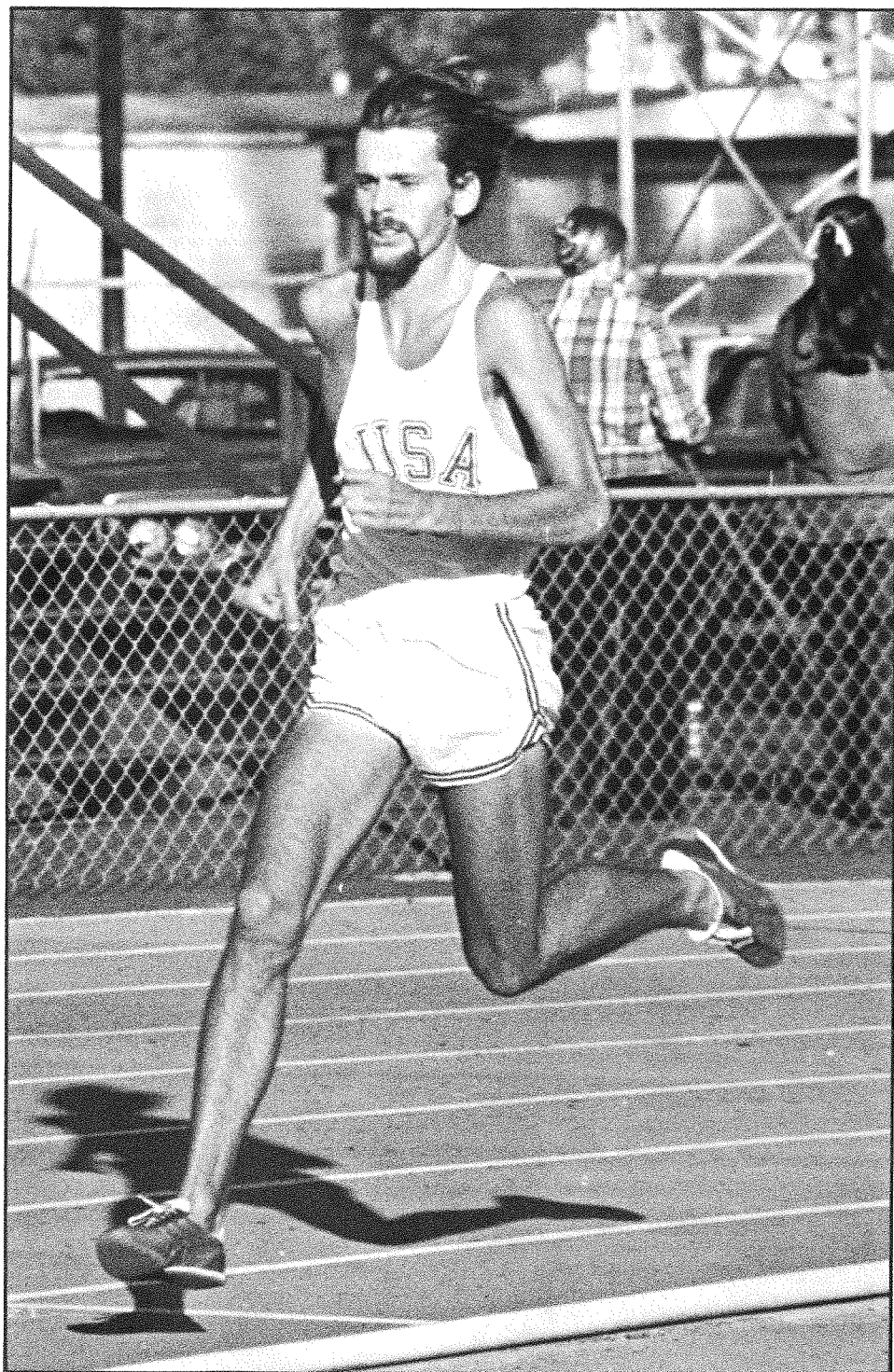
One of the athletes here has cancer and was told to have an amputation but chose instead to compete. She made the team. She's probably going to have an operation after the Olympics. A leg. I happened to know a friend of hers who told me because he was so upset, so I talked to her and she said, "It's true, but even my family doesn't know, so please don't print it." So we can't print it.

RW: Do you ever feel you're intruding on the life of a person?

Moore: Yes, definitely. I had a dozen questions to ask Jan Merrill when we had dinner. Everyone was saying, "Oh, what a wonderful opportunity. Nobody else can even talk to Higgins, let alone Jan." I didn't ask any of those questions.

I have some really severe differences with people about that. I got into a fight with the *Time* people who were here one night for cocktails, because they were upset and felt that it's Merrill's duty to talk. And I said I really feel like Higgins.

If it's true Merrill doesn't want to talk, private individuals, amateur athletes, do whatever they do for all different, private reasons. If they want to talk about them, that's fine, but there's no obligation to. If they have some pro-



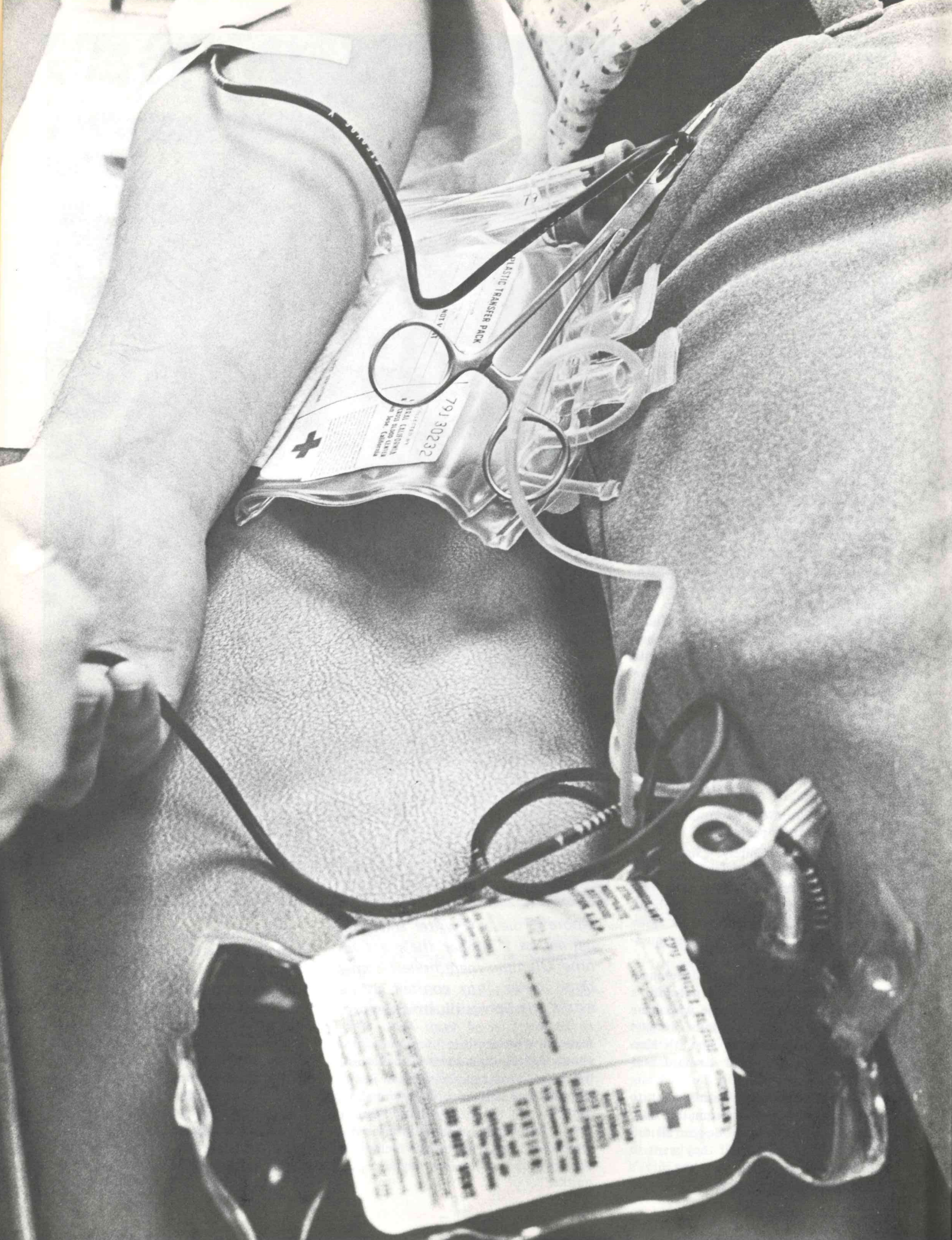
Jeff Johnson

*Moore's role as a writer and sympathies as a runner (he's a two-time Olympic marathoner) sometimes come into conflict as he works on a Sports Illustrated story.*

fessional contract that has some clause about making themselves available as a public property, maybe you can justify something. But the people I write about haven't, and so I really don't want to pry. I know if anybody's interviewing me, I'm not going to be too inclined to talk about my basic psychological quirks.

RW: I understand you're nearly finished with your first book. Can you tell me about it?

Moore: I don't want to talk about that. It's awful. It's just a pile of old stuff, all this material on running from three Olympics. It's sort of loosely autobiographical, with chances to go off and pontificate about the state of the sport, and all sports, in this country and the world. If I do it right, I think I can take some of the incidents and make them understandable and poignant. But it will mean two months of awfully hard work. ●



ELASTIC TRAYSER PACK

791 30232



WEST LAKE HOSPITAL  
AND MEDICAL CENTER  
1800 HILL DRIVE  
WEST LAKE, CALIFORNIA 90910



**WEST LAKE HOSPITAL & MEDICAL CENTER**

NAME	
MR. / MRS. / MISS / DR.	
ADDRESS	
CITY	
STATE	
ZIP	
PHONE	
DATE	
SIGNATURE	

WEST LAKE HOSPITAL  
1800 HILL DRIVE  
WEST LAKE, CALIFORNIA 90910

# Does the Sport Need New Blood?

by Russell Pate, Ph.D.

*When asked about the charges of "blood doping," Lasse Viren played dumb.*

*"I don't know what it is," he said. "I never heard of it."*

*"It's supposed to raise the hemoglobin," he was told.*

*"How do you raise the hemoglobin?" he said. "I don't know. Do you know?"*

*"That's a non-denial denial, a Watergate denial."*

Dave Anderson, *New York Times*.

Clouds of controversy haunted the Games of the 21st Olympiad. For the most part, these clouds were political, with governments and international organizations imposing irrational and unfair decisions on helpless athletes. But as Lasse Viren ran through a Montreal mist to finish fifth in the marathon, one could not help but feel that the clouds which hung over him were of his own making.

Viren earlier had fashioned brilliant victories in the 5000- and 10,000-meter runs. He had defended his Munich titles and secured for himself a prominent place in Olympic history. But following his win in the 5000, the modern-day "Flying Finn" had coyly evaded an interviewer's question concerning whether or not he had employed a physiological manipulation called "blood doping." By so doing, Viren had touched off yet another Olympic controversy and, in the minds of many, tarnished one of the superb athletic feats of all time.

Did Lasse Viren use blood doping? I do not know. But one thing is certain: Viren's comments have focused public attention on a debate which has been smoldering for nearly five years. Finally, the blood doping controversy has burst into full flame.

The sporting world first learned of

blood doping in 1971 when Dr. Bjorn Ekblom of Sweden reported that the removal and later reinfusion of blood produced marked improvements in performance of endurance work.

*Track & Field News* quoted Dr. Ekblom: "The effect was stunning. Our test persons increased their capacity by 20%."

While Ekblom apparently was convinced that his findings were significant, the early, non-scientific reports of his work raised more questions than they answered. Many observers wondered, "How exactly is blood doping performed? Does blood doping really provide a physiological (as distinguished from psychological) benefit? Are there any harmful side-effects to blood doping?"

Members of the scientific community reserved judgment on blood doping for several months until the technical report of Ekblom's work appeared in the respected *Journal of Applied Physiology*. This explained in detail the laboratory techniques employed by Ekblom.

Basically, 800 milliliters of blood has been removed from each subject in one group and 1200 milliliters from the members of another group. The blood was stored in a conventional manner for 28 days. During this period after blood removal, the subjects' hemoglobin levels returned toward normal but did not reach normal levels. Then the stored red blood cells were infused back into the original donor.

The subjects performed treadmill tests of maximal oxygen uptake on several occasions before and after blood reinfusion. The results indicated that, on the average, the subjects did indeed increase their treadmill performances (work times to exhaustion) and maximal oxygen uptakes. However, whether

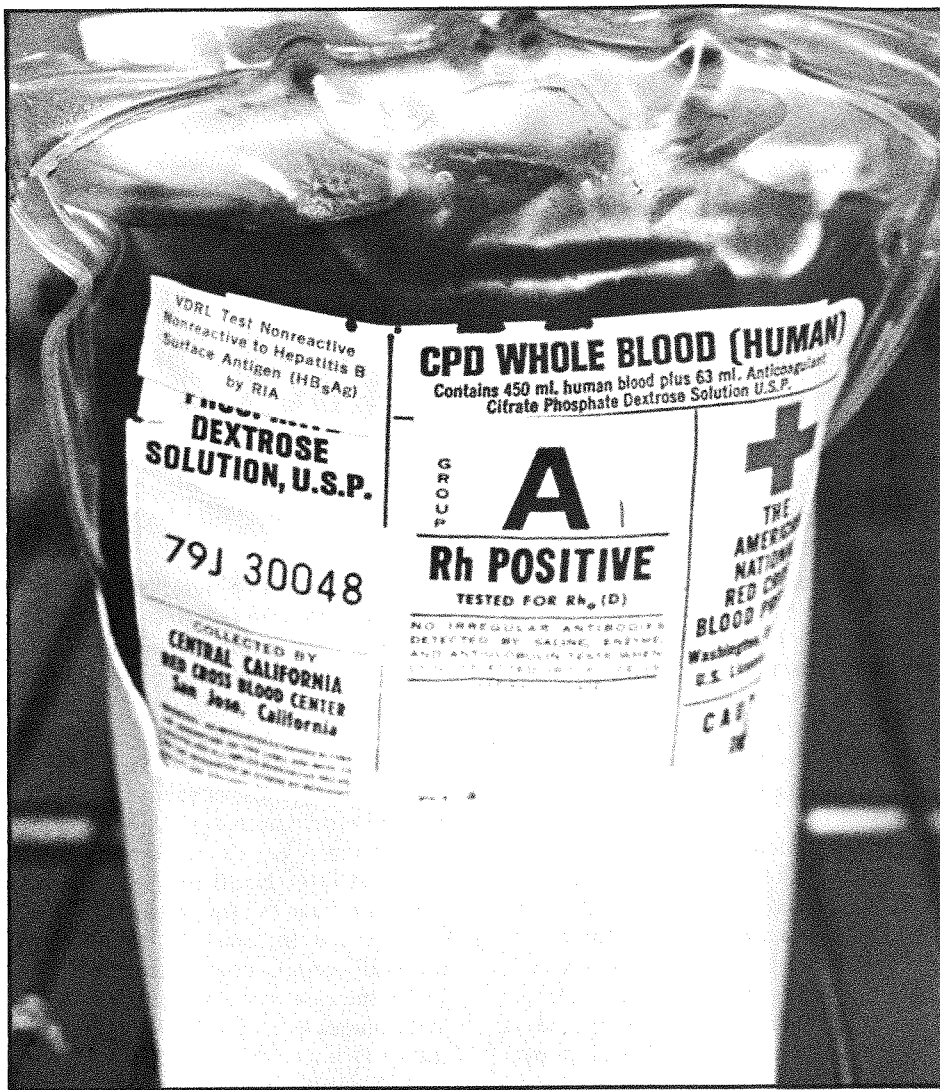
or not the increases were "stunning" is a matter of interpretation.

If the performances after reinfusion are compared with data collected just before blood reinfusion, the increases do appear sizeable. But this is not the comparison with which the athletic practitioner is most concerned. Rather, we are most interested in comparing performance *before blood removal* with that *after blood reinfusion*. When Ekblom's results are viewed in this manner, the increases in performance are still present but much smaller—a 15.6% increase in work time and only a 4.8% increase in maximal oxygen uptake.

At first glance, one might be tempted to say, "an increase is an increase," and quickly conclude that blood doping does, in fact, improve endurance. This is the shotgun approach which has been adopted by most of the world's news media. But before jumping to such a conclusion, I suggest that the following points be given consideration:

1. Ekblom's research design provided no control for psychological factors. It is a well-established principle that subject bias can generate a "placebo effect" in research of this kind. Such an effect can be quite marked in variables such as work time to exhaustion which depend, at least in part, on the subjects' perceptions.

2. Dr. Per-Olof Astrand, a famed Swedish physiologist, has admitted that Ekblom's work-time data alone are not convincing. Speaking in Berkeley, Calif., in 1973, Astrand supported Ekblom's conclusions but based his support entirely on the observed increases in maximal oxygen uptake. In theory, maximal oxygen uptake should be unaffected by subject bias. However, as previously



David Madison

the respected *Journal of Applied Physiology*. This explained in detail the laboratory techniques employed by Ekblom.

Basically, 800 milliliters of blood has been removed from each subject in one group and 1200 milliliters from the members of another group. The blood was stored in a conventional manner for 28 days. During this period after blood removal, the subjects' hemoglobin levels returned toward normal but did not reach normal levels. Then the stored red blood cells were infused back into the original donor.

The subjects performed treadmill tests of maximal oxygen uptake on several occasions before and after blood reinfusion. The results indicated that, on the average, the subjects did indeed increase their treadmill performances (work times to exhaustion) and maximal oxygen uptakes. However, whether or not the increases were "stunning" is a matter of interpretation.

If the performances after reinfusion are compared with data collected just

before blood reinfusion, the increases do appear sizeable. But this is not the comparison with which the athletic practitioner is most concerned. Rather, we are most interested in comparing performance *before blood removal* with that *after blood reinfusion*. When Ekblom's results are viewed in this manner, the increases in performance are still present but much smaller—a 15.6% increase in work time and only a 4.8% increase in maximal oxygen uptake.

At first glance, one might be tempted to say, "an increase is an increase," and quickly conclude that blood doping does, in fact, improve endurance. This is the shotgun approach which has been adopted by most of the world's news media. But before jumping to such a conclusion, I suggest that the following points be given consideration:

1. Ekblom's research design provided no control for psychological factors. It is a well-established principle that subject bias can generate a "placebo

effect" in research of this kind. Such an effect can be quite marked in variables such as work time to exhaustion which depend, at least in part, on the subjects' perceptions.

2. Dr. Per-Olof Astrand, a famed Swedish physiologist, has admitted that Ekblom's work-time data alone are not convincing. Speaking in Berkeley, Calif., in 1973, Astrand supported Ekblom's conclusions but based his support entirely on the observed increases in maximal oxygen uptake. In theory, maximal oxygen uptake should be unaffected by subject bias. However, as previously mentioned, the real increase in maximal oxygen uptake was quite small.

3. The groups studied were very small (three in one group and four in the other). Consequently, the observed small increase in maximal oxygen uptake does not carry the weight of statistical significance. In addition, the subjects were non-athletes. While they were physically fit, they were by no means highly trained. Thus, it is questionable that Ekblom's findings apply to international-class athletes.

In my opinion, a healthy skepticism concerning the effects of blood doping is warranted. To the average athlete, coach and sports fan, the idea that blood doping increases endurance seems sensible enough. After all, everyone knows that endurance depends on supplying oxygen to the muscles and that hemoglobin (carried in red blood cells) transports oxygen through the cardiovascular system. Therefore, if we increase the number of red blood cells and the hemoglobin concentration, we should increase our ability to transport oxygen to the working muscles and consequently improve the muscles' ability to perform work aerobically. Right? Maybe, but not necessarily. There are a few problems with this line of reasoning.

- Increasing the red blood cell count increases the oxygen carrying capacity of the blood, but it also increases the blood's viscosity. This increases the resistance to the flow of blood through the blood vessels and may reduce the heart's maximum ability to pump blood to the muscles.

- Even if we did offer more oxygen to the muscles, the muscles may not be able to use it because of limitations posed by the enzyme systems which produce the chemical energy for muscle contraction.

In short, there are sound physiological reasons for arguing that blood doping may be useless to athletes perform-

*The world's media generally labeled Lasse Viren guilty of "blood-doping" until he could prove himself innocent.*

signs. Ideally, studies should be done on various groups ranging from untrained persons to international-class athletes. Furthermore, other studies should focus on possible harmful side-effects.

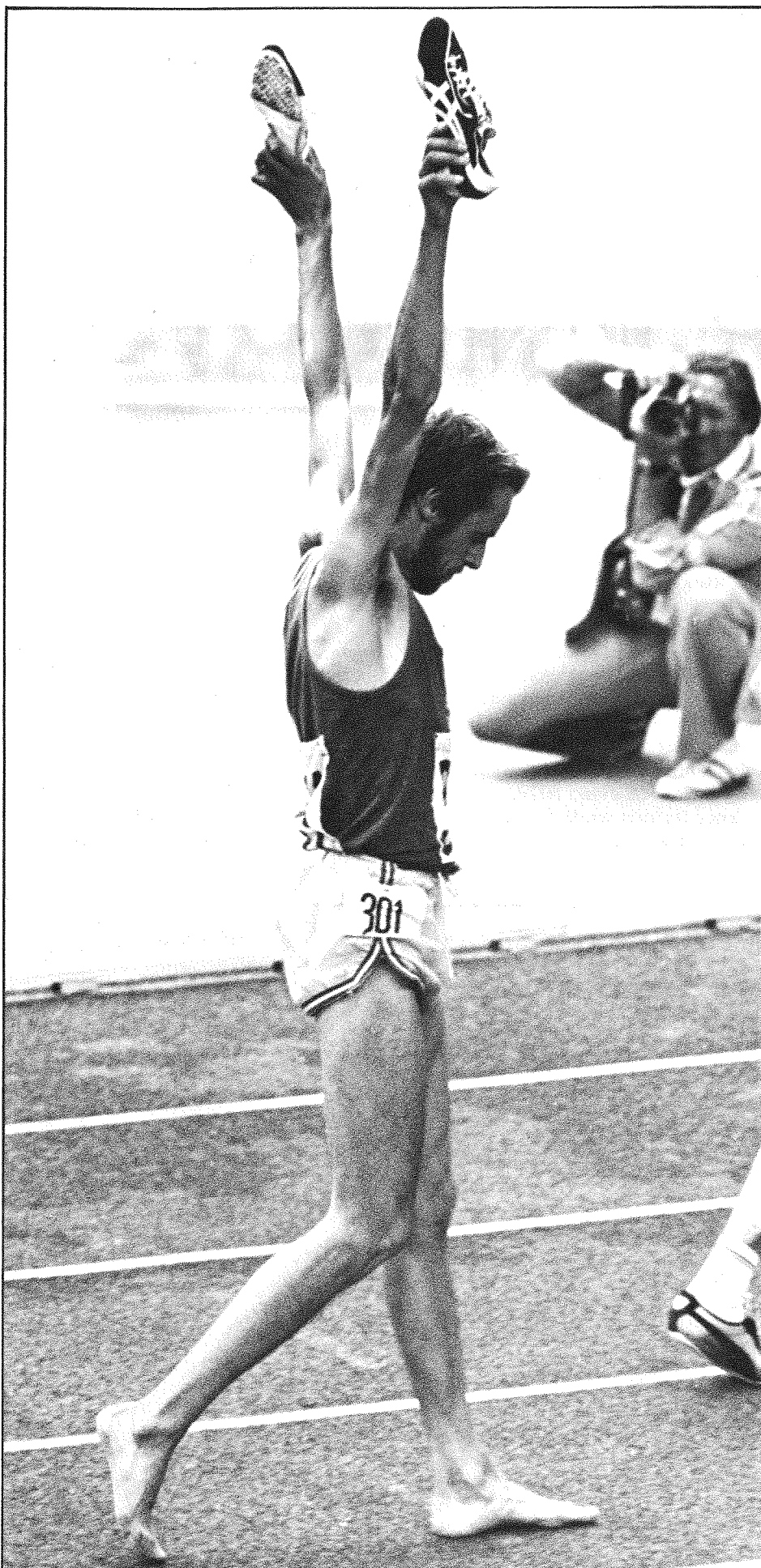
It seems to me that the international sport regulatory bodies are risking being caught with their scientific pants down. I hope that, for once, these groups show foresight and move to sponsor research to allow enlightened decision-making. A valid test for blood doping may prove very difficult to establish. But if future research shows that blood doping is useless, no test will be needed. Such studies need to be completed and policies developed before blood doping becomes the distance runner's steroid.

Pending the completion of definitive research, interested parties should base their judgments on the best available evidence. This evidence now provides neither solid physiological rationale nor convincing experimntal data to indicate that blood doping increases endurance.

Thus, for the time being, I see no reason to view Lasse Viren's accomplishments in Montreal as anything but the result of superior natural talent, diligent training and devastating competitive instinct.

#### REFERENCES

1. Astrand, P. -O—"Blood Doping in Endurance Athletes," *Innovations in Athletic Conditioning and Sports Medicine*, Berkeley, Calif., 1973.
2. "Blood Doping," *Track & Field News*, Los Altos, Calif., October 1971.
3. Ekblom, B., A.N. Goldberg and B. Gullbring—"Response to Exercise after Blood Loss and Reinfusion," *Journal of Applied Physiology*, 33:175-180, 1972.
4. Gullbring, B., A. Holmgren, T. Sjostrand and T. Strandill—"The Effect of Blood Volume Variations on the Pulse Rate in Supine and Upright Positions and During Exercise," *Acta Physiologica Scandinavica*, 50:62-71, 1960.
5. Pace, N., E.L. Lozner, W.V. Consolazio, G.G. Pitts and L.J. Pecora—"The Increase in Hypoxia Tolerance of Normal Men Accompanying the Polycythemia Induced by Transfusion of Erythrocytes," *American Journal of Physiology*, 148:152-163, 1947.
6. Robinson, B. and others—"Circulatory Effects of Acute Expansion of Blood Volume," *Circulation Research*, 19:26-32, 1966.
7. Williams, M.H., A.R. Goodwin, R. Perkins and J. Boccie—"Effect of Blood Rejection upon Endurance Capacity and Heart Rate," *Medicine and Science in Sports*, 5:181-186, 1973. ●



Mark Shearman

# A Fence Made For RUNNING

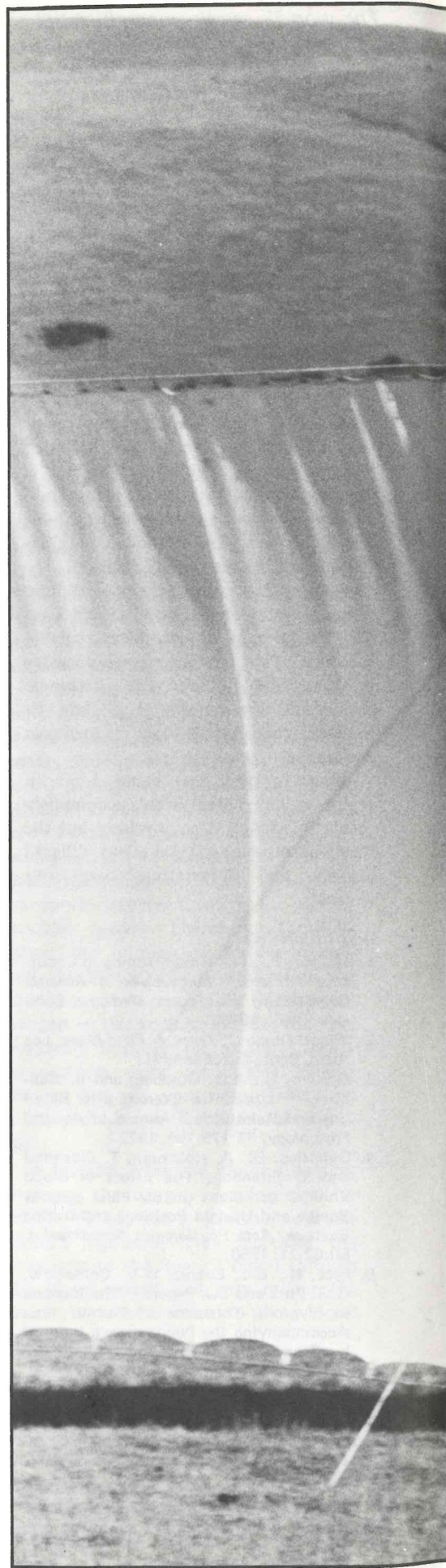
by Chris Knipp

This fall, northern Californians were bemused by the sight of a bizarre but beautiful “environmental” art work. A shimmering band of 18-foot-high white nylon fabric hung on steel poles and cables that meandered across 24½ miles near San Francisco, the masterpiece was the subject of numerous national news stories during the two weeks of its existence. When a Bulgarian-born New York artist, Javacheff Christo, called his creation “Running Fence” he didn’t intend to provide a fence for runners. But several runners found the idea of running Christo’s creation irresistible.

The result was a blend of art and athletics, something like a marathon plus an obstacle course—a unique, challenging way to experience art and the environment.

Christo himself has some of the characteristics of a distance runner. He is lean, tan, energetic but calm, far younger looking than his 41 years. His determination and devotion to a personal

*Stretching more than 20 miles, the Running Fence poses an awesome display of grandeur from afar (below) as well as nearby (right).*



As with anyone who suddenly punctures the media with an attention-grabbing accomplishment, Javacheff Vladimirov Christo has a past typified by movement, lack of attention and small success. Born in Gabrovo, Bulgaria on June 13, 1935, Christo came to the United States in 1964 with his wife, Jeanne-Claude, and son, Cyril.

His previous art projects include: stacked oil drums in Cologne Harbor, Germany, a wrapped tree in Eindhoven,

Netherlands, stacked hay at the Philadelphia Institute of Contemporary Art, a packaged public building in Bern, Switzerland, a valley curtain in Rifle, Colo., and a wrapped fountain and tower in Spoleto and Milan, Italy.

Christo received his education at the Fine Arts Academies in Austria and Bulgaria, and at the Burrein Theatre in Prague, Czechoslovakia.

In 1966, Christo received the William and Norma Copley art award.

goal in the face of seemingly endless obstacles (both environmental and human) could well provide inspiration to any runner.

He devoted four years to this project. It took 11 months to persuade the 59 ranchers whose land Running Fence crossed to grant access. Another year and a half (with 14 public hearings and a 464-page, \$39,000 environmental report was spent getting local and state government approval. He is raising the \$2 million-plus cost of the Fence himself by plowing all his considerable artistic profits back into his art.

Despite all the media publicity, Running Fence experienced the hard effort and loneliness of the long-distance runner. Construction and installation workers toiled 12-16-hour days to complete an art work which was largely on land inaccessible to viewers.

But for Christo, as for runners, it's the experience that matters, the struggle itself rather than the outcome of the race. Christo considers the whole process of getting the project built, the hearings, the protests and applause, all elements in his art.

I date my "involvement" with Christo's project from when I read a magazine article about it and decided on the spot that a Running Fence should be run. After a few phone calls, I was at project headquarters in the tiny hamlet of Bloomfield, Calif., meeting Christo's French wife, Jeanne-Claude, and Christo himself.

Along the way, I had seen the skeleton of the Fence racing up and down bare hills, disappearing and re-appearing amid cows, sheep and trees. The poles and support cables, designed to carry the 165,000 yards of nylon fabric in high wind, already were mounted but the structure was almost invisible without the fabric (which 300 part-time employees later were to install in an intensive two-day effort).

When I told Christo I wanted to run the Fence, he was friendly but cool.

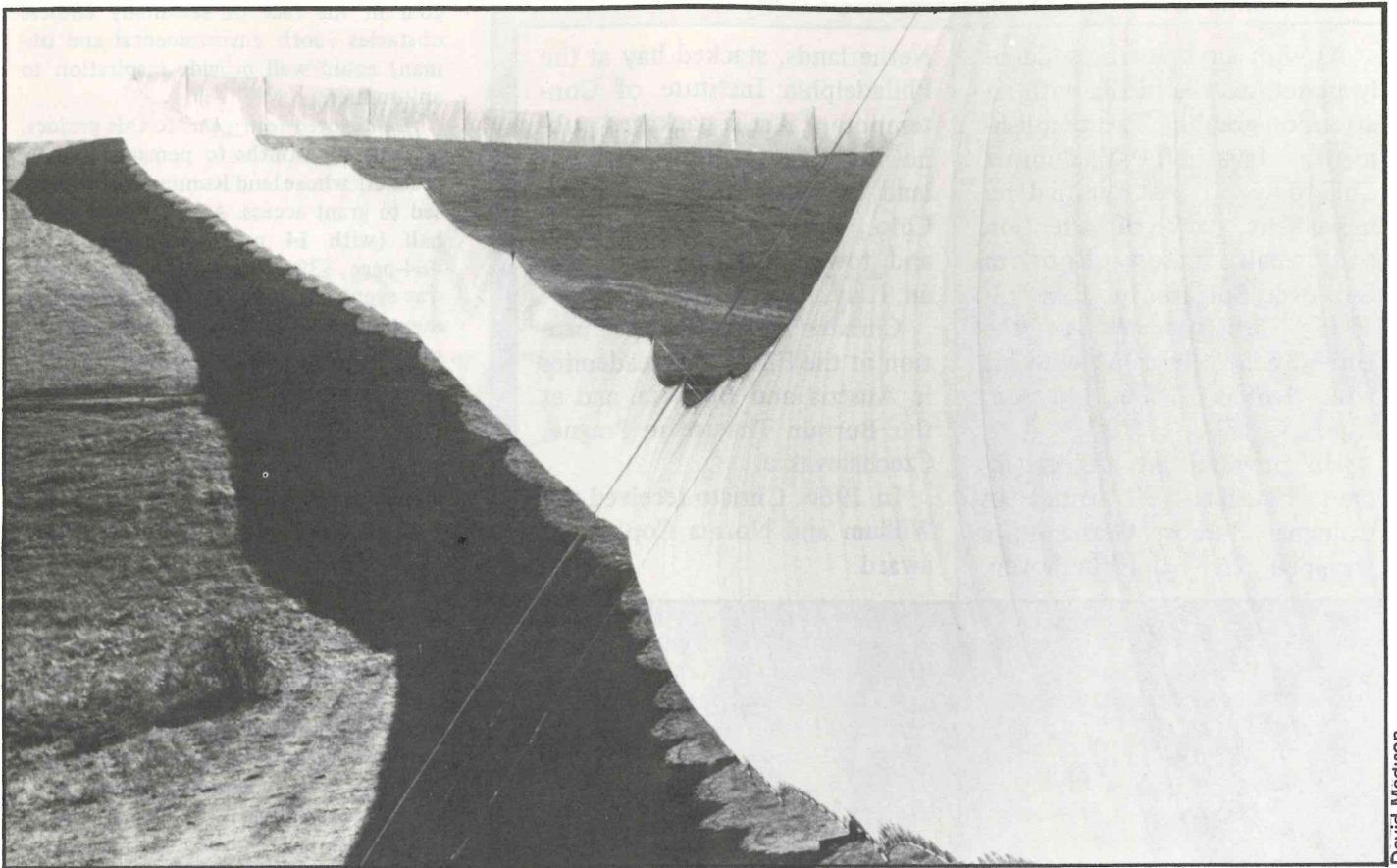
"I don't want to encourage you, I don't discourage you," the artist said in his rapid-fire Franco-Bulgarian English. "But I merely say that it is very *delicate*, very *delicate*. Anything that angers the ranchers could jeopardize the project."

Running a Running Fence sounded as hard as building one. Christo told me I would have to get permission from the 59 landowners and the local government—which took him nearly three years to do.

"But there is one way you can do it. You can join the workers who hang



David Madison



David Madison

the fabric. Then you will wear the Running Fence T-shirt and you will have permission to cross the ranchers' land."

The next afternoon I was back receiving instructions on installing the nylon panels. When I got a chance, I would ask questions about the terrain and sneak looks at maps. I still had no idea what running the Running Fence would be like, except that I knew there would be many fences (more than 100) to climb along the 24½ miles.

Although it was looking harder and harder the more I saw of it, I was fascinated by the Running Fence itself and the energy and charisma of Christo and Jeanne-Claude. They and the project had ways of converting even doubting farmers into admirers of their form of art. Though some called Running Fence "a roll of toilet paper" and a "rape of the countryside," those who worked on it gained respect for the land, and many who came to scoff went away as converts.

I also found the Running Fence's energy easily drew in other friends, relatives and runners. Pat Miller of Northridge, Calif., a friend and a far better runner than I, agreed to run the Fence with me. Jeanne-Claude promised to lend Pat her Running Fence T-shirt. Other runners, with and without official sanction, appeared as soon as the fabric went up.

Perhaps I liked the idea of running the Running Fence because I am not a competitive runner. Or perhaps the reason was that I am interested in art.

The same is true of Ed Baker, a graduate student in mathematics at Berkeley. He likes art. And he's "serious" about running but has so far entered only one race in his life. Ed didn't bother to get permission to run the Fence. He just ran, at his own pace, in old swimming trunks and a six-month-old pair of very worn down Adidas SL-72s. Along the way, Ed found an official Running Fence T-shirt lying on the ground and put it on. That made his run official enough for him.

Baker read about Christo's art work a week before the unfurling began. He and a friend, whose farm is within a mile of the Fence's eastern end, went to look at it on unfurling day. Ed was so excited and exhilarated by the sight of the Fence unwinding over the hillsides that he went out on his first run along it that afternoon.

It was a very hot, dry day and Ed stopped outside Valley Ford, some 16 miles from his starting point, then hitchhiked into the town. After refreshing, he ran back toward the place where he'd stopped and up the long, steep hill rising northeast of Valley Ford. There he witnessed a magnificent view of Christo's creation.

*Variations in terrain posed some problems for construction of the Fence as it wound through more than 50 ranches. The unique construction (right), however, enabled Christo's masterpiece to be as sturdy as the challenge of completing it.*

About the time Baker had begun his run I was working with the fabric installation crew, which had been bused into Valley Ford. Members of Christo's "army" were eating bag lunches, yelling, running around pouring water on each other and gulping beer from the town grocery store while the movie and TV cameras rolled. Christo vainly walked around waving his arms and trying to get us back to work.

In the midst of this wild crowd of dirty, tired, somewhat drunk Running Fence workers in hard hats and yellow Christo T-shirts, one figure stood apart. A tall, lean, sunburned man with close-cropped grey hair, wearing only track shorts and running shoes, was standing in front of the Valley Ford Post Office. Obviously a runner.

He turned out to be Bob Urie, a New York businessman who works for the company that sold Christo the fabric for Running Fence. He was also an or-



ganizer of the New York City Marathon—and, I gathered, a friend and admirer of Christo. Urie had been running the Fence via adjoining roads 17 miles so far, in three hours and had stopped to rest.

The next day, Ed Baker, who'd run the rough terrain along the Running Fence, woke up sore. He had a giant blood blister on his right foot and other blisters on both feet. His knees and hip joints ached from the angular running and from climbing all those fences—three dozen or more. Still, it had been fun following Christo's Running Fence and seeing all the friendly people hanging the glistening nylon fabric. Nobody had objected. They'd just waved and wished him a good run.

So, sore or not, that afternoon Ed hitched back to Valley Ford and took up where he left off, running the most dramatic part of Running Fence, down to the Pacific coast. There were fewer fences, but this was the roughest, hilliest part.

The steepest ravine was in this section, a place so rugged that the Running Fence was interrupted and Ed lost sight of it until he got onto the crest of the other side.

The white fabric ran down into the Bay. Ed took a swim and met two trespassing tourists who took pictures of him and the Fence. Then he ran back,

stopping short of Valley Ford.

Maybe it's better with something like this not to know what you're getting into. After working on the Fence, I knew all too well. Besides, I was tired out from the long days of work on the Fence and was having recurring pain from surgery performed a month earlier. I reluctantly decided I wouldn't attempt to run the whole of Christo's Running Fence.

Being a purist, I never thought of running it in stages. Friends suggested that Pat Miller and I run it in relays, but that seemed too complicated logistically.

We began running the eastern end during the evening. The weather was cloudy and almost cold, and the white nylon glowed against the darkening terrain. We could see Christo was right when he called his Running Fence "a ribbon of light cresting over the rolling hills." It was beautiful, even awe-inspiring. There could be no better way to experience Running Fence than by running along it, over the rolling hills.

At last I was really running the Running Fence, and I was so exhilarated I had no trouble keeping up with Pat on the uphill stretches, nimbly dodging the scattered rocks.

The next morning, I left Pat on a road near the eastern end. I drove

ahead, meeting him wherever the Fence intersected roads—roughly at six-mile intervals.

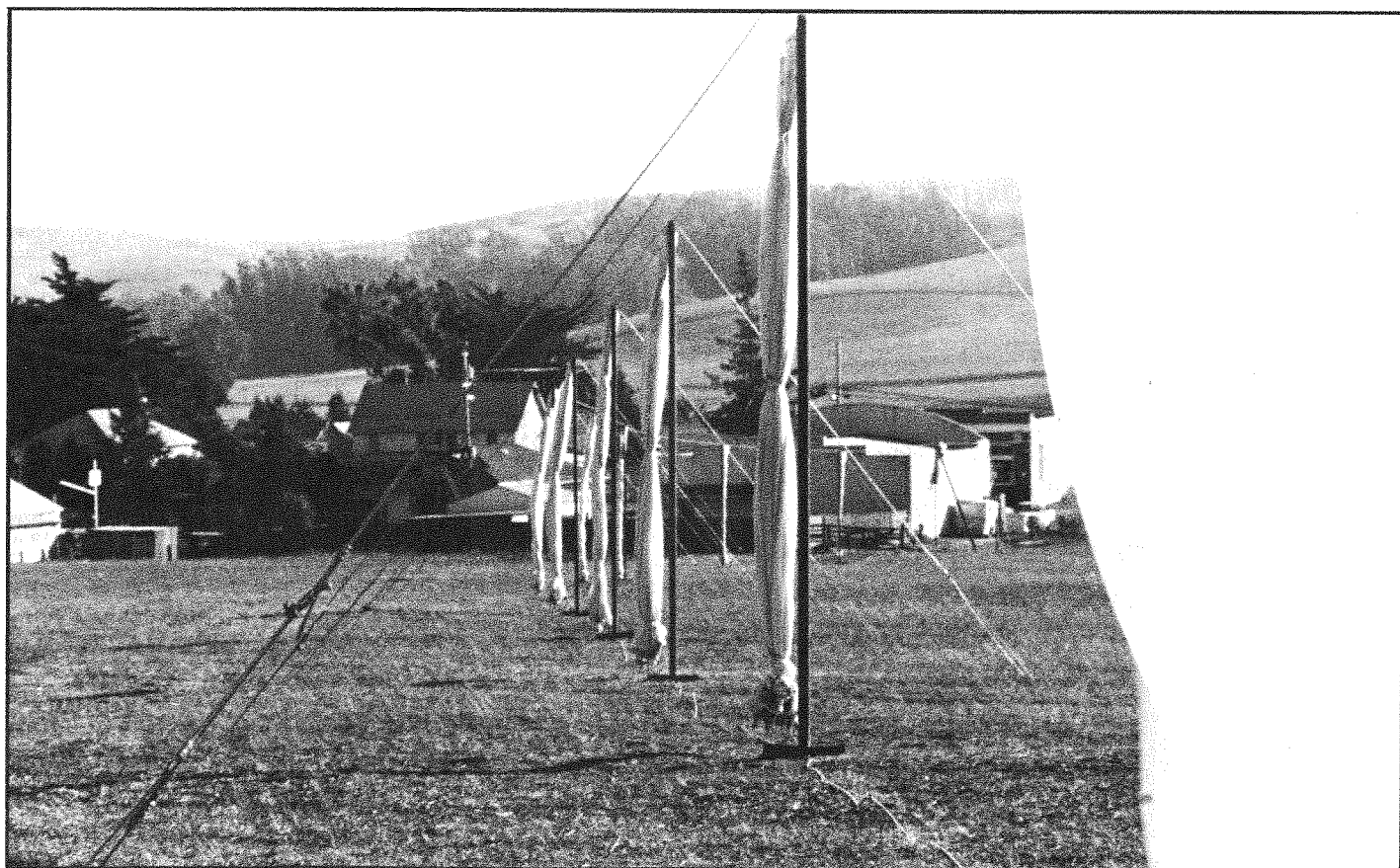
After the first segment, he was already complaining. "This isn't running," he said. "It's climbing fences." He'd already counted two dozen, one of which was electrified. Christo hadn't warned me about that. (His design had overlooked runners' needs.) Pat also thought he'd been chased by a bull but it may have been a lively cow.

Pat Miller bailed out at 18 miles, just before the hills leading into Valley Ford, after a continuous run of more than three hours. Considering the fences, ravines, stones, and cow manure, his pace was excellent and his bail-out excusable. I'd guess that his was the fastest Running Fence run.

It was Ed Baker who seemed to understand the fusion of art and running best, however.

"An experience considered as a work of art can become art," he told me. "Art is a kind of experience. Running is another. In terms of 'conceptual art,' the excitement of running can become a work of art. My interaction with the environment in running the Fence was like Christo's."

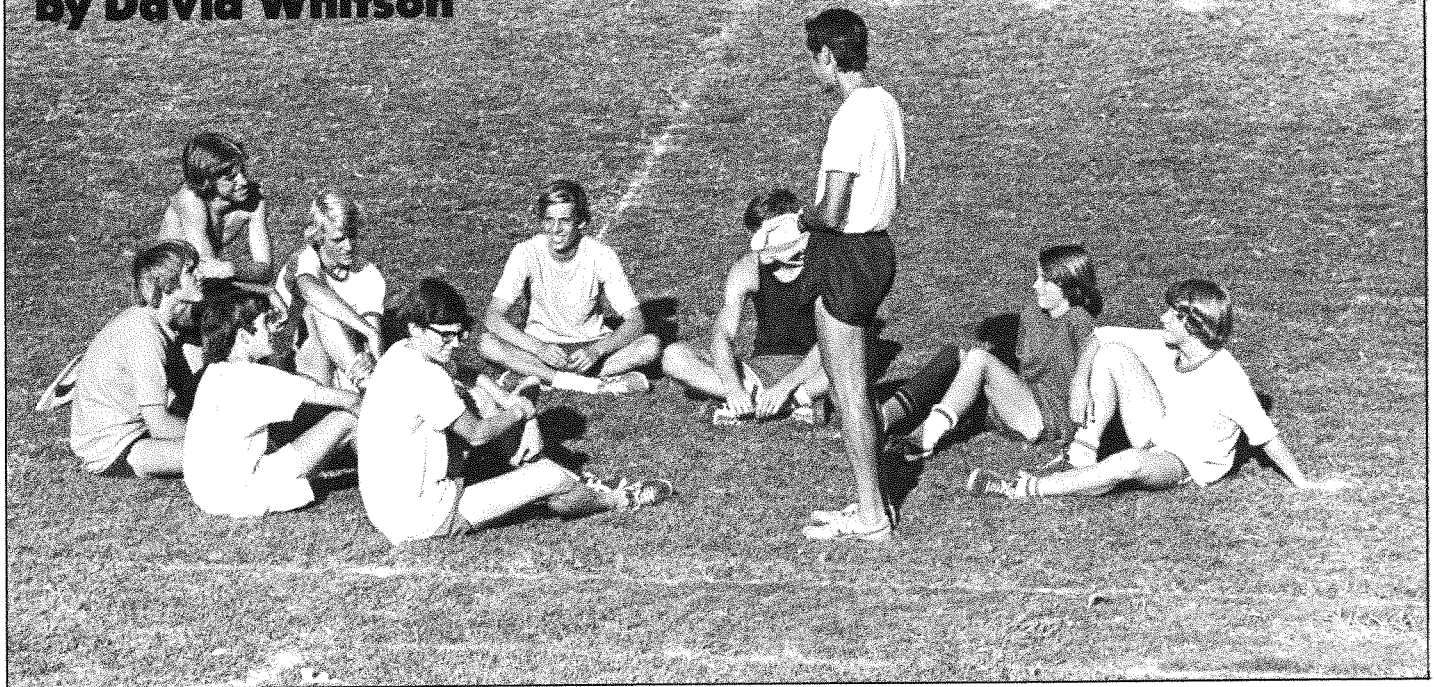
Both, in a sense, were trespassers. Yet both were underlining and enjoying the beauty of the northern California coast. ●



David Madison

# New Coaches, New Approaches

by David Whitson



David Madison

Last year, I taught a brief class in the psychology of sport to students who, within a year, would be teachers of physical education. It was my first attempt at such a course, and I wondered whether the issues (of which my own experiences as a coach and athlete had told me P.E. teachers should be talking) would be ones the students, too, would feel were real.

I wanted to explore the ways in which many of the hours I've spent running have been happy ones—how they seemed like “my” hours, times when I could experiment with myself and the world around me, and could enjoy what I found. I also wanted to understand why this sense of “joy in discovery” had disappeared for a while, to be replaced by something more like apprehension, by a nagging fear that I could not “produce the goods” I had learned to expect of myself.

The course lasted six weeks, and our introductory discussions satisfied me that my experiences were neither unique nor peculiar to North American sport. While some of the students continued to take part in various sports, a much larger number counted themselves as ex-athletes—and sounded quite

happy to be out of it.

A comment like, “I used to enjoy playing games, but now it just seems like drills and work” evoked much agreement, as did, “You have to be so good. You can't just go out on the court and play. You're always worrying about how you're doing.”

Perhaps, in sharing our experiences, we could come to a clearer understanding of how the pleasure disappeared, and the tension and drudgery crept in. If so, maybe we could go on to try to work out a strategy for teaching and coaching which might help to avoid all this.

I began each discussion session by summarizing, with pithy quotes where possible, what various people were saying about particular aspects of the problem. This was less than ideal, because I don't speak as poetically as Kenny Moore writes. But it served to let the students respond to and pursue those issues that most interested them. Our early sessions centered on these statements:

“What should it matter if 10 runners want to come across the line together? They're the ones who are putting out the effort. Why should someone else's hang-ups dictate what the runners are

going to do? It's a sort of personal freedom that's involved.” (Frank Shorter, *RW*, March '71).

“The aim of the game is to *win*. Any person who enters any competition is neither honest nor fair to their opposition, their supporters, casual spectators or even themselves (not to mention their poor coach) if they do not make every possible *preparatory and competitive effort to win*.” (Harry Kerrison, former director, Canadian Track and Field Association).

These provoked good discussion. Some students maintained stoutly that winning *was* the whole point of any game. Others knew they didn't like some of the consequences of this view, but had never really imagined other possibilities. Though Shorter's suggestion was so novel that it seemed bizarre. The idea that sport as they knew it didn't have to be taken for granted intrigued them.

The obligation issue was an interesting one. What, if any, are the athlete's obligations to coach, school, country and teammates? Even students who really never had been pushed in sports recalled being uncomfortably aware of the pride others took in their accomplishments. Most of the group thought

this was only natural, but several spoke of it as something which made them tense and which they didn't enjoy.

This discussion resulted in a look at Cliff Temple's "The Happiest Days Of Their Lives?" (*Athletic Weekly*, Sept. '74) and Terry Orlick's "The Athletic Dropout" (*CAPHER Journal*, Nov. '74). Temple had talked with former English schools' track champions, most of whom had left the sport within three years, and Orlick interviewed dropouts from house league hockey programs in Canada, and from the national junior ski team. Why had they all left their various sports?

"I liked it when I started out, but later it wasn't fun any more. There was too much criticism."

"You've done your best and somebody says you can go faster."

"The coach didn't act like he wanted me on the team. He didn't spend any time with the kids who weren't tops."

Responses like these helped to draw attention to the connections between the "winning" and "obligation" issues. They also helped some of the dropout students to begin to talk about their own experiences more analytically.

Finally we talked about alternative kinds of "success" and how we find them; about enjoying each moment as we live it, enjoying our surroundings and our thoughts, and learning to be aware of all these and to savor them. I led them to running writers (Kenny Moore, Mike Spino, Ian Jackson, Joe Henderson) who have provided beautiful glimpses of what sport could offer in this vein.

We also talked about a different kind of motivation: self-motivation and how we can "know" that this works; about having a sense that we can do a little more than we ever have before and pressing on, excitedly, to see if we can; about not being pushed but beckoned from within. Some students doubted that we could be "beckoned" to excellence. They couldn't visualize a commitment they'd never had a chance to find for themselves. Others, however, reflected that it was precisely in those activities they liked the most which they tried to extend their talents without any outside urging.

Whether we were talking about soccer without violence or running without pain-torture-agony, most of the students still couldn't quite visualize these same old activities with a new and different ethos. Clearly, what was needed was a taste of the experience. Just talking about abandonment, or about getting to know ourselves on an evening run,

didn't convey how these things felt. And talk about "playing with your edges" sounded ludicrous, unless you had done it. Then you knew exactly what it meant—and how exciting it was.

I decided to experiment and suggested two ways of fulfilling the course requirements:

- Play hockey or basketball for half an hour without keeping score. Report on your feelings at the time and your reflections on the experience afterwards.

- Run a mile on a nice day. Report what you saw and what you felt. If you do this with a friend, it might be appropriate to report on what you talked about. Consider your reactions in relation to some of the issues raised in the course.

About half of the students chose the run. The impact of the experience depended on how much they could detach themselves from the perspectives they had always taken for granted. For some, this proved to be too big of a leap, but others gave it a real chance and reported some good times and interesting thoughts. A few found things they never expected, things like this:

"My first reaction was one of complete distaste. As far as I was concerned, the only people who ran were either training for some upcoming event or were complete fitness fanatics. I set off with the thought in mind that it was a piece of work for college, and not something to enjoy. It reminded me of how we all used to have to drag ourselves through a run before we went into the pool for training.

"I started to reminisce about all the things we used to do and all the people I had trained with. What were they doing now? Would I ever see them again? When I thought about it, I really liked those training sessions, not so much for the training itself but for the great friends I met there and the laughs we used to have. I wondered if it was just us, or does everyone who trains have the same good times? The smile on my face now surprised me, so I carried on remembering. This was much easier, running in these circumstances, with nobody bullying you to run faster. I was actually quite enjoying it.

"I stopped thinking for a moment, and watched what was going on around me. The only movement was from the waves and the wind, and me. I felt happy. I could do what I liked, like the wind and the waves. I watched a lone seagull as he rode the wind, dipping and circling, so full of ease and grace.

Can you imagine our lecturers trying to 'teach' anything to him?"

Another writer told of a shared experience:

"I must admit I ventured forth with some reluctance, but I didn't want to show this to Andy so I carried on, smiling. As we settled into a pace, I could feel my hands and face tingle in the cold, but it was not at all painful, as I had imagined it might be. I felt alive and fresh.

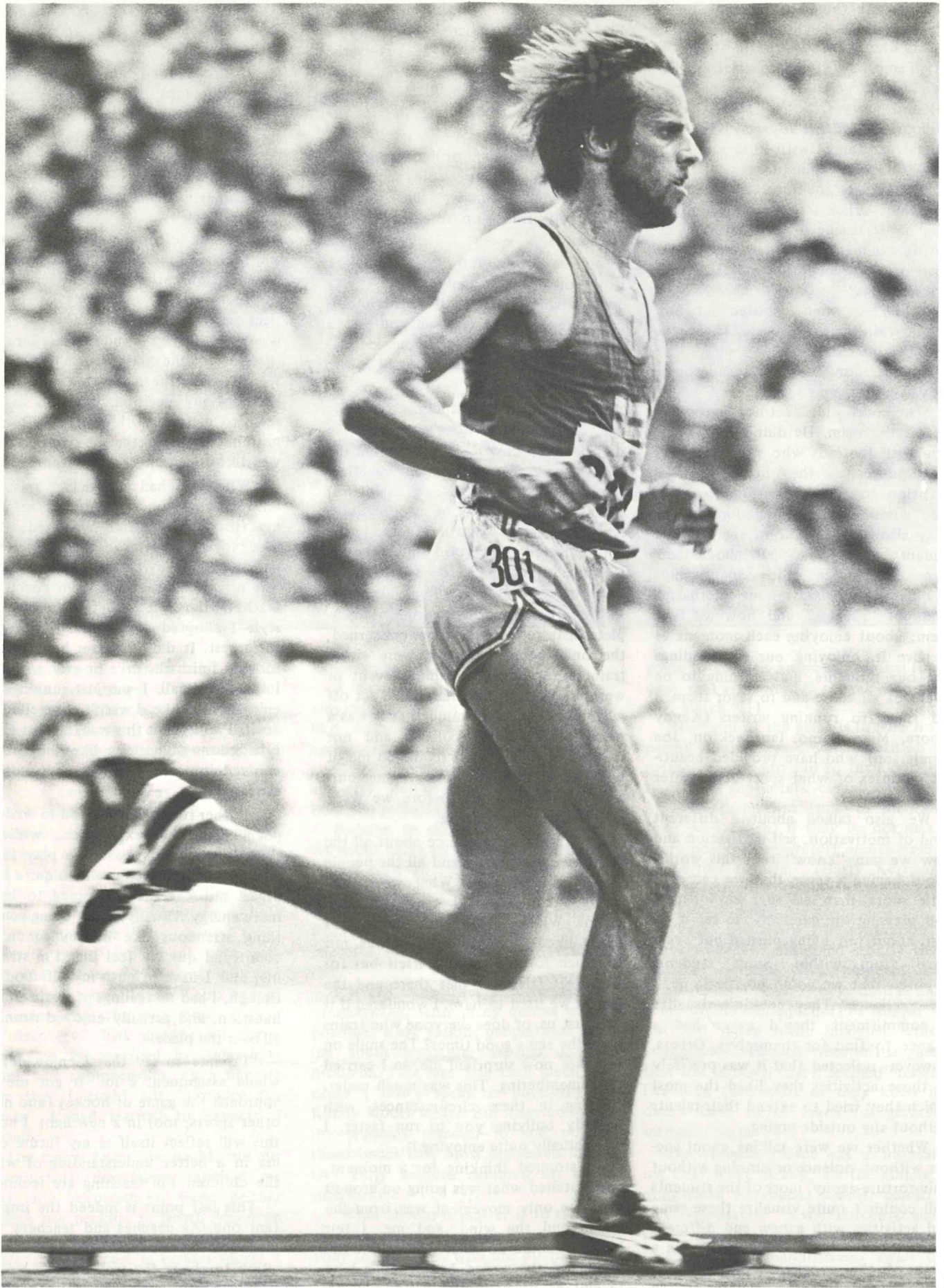
"On our left the dunes looked sad and lifeless, in complete contrast to the water on our other side which seemed so bright, so alive and happy, as the reflection of the moon danced off the waves. I asked Andy whether he thought anyone could live on the moon. We discussed the idea for a while, not reaching any decisions, but this didn't seem to matter. Nothing was really important, as long as the run continued. It was like living in a world of fantasy.

"When we had finished, I actually felt revived. I wondered why, as this was my first run, I didn't feel tired, as I used to on the track after only 880-yard jog. I believe it was because there was no pressure on me from coach or teacher. Here, it didn't matter what style I adopted or whether I stopped for a rest. It didn't matter how long it took to finish the mile or even whether I finished at all. I was just running for enjoyment's sake. I wasn't compelled to do it. I will admit this was the first time I had done something like this, but I enjoyed it, and I don't think it will be the last."

Another runner was moved to write a poem about her experiences, while a student who had chosen to play field hockey said, "A feeling which quite surprised me was that I seemed to have more energy. Usually, when doing something strenuous like hockey or cross-country, I quickly feel that I'm straining, and I have to push myself. Today, though, I had no feelings of strain or exhaustion, and actually enjoyed running all over the place.

"I'd like to say that I enjoyed this whole assignment a lot. It got me to approach the game of hockey (and now other sports, too) in a new light. I hope this will reflect itself in my future career in a better understanding of what the children I'm teaching are feeling."

This last point is indeed the important one. As coaches and teachers, the graduates of this class will be in a position to shape the way a lot of young people experience sport. How will they tell their students to define success? ●



Mark Shearman

# Making the Right Racing Moves

by Hal Higdon

**O**f all the runners I've seen race, one stands out as the premiere tactician of all: Herb Elliott. Most track fans remember Herb as a world record holder and an Olympic gold medalist, but I remember Elliott because of his superb use of tactics.

He could lead from the gun; he could kick at the tape; he could burst in the middle. He finished a career unbeaten in the 1500 meters and mile by effectively employing all those tactics. Probably his most astonishing race came in the Rome Olympics of 1960, when he stunned his competitors by starting his sprint with roughly two laps to go. They came back on him near the end, but Herb Elliott still had the victory.

A knowledge of tactics is essential if you intend to race successfully, but too many runners give little thought to this form of the running art.

"Tactics" is a military expression usually coupled with the term "strategy." Strategy, by a dictionary definition, is the science of planning and directing large-scale military operations and maneuvering your forces into the most advantageous position *prior to* the actual engagement with the enemy. Tactics is the science of arranging and maneuvering military and naval forces *in action*, or before the enemy.

Translated into running terms, strategy is training yourself to race. Tactics is the act of racing itself, particularly how you maneuver in crowded fields of two or more runners.

Tactics are least important in the shortest and longest events. In races up to and including 440 yards, runners generally go full speed all the way, separated in lanes. Little contact and no decisions are to be made concerning pace. In the longest races, beyond 10,000 meters, runners compete on wide, straight courses where, again, little contact occurs. Pace becomes an important tactic, but less important than at medium distances.

In the medium distances (road runs less than 10 miles, cross-country events from two to six miles, track races from 800 to 10,000 meters) tactics become critical. Tactics increase in importance when runners move onto tight, narrow, indoor tracks where straightaways are short and hairpin turns make running widely difficult.

*Lasse Viren—man for all tactics. At Montreal, he won from the back and from the front.*

## USING A KICK

There are two styles of running: from the front and from the rear (with numerous variations on both). Those who lead presumably do so because they possess superior endurance and like to break their opponent before sighting the finish line. Those who follow presumably do so because they have superior finishing speed and know they can beat their opponent as long as they stay with him.

A handful of extremely gifted athletes possess both superior endurance and superior speed. When these occur simultaneously in one athlete, you have a racer.

Several excellent front-runners come to mind: Filbert Bayi, Ron Clarke, Kip Keino. A letter written to *Runner's World* recently (September 1976, "Tacky Tactics") disparaged Keino's 1500-meter victory over Jim Ryun at Mexico City as a "trick tactic," because teammate Ben Jipcho set a fast pace theoretically allowing Keino to pull away from Ryun. Nothing was tricky about the tactic. It was simply a matter of strength over speed.

More often, speed prevails. This was particularly true during the reign of New Zealand's Peter Snell, Olympic gold medalist at 800 meters in 1960 and 1964 and at 1500 meters in 1964. *Snell*, in German, means *fast*, and Peter was that. His typical tactic was to burst into a frantic sprint at the end of the back straightaway with 200 meters to go. His kick was superb. He did not merely beat opponents, he demolished them. It was almost as though Snell were sitting in the blocks at the 200 meters start, waiting for the others to go 3½ laps so he could race with them.

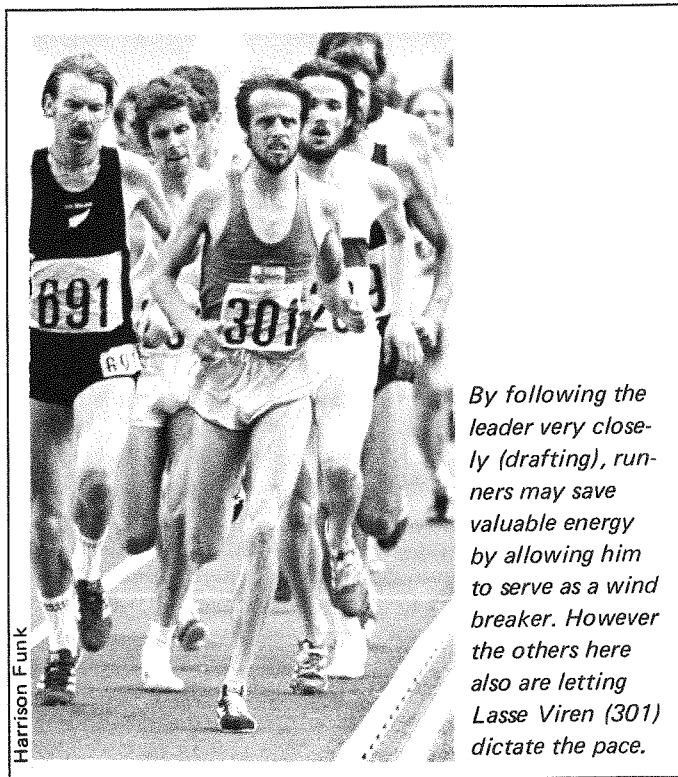
But kickers succeed in part for psychological reasons. Not only do they have unbeatably fast kicks, but also because others *expect* them to have unbeatably fast kicks. Snell toured North America during the spring of 1965 and began the tour as his usual invincible self by overwhelming rivals (including a young Jim Ryun) with his finishing burst.

Then, one weekend he traveled to Toronto, Canada, to race Bill Crothers, the 800 meter Olympic silver medalist. Snell had a touch of flu and was beaten. This was hardly a disgrace, but word spread like a brushfire among middle distance runners of the world: "Crothers outkicked Snell!" The superb New Zealander's psychological edge vanished overnight, and he never won another race.

(One of those who defeated Snell that summer was Ryun, who reigned as "boss kicker" for three years until defeat by Keino reduced his psychological edge.)

Kickers may not necessarily win more races than front-runners, but their victories seem more spectacular and so may be remembered longer. As a result, too many runners assume that kicking is the only tactic to employ for guaranteed victory. Sometimes this is true, but remember that Lasse Viren, a renowned kicker, won the 5000 meters at Montreal by leading the last six laps.

Viren understood a very important tactical rule: *A runner who automatically assumes a back position lets others dictate his race.*



*By following the leader very closely (drafting), runners may save valuable energy by allowing him to serve as a wind breaker. However the others here also are letting Lasse Viren (301) dictate the pace.*

## FOLLOWING THE LEADER

There are times when discretion becomes the better part of valor, and a runner who desires victory above all should be a follower rather than a leader. Four such instances occur when it is best to follow:

- *On windy days.* If you run into a wind, it takes additional energy to battle it. A tactical runner may choose to tuck in behind an opponent and use him as a windshield. In NASCAR parlance this is known as "drafting." When a runner drafts on a windy day during a track race, he not only uses his opponent to block the wind going down one straightaway, but also blocks the wind pushing the opponent from behind on the other straightaway. This tactic works best when the wind flows parallel to the straightaway, and is of less value in crosswinds which blow across the turns. A runner who employs this tactic must have a strong tolerance for disfavor, since his popularity among other runners (and fans) eventually will wane.

- *As a psychological weapon.* Some runners have a low tolerance for tension and wilt under the psychological pressure of having another runner dogging their footsteps. Simply by trailing a runner (wind or no wind) you may cause him to worry

about your presence and break his concentration. Although running seems an automatic function, it is not. You cannot run efficiently unless you concentrate fully on the act, and runners who worry more about those behind them than the track before them lose efficiency. Some runners, in fact, *many* runners, give up if passed forcefully near the finish line. So, where and when you decide to pass often is more important in the psychological battle for supremacy than how fast you pass.

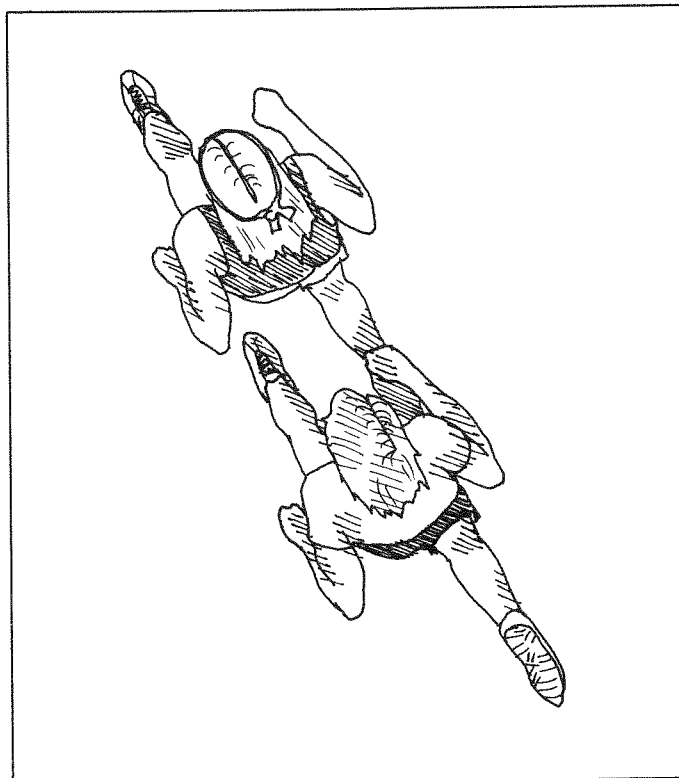
- *If you're faster.* A runner who can run his last quarter in 59 seconds, all things being equal, will defeat a runner only capable of running his last quarter in 60 seconds. If you are the latter, you do not want to be behind the former going into the last lap. If you are the former, you need only stick on the latter's shoulder to defeat him. Of course, sooner or later somebody comes along capable of a last lap in 58 seconds.

- *If the pace is too fast.* Too fast may mean any speed faster than what you consider an ideal pace. If you plan to lead a mile race in 62 seconds and someone pulls you through the first lap in 58, you are better staying behind and allowing the fast pace to lag before taking command. Sometimes, of course, the pace may not lag and you will find yourself permanently behind. But then that's racing.

## LEADERS OF THE PACK

There are occasions, even if you consider yourself a kicker, when it is unwise to follow another's pace. There are four such instances:

- *On indoor tracks.* Following may be a poor tactic on short, 11-lap-to-the-mile board tracks used in most major meets. A stretching-out effect occurs on indoor tracks. As the

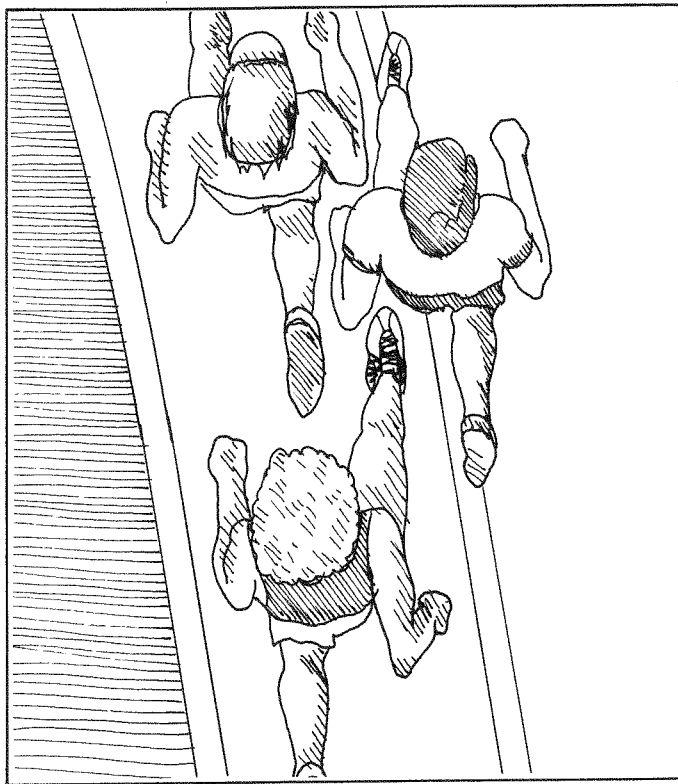


lead runner slows going through the turn, others behind him slow progressively (depending on their position behind him). The sixth runner in a six-man field will find himself slowing while still on the straightaway and still going through the turn. The leader, meanwhile, has speeded up on the next straight-

away. Since indoor straightaways are short, passing becomes a more difficult task—particularly on the last lap. The same stretching-out effect occurs in the 3000-meter steeplechase at each barrier where the lagging runners find themselves blocked by runners in the front (who lose momentum while in the air).

● *On rough cross-country courses.* There are two particular instances when you do not want to follow a runner in cross-country. One is when the footing is hazardous, because running behind someone is a bit like running in the dark. The other is when the course narrows. If you get caught behind a slower runner in the middle of the pack, the rest of the field will draw away from you. In crowded fields, you can get stomped on if you hit a sharp turn.

● *If you're slower.* This is the flip side of why you can run behind if you have superior finishing speed. If you meet one of those runners, you want to break him before the last straightaway. If the pace is too slow for any reason, you may want to, or may have to, get out front and keep it honest.

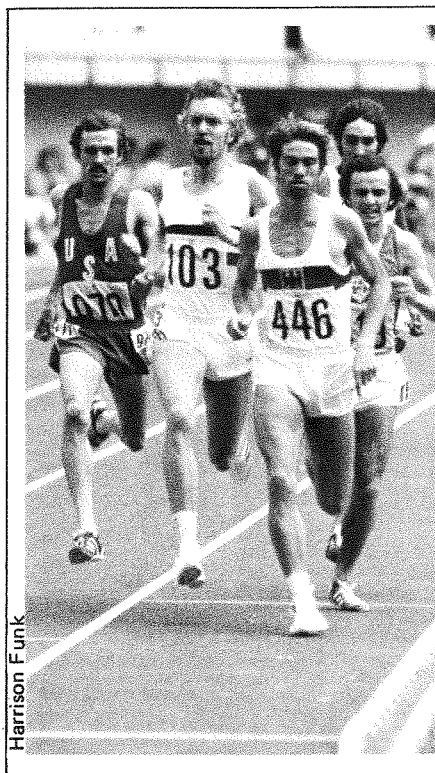


● *On hot days in road races.* Probably one of the most frustrating experiences as a marathoner is to arrive at a water point during a warm race and be unable to obtain water. This is likely to happen if you are behind a group of runners who take all the immediately available cups before you get there. If the water is being handed out on only one side and your opponent unintentionally blocks you, you also may experience trouble. Speeding up or slowing down to get the water may cost energy, but on some days it may be necessary. The runner who runs alone may suffer loneliness, but he avoids these problems.

Another tactical reason for leading in the closing stages of a race is that if you are two yards ahead of your opponent with 100 yards to go, he has to run 2% faster down that final straightaway (covering 102 yards) to beat you.

Rick Wohlhuter understood this (*RW*, July '76 "Fall and

Rise of Rick Wohlhuter") when he said, "One strategy is to say, 'to hell with everybody else,' and just keep them behind. If they work their way to your shoulder coming down that last straightaway, just hope they will have fought so hard to get there they don't have the speed or strength to go by."



*Utilizing the element of surprise, a runner like Rick Wohlhuter (left) moves to overtake the leader going into a turn, as most runners tend to ease up on this portion of the track.*

It was almost as though Rick had a premonition of the tactic Alberto Juantoreno would utilize to wrest the gold medal from him.

Some runners (who are pace-setters) find it very disturbing when other runners (who are kickers) trail them for an entire race waiting for the precise moment to storm by. Unless he is very experienced and cool, this exerts excessive psychological pressure on the lead runner. The trail runner knows this and this is one reason he stays behind.

Various methods are used to disengage a trailing runner, probably the simplest one being simply to run off and leave him. This works, obviously, only if you are clearly superior. For runners of near-equal ability, however, the lead runner must employ other tactics.

One method is to vary your pace, alternately slowing down and speeding up. Time your fast spurts (particularly in cross-country runs) after you have passed some natural obstacle or crested a hill so you can catch your opponent off guard and open a slight lead before he recovers.

Since you pick and choose the places for pace changes, you expend less energy than your opponent. You control the tempo. Of course, if your opponent is experienced (or reads *Runner's World*), he will know enough to hold back and not match your every twitch. A confident kicker may trail almost to the point of losing contact, and only move into a striking position when it comes time to strike.

In road races, while running into the wind, you sometimes can limit the benefit to an opponent by *weaving*, moving back and forth sideways, so he must constantly change position to keep you as a shield.

Sometimes while battling an opponent in a road race, I spurt when we reach a water point. As he reaches for a cup of water, I start to move. He will lose distance both while grabbing the water and while swallowing it. It's difficult to race hard those first few hundred yards after a good drink of water. This is not a wise tactic to employ on very hot days.

On one occasion I ran a two-mile track race against an opponent who had been instructed by his coach to follow my pace. Since I was doubling back after the mile, I was not eager



Harrison Funk

*A box forces the runner into a position of helplessness. But you can avoid this by aligning your inside shoulder on the shoulder on the outside of the runner in front, as Tatiana Kazankina (340) does here.*

to push hard. He was fresh, yet allowed the pace to get slower and slower, particularly after I sensed what was happening and decided to test how slow he was willing to go to remain in second. Finally, after one incredibly slow quarter, I actually started walking. The other runner, much to his coach's consternation, began walking, too. Eventually I won with a blistering kick. I think our time was around 11:30.

## THE ART OF PASSING

There is a time and place to run from behind, and a time and place to run from the front. If you run from behind, and want to win, sooner or later you must pass the runner in front of you. Passing is a tactical art in itself.

Passing on a road course usually poses no problem, because your straightaway may be 26 miles 385 yards long, but on a track you have considerably less distance to get by another runner. Let us consider three possibilities for passing moves:

- *Coming out of the turn.* This is the most obvious place to begin your pass. You have the maximum distance to run after moving wide and before sliding back into the inside lane. If your opponent offers no resistance, you need to shift your pace relatively little to get around him. If he does offer resistance, you have more time to overcome it.

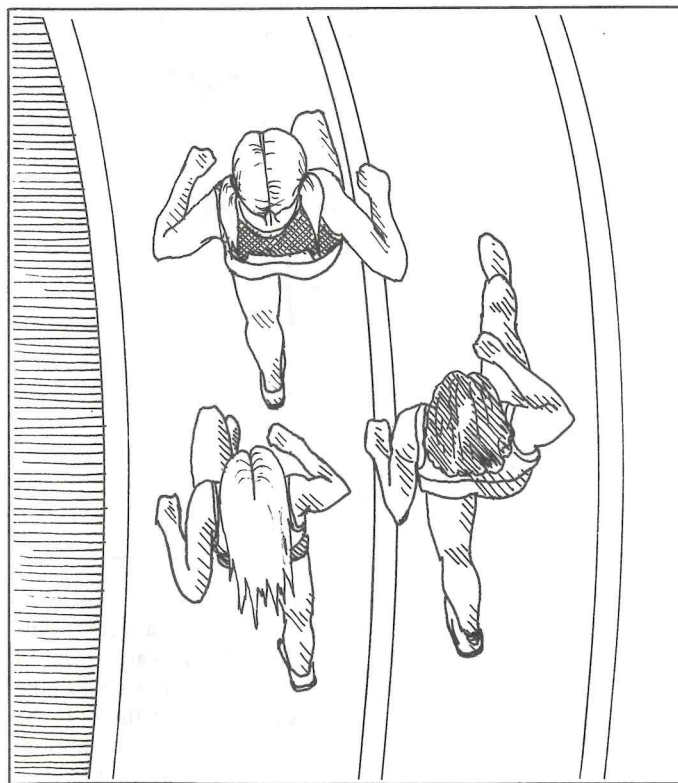
If I intend to pass somebody coming out of a turn (and I am not trying to disguise my move for the element of surprise) I will begin the pass at the apex (or mid-point) of the turn. As I pass the apex I begin easing my way out toward the second

land so that when we reach the straightaway I am beside the runner rather than behind him. This is more efficient than making a sudden move to the side when you hit the straightaway, since anything done suddenly in a race wastes energy.

Of course, everybody knows that coming out of the turn is theoretically the best passing place, so many runners float through the turns then increase their pace down the straightaway to keep their opponent from passing them. This is a good tactic if you want to maintain your lead.

- *Going into the turn.* The last 10 yards of the straightaway is where most inexperienced runners, trying to hold the lead, tend to relax. They figure they have you beaten going into the turn and want to ease off as soon as possible. This is the best time to jump them. Sometimes I make a false move coming down the straightaway, moving outside the lead runner's shoulder, but not seriously challenging him. Then, the moment he relaxes at straightaway's end, I charge past. Before he realizes it, I'm in front.

Sometimes I am the one being passed. If a runner challenges me down the straightaway and fails, I wait until the moment I see him abandon his move and tuck in behind me going around the turn. At that moment I slow down too, forcing him to stay in the outside lane while negotiating the turn. This psychological ploy defeats many inexperienced runners, who fear that in running wide around the turn they cover too much extra distance which inevitably will cause their defeat.



- *On the turn.* A lot of coaches will read this and begin nervously foaming at the mouth. Last spring I attended a junior high track meet where two runners had a stirring shoulder-to-shoulder battle the entire race. The winner did around 12:03, and I overheard the coach of the loser inform the runner he added at least 100 yards to his distance by running wide.

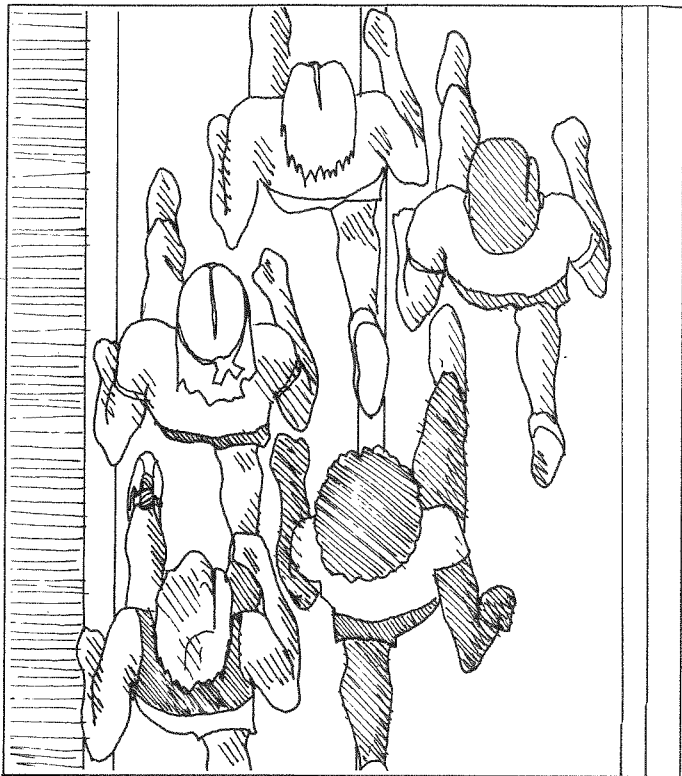
Well, if he ran in the third or fourth lane, he might have covered that much more distance. Actually, I thought the loser ran a relatively good tactical race considering his inexperience.



He ran wide on the straightaways, but moved behind or at least in tight on the turns. But his coach implanted in this young runner's mind that he *never* should pass on the turns. If I feel like passing on a turn, I pass on a turn. You are much better off running a few inches farther than waiting until the straightaway to go around and risking a break in your tempo.

And it is inches rather than feet or yards. I recall some years ago watching Frank Shorter and Jack Bachelier running a race on television. Jack ran most of the way off Frank's shoulder, and the TV commentator kept babbling about all the extra distance he was covering. He ran very little extra distance, and with Jack's long legs, compared to Frank's shorter ones, he probably could stride much more comfortably running to the side rather than directly behind.

What that junior high coach and the TV commentator failed to understand is that when you run wide in a distance race, you rarely run a full lane wide as would a quarter-miler running in staggered lanes. You run a fraction of that. When I



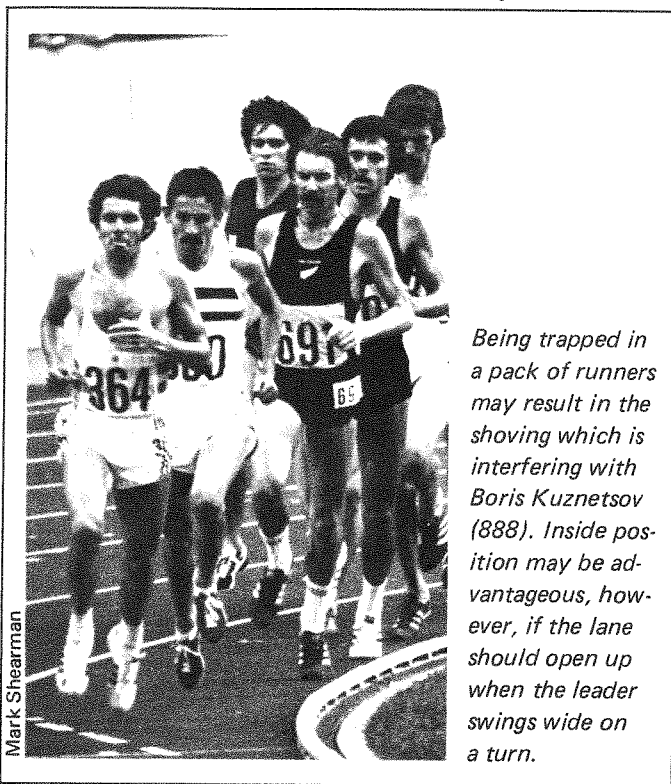
run second behind another runner I normally run slightly wide anyway, so I can see the track ahead over his shoulder and avoid being boxed (more on that later). I often like to run half-wide, meaning that my inside (left) leg is behind his outside (right) leg.

It is easier to pass from half behind than from directly behind. Unless he holds you off you sometimes can snake around a runner on the turn while still in half-wide position. It is a bit like the way a high jumper clears the bar without ever seeming to be completely over it. You dip your shoulder in front of the passed runner. You have not moved the required one stride ahead before cutting in, but you do not cut in. You have moved from a position half-wide behind to a position half-wide ahead, from which you can gradually draw away to a lead sufficient to take the inside lane. That is, if the lead runner permits you to do so.

If you do not wish to be passed in this manner, you must be willing to defend your position. You should not permit

runners to cut in front of you unless they have the necessary one stride lead. Since most runners who do cut in, do so unintentionally, a slight push or soft tap on the arm will usually warn them you intend to hold your ground. If they keep coming, it is an act of aggression, and I have found a sharp blow against the elbow will deter them. If worse comes to worst, the beleaguered runner can raise his arms and stagger into the infield, hoping to draw the attention of the judges to his plight.

More often there are no judges, or they're not watching, but once in an indoor race in Philadelphia they were. I had the



*Being trapped in a pack of runners may result in the shoving which is interfering with Boris Kuznetsov (888). Inside position may be advantageous, however, if the lane should open up when the leader swings wide on a turn.*

lead with three turns left in a mile race when a runner cut me off and forced me into the infield. That got him disqualified. I tried to get back on the track coming out of the turn and he was blocking the inside lane, so I gave him a shove (well, a fairly rough push). That got me disqualified. The third runner won the wristwatch.

What irritated me the most was that in shoving the other runner, I pushed him forward, improving his sprint. I tried to convince the judges that since the other runner was disqualified for cutting me off, he was technically not in the race when I retaliated, so I should not have been penalized. They failed to see the logic in my argument.

In long distance races run on a track, fast runners often must face the problem of passing runners as they lap them. Although it is easier to pass a slow-moving runner, the hazards of collision increase because of the great variation in speed.

For this reason I always object when officials order slower runners to move to an outside lane either while being lapped or for the remainder of the race. Officials who make such rules often never have raced themselves.

At a high school indoor two-mile in Bloomington, Ind., last winter, I thought one official was going to have a heart attack, or at least suffer a hernia, trying to move runners into the second lane just before they were lapped. Some moved and some didn't, which caused more of a problem than if all had remained near the curb.

I have two reasons for wanting lapped runners to stay inside. First, I see no reason why slower runners should be further penalized for their slowness by being made to run in the second or third lane (and I believe most other faster runners share my feelings). I usually am quite happy to move wide and run the slight extra distance. I don't need an extra advantage.

But second, and most important, if the slow runner is told to stay on the inside, I know where he is going to be and I need not worry about him suddenly moving out into my path.

This happened in the Masters Championships at White Plains, N.Y., two summers ago in the 5000-meter run. A lapped runner looked over his shoulder, saw me approaching. He remembered the officials warned everybody to run wide and get out of the way when about to be lapped. But I was closing so fast that, by the time he got the message to his tired feet and moved out, I was on his outside. He only succeeded in bumping me. He apologized after the race, but it was the officials who owed both of us an apology.

Yet, I feel slower runners should not obstruct fast runners. The boom in jogging has enriched our sport, but conversations are best carried on the infield, or in road races, rather than during track events.

In a 3000-meter race, sponsored by the Midwest Masters, I came into the turn and found my path blocked by four runners jogging abreast and chatting. I wasted no energies on obscenities. I simply cut through the infield. That time, fortunately, the judges were not looking.

Sometimes a fast runner treading his way through lapped runners can use them to his tactical advantage. By artfully dodging inside or out, a runner in the lead can break contact with those behind him. I recall one particular race two winters ago when a blizzard caused cancellation of the North Central Marathon and forced more than 200 runners of extreme variations in ability to run a 10-mile substitute race on a snowy track (*Runner's World*, February 1975). I broke fast from the starting line, despite treacherous footing, because I knew we would start lapping trail runners within a mile. Anyone more than 10 yards behind at that point would get hopelessly enmeshed in the crowd.

That is exactly what happened. Soon only Barney Hance of College of St. Francis and myself remained in contention. On a dry road course, Barney would have chewed me up and spat me out, but on that icy track with runners curb to curb, neither of us could gain on the other. I had fun psychologically playing with him because when he had the lead and moved wide to pass a group, I often found a gap on the inside and moved ahead of him. Eventually the organizers threw sand on the icy curves (improving traction) which allowed Barney to demolish me in the last few miles.

## USING AND AVOIDING BOXES

Nevertheless, tactical knowledge often can tip the scales when two runners of equal ability meet. This is particularly true when it comes to boxes. Experienced runners get boxed less often than novices, or if they do get caught, know how to work their way free more easily.

A box occurs when a runner in position behind the leader suddenly finds another runner on his shoulder, boxing him in and preventing him from passing. If the box occurs on the last lap, it may result in defeat. It is a moving box, one in which there is not one wide runner but a stream of runners passing, the one on the inside may find himself going from second to last with little control over his destiny.

If the box occurs in the middle of a race, many runners simply relax and wait for the wide runner to move either forward or back. (After all, his junior high school coach once warned the outside runner not to run wide.) But there are several ways in which a runner can disengage himself from a box.

● *Slow down.* If you slow your pace, the runner boxing you in on the outside will probably move into your position, thus freeing you. But in doing so, you will have surrendered position. And if you do this on the last lap, you may have surrendered too much ground on the leader.

● *Ask to get out.* Most boxes occur unintentionally, and if you ask the runner on your shoulder to give you room, more often than not he will do so. In tactical racing, you want to take advantage of other runners, but you do not want to take unfair advantage.

● *Shove your way out.* This is risky business if the judges are watching. This tactic should be employed only in desperation and probably only if the wide runner is a teammate of the leader and is deliberately holding you in. (This is an illegal tactic and may result in the disqualification of both boxing runners.) However, you can push your way out of a box more subtly by exerting gentle pressure while going around the turn and forcing the outside runner wider than he would like to be (opening a gap by the time you hit the straightaway).

● *Move inside.* This is a desperation tactic, and one that usually only will work on the final straightaway. If you find yourself boxed at this point in the race, waiting for an inside opening may be your only hope. What often occurs is that the lead runner, in his closing sprint with another outside runner on his shoulder, often moves wide either to force that runner farther out or, simply because of centrifugal force, finds himself sliding toward lane two. This sometimes opens the door for another runner to come through on the inside. But the door can close as soon as it opens.

The best defense against boxes is not to get in them. The way to avoid boxes is to run off the shoulder of the runner in front of you, in the same outside-inside overlap stride mentioned earlier. Thus positioned, you cannot be easily boxed, because by moving slightly wide you can be free of the runner in front of you. By thinking ahead you can avoid most boxes.

The same is true in the rush for position at the start. A runner who starts in the middle often gets caught, as others on the outside sprint to reach the pole, then slow down once they get there. If I have a choice, I usually start in an outside lane rather than an inside one—unless it is *the* inside one. When in the middle, I try to edge outward to avoid being hemmed in.

## TACTICAL SENSE

Some purists may object to the use of tactical devices to defeat other runners of equal ability. They consider tactics unfair. But to remove tactics from racing would also remove a lot of fun from the sport. I enjoy getting out on a wide-open road course and running solo with only the clock to beat, but on occasion I like to get on a tight track for a tussle with other runners. To each his own.

These maneuvers, as well as other tactics described in this article, do not come easily and cannot be learned by reading a magazine. Many runners, in fact, use these maneuvers and tactics without giving much thought to the fact that they are using them. The best teacher, in the long run, is experience. ●

*"If you're fond of sand dunes  
and salt sea air,  
quaint little villages  
here and there,  
you're sure to fall in love  
with old Cape Cod."*

**P**atti Page sang those words and made it to the Hit Parade in the early '60s. But it took until the mid-'70s for the area to make it to the Road Runners' Hit Parade.

"Winding roads that seem to beckon me. . ." and apparently quite a few others. Who could resist an entry blank that read: "The race is 7.0 miles long and is run along the beautiful Falmouth shoreline. It begins in front of the Woods Hole Fire Station. . ."

The entry blank only started to tell the story. Woods Hole is the southwestern extremity of the Cape. It's known most widely as home of the US Oceanographic Institute and as the origin of the mythical "Hooper" from *Jaws*.

It's a small, quaint community with a narrow main street canyoned by old two-and three-story buildings recalling the days of iron men and wooden ships. Many a northeaster has blown down these streets and rapped upon these shuttered windows, but Woods Hole has withstood all.

Traditionally, only the wealthy have come to vacation at the Cape. But on race day, it belongs to everyone—specifically, 2090 entrants, 1856 of whom picked up their numbers. All are crammed into the street in front of Captain Kidd's eating and drinking establishment.

The rooftops are peppered with spectators. One with a bugle sounds "Call to the Post" and is regaled by cheers from the throng below.

The official starter has the gun up as he stands on the passenger seat of a Porsche. His girl friend, the driver, misses first gear (chortles from the crowd), finds first, the gun clicks, misfires. We're running. The gas pedal hits the floor, the rollbar hits the starter in the gut, the gun fires but the clocks and runners have been moving for several seconds.

We dash across the drawbridge with a large metal mesh (just what you want to find with thin racing shoes), up the first hill, right turn, through a clump of trees and downhill, where Cape Cod opens up to us.

Amby Burfoot and Vin Fleming are in the lead, with too many people behind them to count. You can't help but be aware of everything: the sand dunes, the undulating road, the rocky beach, the bicycles paralleling our course on

# Winding Roads that Seem to Beckon

by Paul Fetscher

the path 150 yards to our right, beyond them triangular patches of white, billowing in the wind against the backdrop of the far-off shores of Nantucket. A welcome sea breeze makes us more comfortable as we journey.

Clumps of enthusiastic spectators, well-armed with hoses, sponges and oranges, provide oases along the way. Around Falmouth Harbor and back to the sea. A left turn and a hill crested by the Brothers Four restaurant and pregnant with people. Over the hill and a ribbon of asphalt runs the last 300 yards through a sea of color.

More people are here than the entire population of the town. Cards with three-foot-high numerals display the time every 10 seconds from high atop a gabled house at the finish line.

Frank Shorter is first in record time of 33:10, Bill Rodgers second some 20 seconds back with hundreds to follow.

It is a race of T-shirts. Shorter's says, "McSorley's Ale, Alemaster"—very much in keeping with the tone of the weekend. Others read "Falmouth Track Club," "Brothers Four," "Captain Kidd's," "Elliott Lounge, Boston," "The Grog Shop, Philadelphia," and "Copperfield's, Long Island."

The Brothers Four has a mileage chart on the wall with more than 30 drinker-runners listed along with their daily and weekly mileage for the last seven weeks in preparation for Falmouth. Sharpless Jones, a 6'3", blue-eyed blond with an over-developed right elbow has been most consistent in preparation. Some hapless character went to 140 miles in the second week and was never heard from again. Another of the names on the chart is Tommy Leonard.

Leonard is a bit of an overgrown Leprechaun. His ruddy complexion and stark black moustache surround his ever-present smile. The gleam in his eyes gives but a hint of his enthusiasm. He's built like a tank and, surprisingly, has more than one sub-three-hour marathon to his credit. It's been said that his heart is the shape of Cape Cod and just as large.

Tommy is a familiar sight around many a bar, ranging from the Elliott Lounge, where he was tending the day of the Boston Marathon, down to the Brothers Four in Falmouth Heights.

Four years ago, the thought occurred to him that it would be natural for a summer race to be run from one bar to another. He obtained sponsorship and his enthusiasm was contagious. The race grew from 200 participants two years ago to nearly 2000 this time.

After the race, the scene is one of substantial conviviality, cut-offs and cut-ups. The Brothers Four is clearly post-race headquarters. A self-appointed welcoming committee congratulates everyone passing across the front porch. From the front room with sweeping windows, you can see the curved coastline hooking out to Woods Hole and two more contestants cresting the hill some two hours after Frank Shorter led the assault.

Reporters are having their assault on Frank in a back room. Some are asking the inevitable questions.

"How'd you feel about losing to Cierpinski in Montreal?"

Frank, gracious in defeat as well as victory, patiently replies, "Well, I wasn't too happy about the whole thing. I really can't complain because I ran the best I could on that given day. But it's a little difficult to wait for that one given day every four years."

A band plays sing-a-long music of the early '60s. In a break between songs, the lead singer calls out, "Let's have a hand for the guy who made this race what it is. Frank Shorter got first. That's nice. Bill Rodgers got second. That's nice, too. But Tommy Leonard made this race, and that's great!"

When Tommy walks in to the front room, he's greeted by "Happy Birthday," his 43rd, and what a day to remember.

Perhaps Frank Shorter said it best: "There are just so many races a year you can get deadly serious about. This isn't one of them. Not to say we didn't run hard today. We really did (4:45 mile pace). But this is a fun-type race. We've all enjoyed it. I'll definitely be back next year." ●



# Germany's "Runs for the People"

by Mike Spear

If Austria and Switzerland are among the prime ski areas of Europe, then Germany surely is paradise for distance runners.

For more than a dozen years, Germans in cities, towns and villages across the country have flocked to "Volkslaeufe" (people's races) on weekends that cover anywhere from 800 meters to 100 kilometers.

More than half a million runners ran in Volkslaeufe in 1975, according to Lutz Nebenthal, press director for the German Track and Field Association (DLV), and that number is expected to grow this year.

The Volkslaeufe, as the name implies, are for everyone—men, women and children. No club or organization membership is required. All a participant has to do is get to the race site and pay a registration fee.

Getting to the races in Germany is easy, too. They have grown in number each year, and this year more than 400 will be held, Nebenthal says. On any weekend there can be from 4-20 races in the country, and usually one can be found within an hour's drive if you live in Germany.

It wasn't always that way. Fourteen years ago, there were no Volkslaeufe in Germany. Running was done but it was all in private clubs or by top-level athletes under the auspices of the DLV.

Then along came Otto Hosse, a champion skiff rower of Bavaria, who had gotten into running as a way to exercise during the winter months when the lakes and streams in the shadows of the Alps were frozen.

The 6'6" Hosse began running in his late 20s in cross-country and forest running championships. And he is candid about his running ability.

"I was good at rowing but I am not so good at running. I know that," he says. His best time for 10 kilometers is just under 42 minutes and his best time for the marathon is about 3:39.

But he liked running, and he has stayed with it. As his running increased, he saw the benefits from it—fitness and good health—and he became concerned about what he saw happening to the German population.

"During the so-called bad times after the war when the people didn't have enough to eat here in Germany only about 10-15% of them had heart and circulatory problems that proved fatal to them," he says. "Now Germans ride in their Mercedes everywhere, they eat and drink a lot, they smoke and maybe

as many as 70% of them die of heart or circulatory diseases."

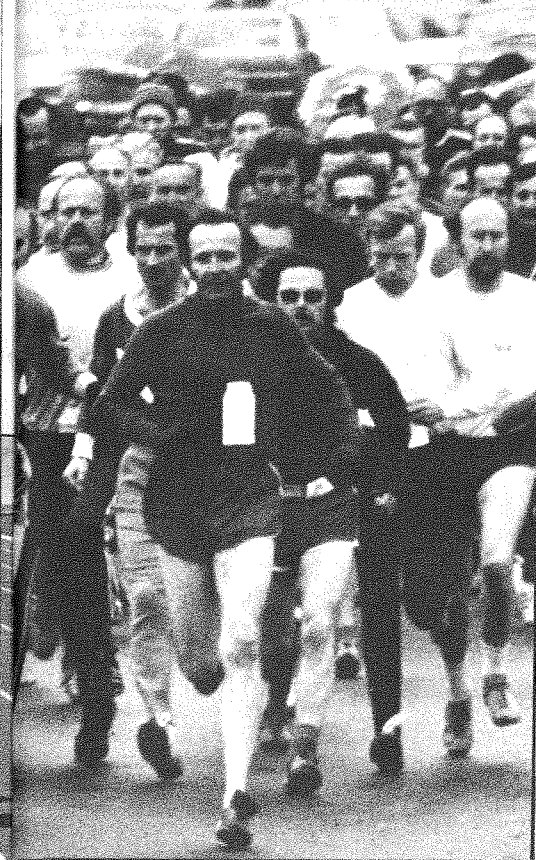
Hosse figured that running was the answer, and he set about trying to organize a running event in which anyone could compete. Using the military races conducted in neighboring Switzerland as a model, he and three runner friends set up the first Volkslauf of Germany in Bobingen, his hometown. This was in 1963.

"People said we were crazy," Hosse says. "We charged a five-mark (about \$1.25 at the exchange rate then) registration fee and people said, 'No one will pay money to come and run 12 kilometers.'"

"But we went ahead. We worked on it for a half-year. We advertised in train and bus stations and at big industrial plants, and on race day 1652 people registered. They came from all parts of southern Germany and Switzerland."

What lured so many?

"Health and fitness for sure, but there is another reason," Hosse says with a grin. "All people like medals, and runners are no exception. In our race, everybody who competed got a medal, just like the winner, to take home and that's one of the main reasons they came. They won't always admit that they like the medals that



*"More than half a million runners ran in Volksläuf in 1975. . . ."*

much, but they do for sure."

The races began to spread rapidly, and by 1970 they were being conducted in all parts of Germany. There is a good

*Otto Hosse*



Mike Spear

reason for their rapid spread, Hosse says. It is what he calls the infrastructure of the German sports clubs. Also, he says, the time was right.

"In America, the sport programs are organized in the schools and universities," Hosse says. "In Germany, our sports are centered in the towns. Every city, town and village has its sports clubs (Turnvereine) where different sports are played. The clubs came to me and asked me how to organize runs. I did quite a bit of traveling at my own expense during that time. It's funny, too, because even though the races started in southern Germany, now more of them are conducted in northern and western Germany."

The DLV began sanctioning the races in 1969, much as the Amateur Athletic Union (AAU) sanctions races in the United States, Hosse says.

Hosse is now 53 years old and he runs a cold storage warehouse in Bobingen. He has been running for 22 years, and he competes almost every weekend. Surprisingly, he wasn't involved much with sports in his school days but there was good reason for it.

"I was the worst boy in my school in sports," he readily admits, but that was largely because of his beliefs. "My family didn't like the Nazis and I wasn't a Hitler Youth. I didn't like the kind of sports they were emphasizing that would help with the later aggression plans."

Now he takes 10-kilometer runs three or four times a week, and on weekends he runs 20-30 kilometers, depending on the races.

At most Volksläuf there are 10- and 20-kilometer running events for men and women that are divided into age classes. Each class covers about a 10-year age spread. Occasionally, there is a 30-kilometer or a marathon event. And there can be 800-1200-meter runs for women and children.

Hosse adds that the 10-kilometer and the marathon runs now attract the most interest. The 10-K race gives a runner a chance to push for a good time, and the marathon is perhaps an ego trip but a hard earned one.

"Here in Germany, every man wants to tell his friends and, of course, his fiancee, 'I'm a marathon runner!'" he says.

Hosse has run more than 40 marathons.

"I run seven or eight every year and I always try to make the one in Athens," he says.

A Volksläuf participant gets a card when he registers, and he pins it to his shirt. (No large numbers are used except for the marathons.) The cards are marked at control points along the racing course, which is usually a two-rutted road through fields and forests.

At the finish gate, the card is stamped with a time clock and turned in, and a medal is given to the runner. The medals vary in size. They can be as small as a quarter or as large as a silver dollar. They hang on a ribbon and usually contain the name of the club sponsoring the race, plus a relief of some prominent landmark or building in the area.

Most runners carry two log cards provided free by the DLV. One is for logging the number of racing kilometers run and the other is for logging the number of races run. When the log cards are filled, patches and pins are given out by the DLV for a small fee.

It would be hard to put an average on the number of runners who compete at each race because there are so many variables, but perhaps 800 would be a fairly accurate figure.

If the race course is through mountains, as it often is, many runners stay away. Word gets out quickly on the courses. Generally, the flatter the course the more runners.

When the race is over, the club provides showers and all the hot tea a runner can drink. Then, too, as everywhere in Germany, there is a wurst stand for a quick snack before going home. ●

# A Visit To The Land of Viren

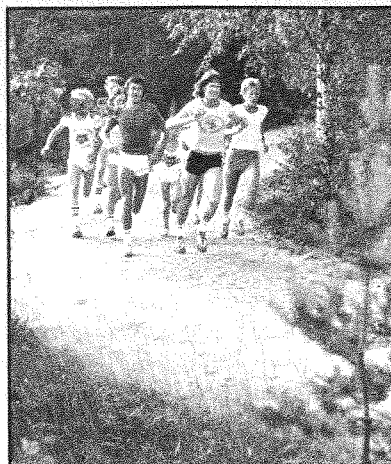
by David Chanoff

**M**idsummers, the feast of St. John, marks the summer solstice. In the Finnish village of Oulainen, there are 24 hours of daylight. It is a time when the Finns renew their perennial hope that this summer, as opposed to previous summers, the sun will bring a modicum of warmth as well as light.

Midsummers is also a time for families to get together. And since most Finns are only a generation removed from the land, this usually means gathering at the parents' or grandparents' house in the country. That was why I happened to be at my wife's mother's home in Oulainen this summer, along with a number of near and distant relations. Many of them had brought their running shoes with them.

A running friend of mine back in Boston had warned me to get in shape if I wanted to work out with the Finns, and I had taken him seriously. Maybe he suspected that the spirit of Hannes Kolehmainen and Paavo Nurmi lives on in the hearts of all middle-aged runners there. He might be right. The night of our arrival, a relative named Raimo suggested a "little trip" of 20 kilometers or so for the next day.

Just as I was beginning to wake up, the road was revealing itself as a cow path. Before long, the cow path disappeared and we were running on a track through the forest. Nestled in the woods about a mile from town was Oulainen's "puru rata." The roughly circular trail had been cut out of the



Kurt Eriksson

*New Zealand's John Walker, dark shorts, and Rod Dixon, dark shirt, lead a pack of runners through the saw dust and wood chip trails of Finland.*

forest, and the fallen trees converted into sawdust and wood chips. This material had been packed on top of the new trail.

The result was a beautiful running path a mile or so long. For a runner with knee problems, it was a godsend. The packed wood chips made a surface that was as soft as butter, and I found that I comfortably could cover distances that would have laid me up for days had I been running on asphalt or concrete.

My Midsummers running companions were a fairly typical lot: a doctor, several engineers, a lawyer and a school teacher. As is the case in America, their reasons for running were not especially clear cut. However, one noteworthy factor may be that Finland is a land of

60-year-old widows whose husbands have died of heart attacks. In a place like Oulainen, where there is a small and visible population, heart attack deaths seem to be epidemic.

Many factors may, of course, be involved. But the standard Finnish diet has to be suspect. It includes large amounts of saturated fats and sugar, and very little in the way of fruit or vegetables. The national drink is coffee, which often serves as breakfast, accompanied by a slice of coffee bread. In more health-conscious households, instead of the sweetbread there are open-face sandwiches of heavily buttered bread, high-fat cheese and cold cuts. Lunch is commonly the day's big meal and almost always includes large helpings of buttered potatoes and often

a meat dish. Milk and beer are the table beverages, and always there is the bread and butter. Coffee is served frequently during the day, along with the ever-present coffee cake and pastries.

When our stay in Oulainen was over, we headed north to visit some old friends in Lapland. This is not an easy country and it is no more suited to running than to other civilized *joies d' esprit*. The low mountains are picturesque but hard as hell to run up and down. The road from the Swedish border to Rovaniemi, capital of Lapland, was used more by reindeer than cars, and the browsing herds stared at what human traffic there was with deep skepticism. Our friends told us that the reindeer liked the road because its 15 or 20 yards of cleared width gave them some relief from the black flies that infest the forests.

What reindeers consider a relief is not necessarily a relief for human beings. Sensible hikers cover themselves with clothes and smear on thick gobs of greasy bug dope. Just harboring the idea of running around these forests in your underwear is taken as a sign of mental disturbance. Actually doing such a thing is proof that the borders of sanity have been left far behind.

The black flies are only one part of a triple scourge. Mosquitoes and no-see-ums are equally unenjoyable. Here a runner finds the right speed quickly. It's the speed at which these insect pests find it difficult to attack. It occurred to me that this would be a perfect training ground for competition long-distance men. Once you start, it is impossible to stop or even slow down before you get to some friendly shelter.

Not surprisingly, I did not meet any other runners above the Arctic Circle. But I did come across an even more improbable sight. A hundred miles north of Tornio, hurtling toward me down the highway was what I first took to be a crazed skateboard fanatic escaped from California. As he drew nearer, I saw that it was wearing skis with wheels attached and was wielding ski poles. Later, from our car, I saw a number of similar figures skiing wildly down the highways on their brakeless contraptions. When I mentioned this sight to Finnish friends, they merely smiled sadly and shook their heads. Apparently it is a training technique that has not yet achieved general acceptance even in this land of determined sportsmen.

From Lapland we went south to Teisko, a farming parish in middle Finland. In this area, the running is on

dirt roads that lead nowhere. Forest paths go into the forest and stop. Farm roads lead to farm houses where you turn around and run back to where you came from.

Only once was I bothered by a dog. It was apparently so startled by the sight of a man running down the road that it broke its rope to join in the fun. It chased me and was in turn chased by a fat farmer who alternately screamed threats at the dog and apologies at me. What a change from the United States where dog owners often assume that anything walking, running or biking near their houses is legitimate prey for their vicious animals. In Finland, humans take priority and dogs are kept tied.

The soft hills and endless lakes of middle Finland made running a pleasure. All roads other than major arteries were unpaved and easy on the legs. The scenery was magnificent. Everyplace has its disadvantages, though. Many runners, myself included, find that this activity creates a steady downward pressure on the bowels. In Finland I was never far from a convenient patch of woods, but using them could be a major trauma. Exposing myself to the ubiquitous mosquitoes was a foolhardy business, and even worse was a nasty variety of stinging nettle that occurred here and there. An innocent rest stop could result in temporary paralysis of the *gluteus maximus*.

But I forgot the bites and burns when I saw smoke curling up from a sauna chimney. The Finnish country sauna is a different thing altogether from the sterile hot boxes that masquerade under that name in American health clubs. Usually, there is a dressing room and a sauna proper. Inside the sauna is a wood burning stove piled high with igneous rocks. Between the stove and the tiered benches is a tank where water is heated.

Above all, the sauna is a social experience. You talk, relax and enjoy yourself with family and friends. Long handled ladles are used to throw water on the hot rocks and create waves of heat. Often, there are bundles of leafy birch twigs that lend their own woody aroma to the moist air.

These "vihtat" play the major role in a sauna ritual that bemuses most foreigners at first. The bather flagellates himself snappily on the back and legs. But what looks for all the world like a strange form of Scandinavian masochism turns out to be a wonderful technique for stimulating the skin.

Ideally, the sauna is located on the shore of an ice cold lake, and when the sweat has begun to pour off your body you are ready for a plunge. Then back to the sauna. Repeated several times, this procedure leaves you with a mixed feeling of relaxation and invigoration that eliminates the last traces of weariness.

Our stay in Finland ended with a week near Helsinki. Relatives there live in Olari, one of the new planned communities just outside the city. Olari is a model development that will eventually house about 12,000 people. It includes apartment houses, row homes, schools, offices and shopping areas all located on walking streets. There is a great deal of open and wooded space within the community, and each cluster of buildings has its own playground. An extremely attractive feature is that the buildings are all in human scale. The largest apartment houses might contain 30 or 35 apartments. More commonly, 10 or 12 families live in the same building.

Olari, of course, has its own sawdust track winding through the woods. This one is three or four yards wide and is used heavily. But whoever designed it had a peculiar sense of humor. The last 150 yards are almost straight uphill.

In late July, the woods on either side of the track were overgrown with blueberries, and runners mixed with ardent pickers out to fill their plastic cannisters. It wasn't unusual to see someone in shorts and running shoes taking a blueberry break, especially on that last uphill stretch.

Various paths lead from the sawdust trail toward other Helsinki suburbs. The county of Espoo which stretches out to the west of Helsinki is really nothing more than a large forest broken here and there by residential neighborhoods, shopping centers and planned communities.

The Finns still do a great deal of walking and biking to get from place to place, and the entire county is crisscrossed with paths, many of them lighted. They make an ideal running environment. The more serious runners use the paths in summer to prepare for the series of long-distance races held in Helsinki in September. These races mark the end of the season for many Finnish runners. In the fall, the weather turns cold, the days begin to shorten drastically and attention turns to cross-country skiing until the late spring sun begins to warm the land again. ●



# Daws' Path to Greatness

An Olympian's views on how to meet your potential.

**R**unning has at least two standards of greatness. The first is an absolute. It's measured at such places as the Olympic Games and in such lists as world records. Very few runners ever get to outrun all of their contemporaries, let alone all who have raced before them. Those who do are honored for it.

The other type of greatness is relative. It is measured by how close one comes to his or her potential, no matter how limited it might be. Everyone has the chance to achieve this greatness, and therefore it is more important to more runners than the first type. But no awards and little attention are given on this basis.

So, few of us realize that Ron Daws is one of the greatest long-distance men in US history. He wasn't there in the absolute sense, perhaps, but was in relative terms.

In 1968, Daws made the Olympic team as a marathoner—the last “slow”

runner to do it. His teammates that year and the runners in the two Games since have all been world-class trackmen. Daws never broke 4:30 for the mile or 9:40 for two miles in college.

The first 10 years of Daws' career included an almost unbroken string of disappointments. He didn't begin to approach his potential until he was in his late 20s, and he was 31 when he qualified for the Olympic team. Ron is, above all, proof that persistent and carefully planned training can turn a slogger into a capable racer.

No one knew much about training when he began running in 1953. He writes in his new book, *The Self-Made Olympian*, “Looking back on the uncoordinated concoction of walks, runs and sprints we did in the name of training, I see how little my coach and I understood the rudiments of conditioning.

“To better understand our archaic approach, it must be remembered that



we were almost totally ignorant of what other runners were doing. No wonder that runners and coaches charted and recharted the same expanses of ground when they devised training methods."

More than 20 years later, the runner from Minnesota says, the problem is just the opposite. We have *too much* information on training and are confused by all we hear and read.

Daws says, "What prompted me to attempt this book was that for all the materials that now abound on the subject, runners by and large remain in a quandary regarding their own training."

The biggest mistake we make, he notes, is that we do too much of the wrong kinds of running at the wrong times of year. In other words, we follow no plan in an era when time-tested plans are available.

"The plan may be to have no plan," Daws says. "Running is decided day to day according to mood. While this unstructured approach may work, more risks are involved when the runner does what he wants and not what he needs."

Ron tells in his book of coaching a high school runner by mail. He had the boy on steady distance work all winter. "Then he became curious about his speed and ran a two-mile time trial. It was the worst thing he could have done, and I told him so. The faster he time-trialed in December, I predicted, the slower he would run in June."

Daws convinced the boy to go back to mileage. But he took the advice too seriously and went twice as far as the schedule suggested. "You will be the fittest guy in the bleachers come state meet," Ron said. The young runner was crippled by achilles tendinitis before the letter arrived.

This case illustrates Daws' contention that training isn't simply running whatever way your wishes take you. Preparing for competition is doing the right kind of running, of the right amounts and paces, at the right time.

Ron himself took his direction from Arthur Lydiard of New Zealand. The Lydiard system has an excellent track record for putting runners in peak condition for their most important races. Lydiard-trained runners won four Olympic gold medals in the 1960s, and Montreal champions Lasse Viren and John Walker can trace their methods back to Lydiard.

Daws writes, "Although Lydiard developed his basic concepts 25 years ago, they still remain the latest word in conditioning. Perhaps they have endured so long because they are found

in the fundamentals of physiology and do not go into and out of vogue like the color of running shoes."

The system involves much more than running lots of miles—the "100-Miles-Every-Week" syndrome which developed in the 1960s from a misreading of Lydiard. In fact, he advised doing 100-mile weeks only for a rather brief period each year.

"In a sense," Daws says, "the whole purpose of Lydiard's marathon-type buildup is to prepare the runner to survive the grueling workouts and time trials that lead up to the racing season."

Daws sees five distinct pieces to the Lydiard training puzzle. They fit together in this order:

1. **Base Building.** This is Lydiard's 100-miles-a-week period. Your own target may be less. But whatever it is, approach it gradually. Then, when it is reached, begin to run faster rather than trying to go farther. ("Don't run hard until you can run easy," Daws says.) Vary the daily distances and efforts.

2. **Hill Training.** The part of the Lydiard system most often skipped is this one. It shouldn't be, because it provides an essential transition between slower and faster running. Daws advises cutting back somewhat on total mileage and adding three hill sessions per week. These involve fast work both up and down hills.

"The objective," Ron says, "is to use the endurance base as a springboard to developing stamina, strength, rudimentary speed and up- and downhill technique. It's the first venture into anaerobic (oxygen-shortage) running."

3. **Sharpening.** It might be called "race practice," since you're now going through the race distance at slightly slower pace—or through portions of the distance at full pace. Add 2-3 sessions of interval running, time trials or minor races each week in place of the hill workouts.

Daws writes, "Most of the work now has been done. What's left is to pull everything together, develop the ability to function anaerobically, learn pace and redevelop speed."

4. **Serious Racing.** Training all but ceases, according to Daws. "You shouldn't train while racing hard because you don't have to. With the methods described earlier, by the time the big races start you will already be at peak fitness. All you need between races is light running to stay loose and fresh, plus some sharp, but not exhausting, speed work."

5. **Rest.** Daws, like Lydiard, believes that peak form can only be kept for a month or so. Then the runner must rebuild—but first, a two-week break.

Ron has drawn up sample yearly plans for US runners aiming at 2-3 peaks per year:

#### TRACK AND CROSS-COUNTRY

December—base mileage  
January—hills and sharpening  
Feb.-March—indoor racing  
March (last half)—base mileage  
April—sharpening work  
May-June—track racing  
June (last half)—rest  
July—base mileage  
August—hill training  
September—sharpening  
Oct.-Nov.—cross-country racing  
Nov. (last half)—rest

#### ROAD AND CROSS-COUNTRY

Dec.-Feb.—base mileage  
March—hill training  
April—sharpening  
May-June—road racing  
June (last half)—rest  
July—base mileage  
August—hill training  
September—sharpening  
Oct.-Nov.—cross-country racing  
Nov. (last half)—rest

Daws adds, "I don't believe in racing year-round. Those who do rarely hit their potential. But if you must race for months on end, at least have one (mileage) build up period where you race infrequently."

Ron raced when it counted. Using the schedule outlines, he not only won national road running championships, but also set American long-distance records and made a US Olympic team. He also improved dramatically in the track events which had frustrated him early in his career. He cut his two-mile time from 9:43 to 9:09 and his three-mile from 15:22 to 14:01.

Those times won nothing big, but were satisfying to him because he outran the apparent limits of his potential. Daws draws from these times the conclusion that "no runner is so untalented that he cannot improve vastly. I'm not claiming that any runner with club feet and asthma can, by scheming and whipping himself in training, beat those of world-record caliber. But in fully extracting his innate capabilities he may venture into worlds he never dreamed of." ●

# The Cross Police

About two years ago, Bob Burke, the athletic director for the Los Angeles Police Department, had a problem. His mind was filled with past accomplishments of the department's running team, but it was his job to dream up new challenges to excite the imagination and test the torso.

He and 13 members of the long-distance relay team had completed several major runs. There had been a warm up in 1969 from Los Angeles to San Diego, down the coast a hundred miles or so. Then came a Los Angeles to San Francisco jaunt.

Next, there was a challenge from the Compton Police to run from Compton, in Southern California, to Northern California's San Leandro and back, a mere 1012 miles. Following was a 2000-mile stretch of the legs from the Mexican to the Canadian border.

There had even been a relay to determine if the police team could beat the United States Postal Service at delivering a letter up to 400 miles. The relay men brought the mail home faster than the post office vehicles.

In 1974, the group moved to more serious relay running, 3881 miles from Washington, D.C. to Los Angeles. This was a prelude to the latest and most ambitious effort, "Bicentennial Relay of Goodwill" to salute America's 200th birthday and the Olympic Games in Montreal. It would go from Los Angeles to Montreal, 3765 miles.

Preparations for this summer's run included writing more than 1000 letters soliciting cooperation from government and business leaders in the 10 states and two Canadian provinces along the route.

Meanwhile, the runners (average age 39½) took to the cross-country trails to train for sizzling desert heat and the chill of mountain peaks exceeding 8000 feet. They each ran 4000 miles in the 10 months before the relay. Just before the start from Los Angeles Memorial Coliseum (home of the 1932 Olympics), each participant was running more than 100 miles a week.

On American Flag Day, June 14, the 14 relay runners, 11 drivers, a doctor and an Amateur Athletic Union official started their overland trudge. The participants and support staff would call four motor homes and two passenger cars "home" for the next 20 days. They proceeded north to Spokane, Wash., then took a hard right and continued toward the Olympic host city of Montreal.

Each man was to run 10-mile legs in 75 minutes, resulting in a daily team mileage of 268 miles, to account for a total of 270 miles per man.

Well-defined regulations governed the run, including, "The race will continue under any and all weather conditions until the team crosses the finish line."

It is not surprising no sympathy was extended to the sick or injured.

by D. Dudley

# Country Chase

"Regardless of injury, no runner will run less than 10 miles at one time. If a runner is forced to quit running prior to completion of his leg, the next runner will complete the fallen team member's leg and will also run his own."

On the road, routine and anticipated difficulties arose. Altitude sickness, influenza, queasy stomachs prompted by a diet of hamburgers and soft drinks, a traffic accident and irate farm dogs caused fleeting distress. Tempers were on edge because each man was required to run twice every 16 hours with only 4½ hours sleep—and on some days no sleep at all. Aside from these irritants, everything went well up to 2200 miles.

"At this point, I believe it was someplace in Michigan," Bob Burke recalls, "the guys fell apart. The team was nine hours ahead of schedule, running 66-67-minute legs."

But by then the combination of gravel, running on inclines, and in rain and heat had deteriorated the shoes—and, more importantly, the feet inside. (Burke says, "Some guys ran their 10 miles in blood.")

One deeply disappointed runner had to drop out with feet that were ghastly, looking somewhat like a pair of putrified peaches. He was found to have blood poisoning. The remaining 13 runners accepted the challenge of additional mileage.

The relay went through rural areas, and the big city policemen discovered

that Middle America is there. Some Middle-Americans traveled 500 miles to watch the runners as they passed. Some engaged in conversation, others yelled their support. Thousands of spectators applauded the principle of the run, and the individual and team effort of the relay runners. Antagonism that had been forecast never materialized. (There had been warnings that dissident groups would "blow out the candles on the Bicentennial cake.")

It had also been strongly indicated that the runners might encounter hostility from the French-speaking Canadians who reportedly "hated the Americans." Nothing could have been further from the truth.

The runners triumphantly concluded their Goodwill Relay in Montreal after 19 days, 19 hours and 14 minutes on the road. At the finish line, there was a 20-man police motorcycle escort, Canadian government officials and an enthusiastic crowd, which included many French-speaking Canadians, chanting, "Happy Birthday, America."

With the relay now several months past, it would seem Athletic Director Burke could relax, lounge around the police academy locker room and swap running tales. But no, he has a problem.

What will be the next challenge? Well, there is always the polar route relay to the 1980 Olympic Games in Moscow. I wonder if Adidas makes snowshoes? •

*Aerial Photography courtesy Hatfield Aerial Surveys, Los Altos, CA*

ley Walker

# Little Old Ladies In Track Shoes

by Walt Belcher

Clara Wise “runs” the 440 in six minutes. While that may not make the *Guinness Book of World Records*, it’s remarkable when you consider Clara is 88 years old and makes her laps while wearing red high heels.

Before jogging three miles, Eve Leal swims a half-mile and plays a game of tennis, if she can find a partner. She says it’s hard to find a tennis pal your age when you are 72.

Minnie Hunter’s doctor suggested that she not get involved in any strenuous exercise, but she is now able to jog a half-mile. Minnie is 70.

These women had never been involved in any exercise program until they joined seven others in a recent experiment which shows that regular jogging or even walking can take years off the physiological age of women over 60.

In tests conducted over a 10-week period at the University of Nevada at Las Vegas, it was found that between five and 15 minutes of jogging or alternate jogging-walking four days per week resulted in a marked improvement in the amount of oxygen the women’s cardiorespiratory systems delivered to their tissues.

“There has been very little quantitative data on the effects of regular exercise, such as jogging or walking, on women over 60, and I wanted to find out if I could actually measure any improvements,” said Aaron S. Goldman, a 44-year-old math professor who conducted the experiment.

“Approximately one million Ameri-

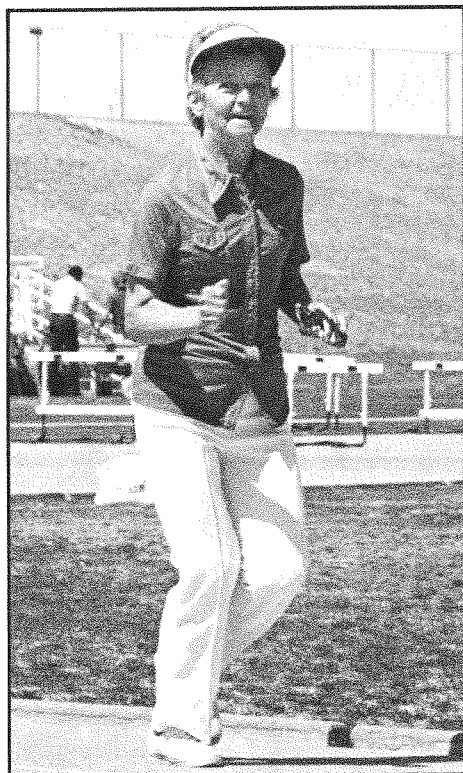
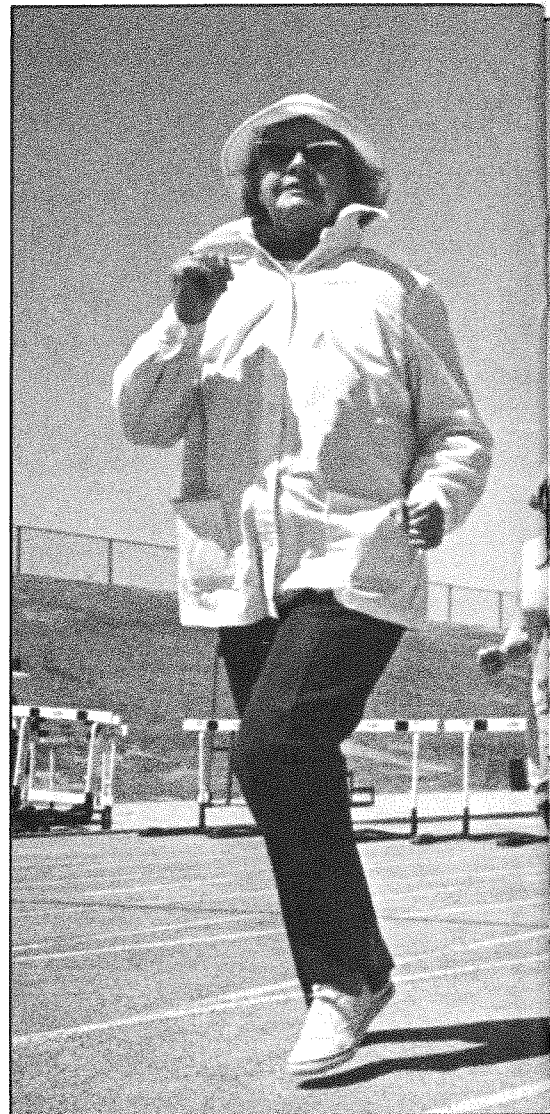
cans suffer from heart attacks each year and only about half survive,” he said. “I think jogging is one way to prevent some of these attacks. As far as jogging programs are concerned, we have tended to overlook the elderly, especially women, because we think it’s too late for them to start taking care of their health. But I don’t think so. And being a professional statistician, I set out to prove it mathematically.”

Financed by a University of Nevada research grant, Goldman, along with Dr. R.B. Dill, an 85-year-old physiologist with the Desert Research Institute of Southern Nevada, developed a system to measure the women’s aerobic capacities.

“It is the single best measure of physiological age,” Goldman said. The marathon runner and instructor of UNLV jogging classes explained that a person’s aerobic capacity declines with age. Using a mathematical formula which translates the amount of oxygen the body uses each minute while doing strenuous exercise, he arrives at a figure which represents physiological age.

For his experiment, Goldman first had the women undergo heart tests to screen out any potential problems. “I would have preferred to take a random sample of healthy women over age 60,

*Eve Leal swims a half-mile and plays a game of tennis before running her three miles. At age 72, Eva’s only problem is finding a tennis partner her age.*





but realistically this was not possible," he said. "Because the elderly in Las Vegas have limited means of public transportation, I had to limit the experiment to those who could make it to the university track four days each week."

Goldman found 10 women ranging in age from 60-88 who could successfully pass the heart tests and whose blood pressure measurements were rated satisfactory. At the beginning of the 10 weeks, each of the participants was put through a treadmill test to measure her aerobic capacity, which is defined in terms of oxygen used per minute and per kilogram of body weight.

"This test is a good indication of how physically fit you are," Goldman said. "Moderately fit young men will get a reading of between 40 and 50, while exceptionally fit men and women in their 70s and 80s will get a reading of between 20 and 30. There is a wide and normal range.

"You can't prevent the decline of the aerobic capacity with age, but good health habits can slow it down. And

*Members of an experiment which showed regular jogging or even walking can take years off the physiological age of women over 60, hit the track for a daily workout.*

since all of the women we tested showed improvement at the end of 10 weeks, we can see that a jog-walk program can help those who have been careless of their well-being."

Only two of the 10 women who participated in the program had readings of over 20 when the tests began. One woman, whose aerobic capacity read 24.4 at the beginning of the tests, showed the most improvement. At the end of the 10-week period, her reading was 28.8. The average improvement was 2.10 points.

To gain additional data about his participants, Goldman measured lung capacity and gave the women blood tests to determine cholesterol and triglyceride levels, and tests to determine potassium count in relation to body fat.

With these preliminary tests out of the way, Goldman had his group meet at the university at noon four days each week. The sessions began with a few simple exercises: knee touches instead of toe touches, deep breathing exercises and stretching exercises that included rotations of the neck, abdomen and arms. Goldman then lined the women up on the track and let them run, jog or walk for 15 minutes.

"The goal was to be able to finish a mile in 15 minutes or less," he said. "Of course, they weren't expected to complete a mile at the beginning of the program. Each moved at her own pace. Some could jog for the entire 15 minutes. Others just made a lap or two, stopped and then started again. Others alternated between jogging and walking. Clara Wise (the 88-year-old) usually showed up in red high heels and I couldn't get her to stop wearing them, but she did at least a half-mile every session."

The daily exercise became a social event for the participants. They turned out even when the desert wind whipped across the track at 30-40 miles per hour. Once, when it rained, the women showed up, but Goldman didn't.

"I took a lot of kidding because of that," he said. "Those girls stuck with it, which is more than I can say for my younger jogging classes. Of the 45 who signed up, only 12 finished."

Alice Cook, 67, said she enjoyed the program so much that she got her husband to join her. "He thought we were too old to be running around a track, but once he got started he found out it could be fun," she said.

Blanche Levinson, 75, fell and injured her head while pushing a grocery cart in a parking lot near her apartment and was in the hospital for two weeks, but rejoined the class. "I felt more alert and good all over, and I think it was because of the jogging," she said.

Goldman offered each of the participants a \$50 reward for completing the program. Eve Leal said she would have done it for nothing. "When you get to my age you've got to stay active and I just love it," she said.

Goldman, who presented his findings to the New York Academy of Sciences this fall, said, "There is no doubt that a great public service could be performed by starting physical education programs throughout the country for the elderly. Obviously, not everyone over age 60 could start jogging; some are too far gone. But many older Americans could benefit from regular daily programs." ●

# The Best of the Country's

## MILERS MILERS MILERS

by Jim McFadden

Once, I wrote a tongue-in-cheek story for *Runner's World*, depicting the problems of a young coach trying to start a distance running program in a small high school in Iowa ("Coaching Against the Odds," May '72). Slightly more than four years from the date of that article, I saw my dream as a coach come true. My top distance runner, Ed DeLashmutt, became a national champion in my favorite event when I was a prep, the mile.

Within two weeks during June, DeLashmutt of Fort Madison (Iowa) High School was the top prep finisher in the four major post-season meets, a feat no other prep miler had ever accomplished. Despite almost constant travel, crisscrossing the country by car, train and plane, Ed ran five miles of 4:10 or better (counting equivalent 1500-meter times). These included 4:07.2 for the mile and 3:47.7 for the 1500 meters.

A year ago Ed was a 4:20 miler and only fifth-ranked in the state of Iowa. What turned him into the top miler in the country in one year? I've been asked that often since the 1976 track season ended.

Other coaches have asked what we did for training, and I tell them in general terms. In the winter, we did a lot of long steady runs, mixed with some hard fartlek and hill training. As the weather improved, we intermixed repeat runs over one mile, 1000 yards and 880 yards about twice a week, with the accent on volume, not speed. Interval runs longer than 440 yards were done only five or six times during the season. The intervals were done mostly as pace work, not as a hard workout.

We did not incorporate any speed training until the end of the racing season, and then used it only lightly until the final weeks. About 90% of our training was done off the track, for psychological reasons. Total mileage was about 80 per week at the peak of the winter period, much less in the spring.

I do not feel this outline of our training, or any training schedule, will be of much help to anyone else. Coaching a runner is part an art form and part individual chemistry, and cannot be transplanted.

For example, if I say that on Feb. 15, we ran five miles at steady pace (6:00 - 6:10 per mile), then did 10 x 330 yards up a 20% hill with a 330-yard

recovery jog downhill, what does that really tell you? It doesn't let you know that it was dark and 10 degrees outside, that we were wearing a couple of sweat suits, and that the road we were running on was covered with patches of ice. It doesn't tell you that we told each other jokes on the downhill recovery jogs, that we talked about and dreamed about races past and future, or that we had fun.

All those things were a part of the total chemistry of the situation. A situation cannot be duplicated, and neither can the personality interplay between a coach and his runners. So telling someone what work you did to prepare for the season, is like taking a quotation out of context.

Surprisingly, one of the main reasons for his rise in 1976 was two defeats that he suffered during the 1975 track and cross-country seasons.

As a freshman and sophomore Ed had been primarily a half-miler. But like every young Iowa runner, Ed had his heart set on winning an event at the Drake Relays in April. Drake does not feature a half-mile run for high schoolers, so Ed eased into the mile more during his senior year.

However, Ed was a varsity basketball player, too, and the team went into the state playoffs, which had left him with only about five weeks to prepare for the Drake. He still ran 4:20.6 but lost the race by about a second. Ed realized then that he could not defeat the top middle-distance runners without the proper build-up, and there was not enough time left in the 1975 season to do it.

Last summer, DeLashmutt started training in July. Ed is an excellent golfer, and in the previous summers he had played in golf tournaments and neglected pre-season training for cross-country, usually reporting only after school started.

The results of the added training were immediately apparent, as he set course records for every course he ran and swept through 12 meets undefeated. Then came the second stinging loss. He finished fourth in the state meet after going into it as a co-favorite.

A few days later, he told me he would not play basketball during the winter. He would train for spring track. This was a big sacrifice as the team was slated to make the state tournament again in 1976, and basketball is a big sport in small midwestern towns. I handed him an old newspaper photo of Jerome Howe, the state mile record-holder. On it was written: "4:08—The Greatest Middle-Distance Runner In Iowa History." That was the goal.

All winter, Ed kept the photo taped inside his locker, and, together with teammates Bob Vandel (who later finished fourth in the state mile) and Jon Mathiason (who became the second fastest junior two-miler in the nation), he began the toughest winter build-up yet attempted by runners from his school.

Then DeLashmutt began a series of key races in which he hit a new PR each month in the mile: March—4:17.1 (after a 4:26.0 heat that morning). April—4:13.8 (on a wet, windy day). May—4:08.9 (a new Iowa record).

Now that he'd won the Drake Relays and was almost assured of a state meet win, we began to look past Iowa competition the first time, toward the big post-season meets. Final sharpening speed work was held back until after the state meet, then Ed set out in June to conquer new worlds and to reach his final peak for the season.

Finally, he raced through the Atlanta Classic, the Junior National AAU, the International Prep Invitational and the Golden West Meet, using great tactical sense and a stunning finishing kick (last 440 in 56.2 at the IPI) to top the best prep milers in the nation. Ed said one of the things that drove him on the most, in the big meets, was that none of the newspapers ever picked him as the favorite—even in California after he had won all the others. Even in the last race, he still had to prove he was the best. This attitude will continue to work in his favor this year as he begins competing as a freshman at Kansas State University. ●



Fort  
Madison  
Harriers

# WHERE ONE LAP CAN BE A VICTORY

by John Shultz & Greg Shivers

It was a cold morning. The wind was whipping across the green all-weather track, causing the 10 or 15 adults at the starting line to huddle together and to pull up the collars on their coats. These people were the type that could be seen almost anywhere; in the local supermarket, at a Saturday football game, even in a crowded subway. The group included a college professor or two, several secretaries and businessmen, college students and housewives.

If you looked closely, you could sense the excitement in these people as they talked nervously, with lowered voices and darting glances toward the track. These were parents, and they were gathered to watch their children perform. Their nervousness was understandable.

What made this group unique, was that their children were members of a class of mentally retarded youngsters. Not only were the children mentally deviant, but many of them also were handicapped by various forms of physical disabilities. There was simply no reason to believe that this group of youngsters would ever be congregated on a track at a major Southeastern university.

To be sure, national television coverage has been given to the athletic accomplishments of the best of the mentally retarded youngsters by ABC's Wide World of Sports. Annually, these programs cover the national finals of the Special Olympics, a program in which only mentally retarded children can compete.

But it would have been incredibly naive to assume that the children here were that class of athlete. These kids are to the children on TV as the neighborhood jogger is to the Frank Shorters, Jeff Galloways and Marty Liquoris.

Before we can understand these children, we must first understand the label carried by all of them. All of them are "mentally retarded." As such, society gives them problems.

Public opinion of a mentally retarded person is often analogous to the esteem given an individual with a highly contag-

ious disease. Mention the word retarded, and to most people the image of a drooling, grossly deformed freak comes to mind—one who is only capable of performing such menial tasks as cutting, pasting and coloring.

The currently accepted definition offered by the American Association on Mental Deficiency appears to support these outdated opinions. It states, "Mental retardation refers to significantly subaverage general intellectual functioning existing concurrently with deficits in adaptive behavior and manifested during the developmental period."

In other words, if you are retarded in one area you are probably retarded in all areas. We do not hold that position. One of us has not only taught retarded adolescents for almost five years but also has lived with a mentally retarded brother for 18 years. The other has worked as a psychologist with retarded children and their parents for about three years. This kind of first-hand contact has changed our outlook considerably. We both believe now that retarded individuals have in the past and can in the future become productive, contributing members of society.

Physical fitness forms a base for the development of any person. You *know* that when you are in shape, you simply feel better—you are less likely to get upset about small things, and you do better on your job or in your daily tasks, whatever they may be.

Anyone who has been around retarded people knows that many of them are "retarded" physically as well. They often have physical disabilities and are generally lethargic. At the same time, we were aware of two things: First, it is easier to bring about physical changes than to bring change emotionally or intellectually. We also knew that if you can raise the level of functioning in one area, the other two areas can get a "free ride." They, too, will go up. If we are able to raise these children's level of physical functioning, we should be able to see emotional and intellectual gains as well.

Thus, while our purpose in getting

these children in an active exercise program was to see how they would respond, our hope was that there would be transfer to their social and academic learning as well.

The program we followed was a weird amalgam of Bill Bowerman's and Kenneth Cooper's methods. Since a major concern was to keep the interest level high, we adopted the Bowerman slogan, "Train, not strain." To do this, it was necessary to group students according



to their level of fitness.

All four groups progressed at their own rates. In some cases, the group would spend two weeks on one level until each member was able to increase his or her distance. One of the more delightful side-effects of working in groups, and certainly not what we had predicted would happen, was the "we-feeling" that developed. It was beautiful to see how the youngsters began to encourage each other.

The program had a kind of climax on that cold December day, 10 weeks after we had met on the same track for a pre-test. Parents had been invited to see what their children could do and so, naturally, the kids were "up." Let us describe how they did. In each case, the nickname of the student is used.

*Gazelle:* He is a 15-year-old boy who, viewed from the side, looks something like "Sammy the Snake." He has an extreme case of curvature of the spine. He has been identified as an "emotionally disturbed" young man. Whether he is, in fact, disturbed is a moot point. He is emotionally disturbing to everyone around him—students, staff and parents alike. On the pre-test, to the great surprise of everyone (authors included), the Gazelle ran 1¼ miles in a 12-minute period. On this day, he ran a special "exhibition" with another student and one of the authors pacing him. He covered 1½ miles in a little under 12 minutes!



*Goose:* This young man has posed a particular problem to his teachers and parents for a number of years. Although he is constantly engaged in numerous loud, boisterous, inappropriate behaviors, the thing that bothers others most is Goose's tendency to avoid any kind of eye contact. Poorly motivated for any other activity, he ran with the Gazelle in the special exhibition—1½ miles at an eight-minute mile pace.

*Kitchen:* In many ways it is a miracle



Hugh Brown

*Overcoming mental and physical handicaps, these Special Olympians have shown courage and dedication to themselves and those around them.*

that this 13-year-old boy even walks. He has a bone disorder which has caused his shins to become literally convex. When Kitchen walks, he looks like he will fall on his face at any moment. Naturally, we were concerned about getting this boy involved in the program.

The reaction of Kitchen's parents was very different from that of most parents. While most parents would "protect" their child, they took the position that they wanted the boy to be "as normal as possible." That meant that he would be involved in intense physical activity and that he might fall or get pushed. In Kitchen's case, it also meant that he might break a leg. This was a risk the parents were willing to take.

On the day of the performance, Kitchen ran all the way around the track once, without stopping and with his parents looking on. Tears came to his mother's eyes as she expressed her happiness and appreciation afterwards. She was immensely relieved to see what he could do.

*Thumbs:* This 16-year-old Downs Syndrome (Mongoloid) boy was also hampered by size. Because of a thyroid deficiency he was of very short stature. In order to compensate for these deficiencies, Thumbs was taking a thyroid medication. The only trouble is that under this regimen he became hyperactive, and when the increased activity level was combined with his natural tendencies towards being stubborn, even "mule-headed," it spelled trouble for those people who were trying to keep him under control.

Besides all this, Thumbs was overweight. One of our most amusing moments came during the pre-test when Thumbs ran by us, pointing at his stomach, shouting in his pidgin English, "Too fat!"

On the day of the performance, Thumbs ran two laps, not consecutively, each time cheering himself and waving closed hands over his head in victorious boxer fashion as he crossed the finish line.

*Puppet:* This 15-year-old was an "acondroplastic dwarf," short in stature and extremely overweight. When Puppet "ran" it was a sight to see. A veteran of extensive surgery in both legs, with no kneecap in one of his legs, Puppet ran by dragging one leg out around the side, swinging it forward and then placing it on the ground in front of him. After about a month of working out, Puppet developed a rhythm and didn't look all that bad. But endurance remained a problem. On the big day, he ran all but 25 yards of one whole lap.

*Big Foot:* In many ways, simply moving should have constituted a major effort for this boy. Big Foot has epileptic seizures. Without medication, the real danger exists that he would go into a continuous seizure state and die. He has a protruding lower lip resulting from scar tissue formed by chewing on his lip during his numerous seizures, and gums which had swollen to the point that they practically covered his teeth, a side-effect of the medication.

After watching him stumble around the classroom, we naturally were concerned about how he would do at the track. On pre-testing day, we were only going to let him run one lap. But when we saw how well he was doing, we let him go another. The next time the class went out to run, Big Foot ran six laps, 1½ miles, without stopping! And he probably could have gone more.

*Tail-gate:* A girl who had been kicked out of her previous school, overweight and at times obstreperous, Tail-gate could not even run 100 yards her

first day at the track. On the day of the program, she made two complete laps without stopping. She seemed to have grown two inches after she finished.

*Wings:* Running with Tail-gate was another girl. A Mongoloid, also 15 and overweight, Wings was the opposite of Tail-gate in classroom decorum. It would be hard to imagine a child more cooperative when it came to academic tasks. Physical exercise was another matter. She hated it. But by the time of the program, she was at least *tolerating* the activity. The two laps she ran on that day represented a 100% increase in her PR for distance.

On the day of the program, after everyone in the class had performed, we asked the parents and relatives who were there to run with us, as a group, once around the track—a kind of symbolic "family that runs together, etc." A number of the parents, brothers and sisters did so.

We will never forget Gazelle's father. Overweight, he made a mighty effort to cover the one lap. At the end, his face was inordinately flushed and, frankly, we were concerned about his heart. His reaction, however, was significant. He vowed that he was going to lose sufficient weight so that he would be able to go running with his son. As of this writing, he has lost 30 pounds, his pants have been taken up once and are about to be taken up again, and he was to start running regularly this summer.

We started this running program with mentally retarded adolescents not only because we were concerned with the children's lack of energy and general ennui, but also because we wanted to see how they would respond to a program of vigorous exercise. The results have been much more than we had expected. The children *are* more energetic, they *do* hold up throughout the day without getting exhausted so easily. Unobtrusively, their intellectual functioning has improved. We have been able to teach Frontier, Kitchen and Thumbs all how to assemble and disassemble a 13-piece bicycle brake.

This is not to say that all of them can become white collar workers or "professionals" but that, given the skills, they can become productive, active members of a constructive society.

Running will simply give them, or you for that matter, the energy needed. Other skills are needed to fill the role of "productive member of society." But these skills too can be taught. We remain optimistic. ●

# Sizing Up the Olympians

What does it take to run in the Olympic Games?

It obviously takes abnormal amounts of speed and endurance. Also, it helps to be born in the right place. A 42-minute 10,000-meter man from Haiti ran in Montreal, for instance, while 28½-minute men from other countries couldn't qualify.

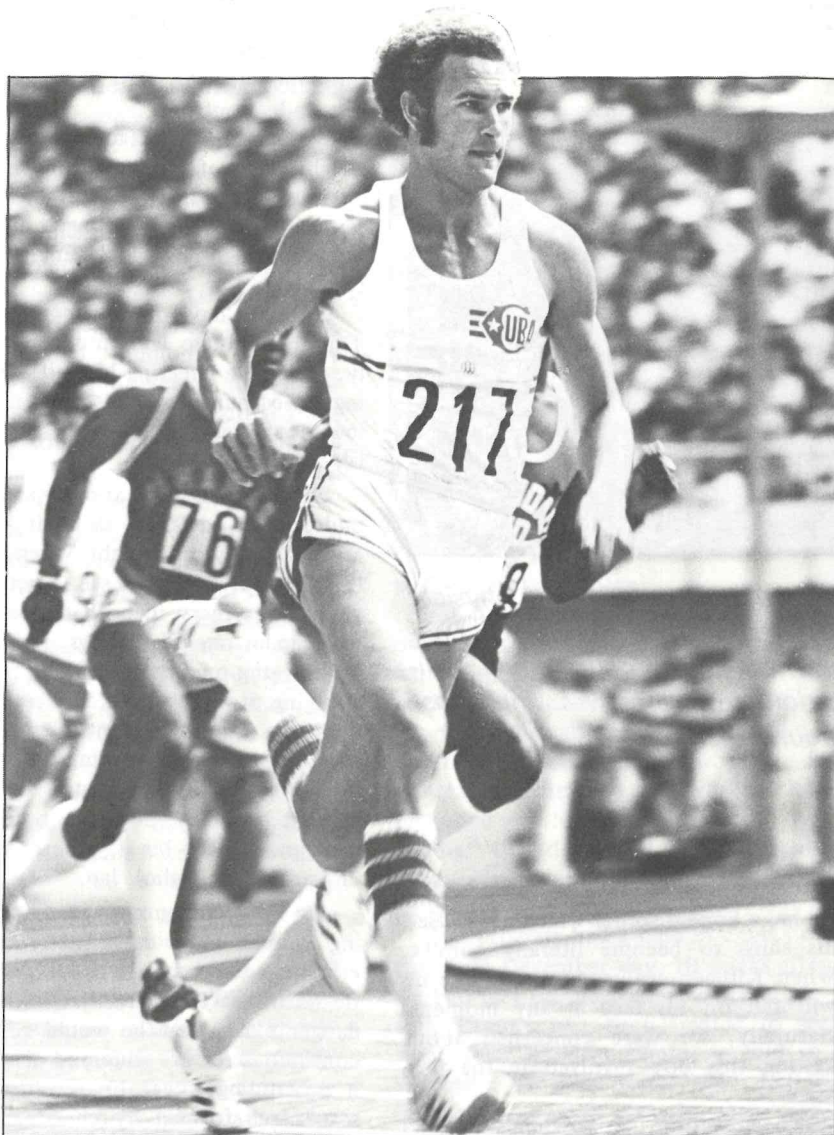
In addition, the rigid selection process of the Olympics limits the fields to those who are best suited by age and size for their events. What ages and sizes are best? We can find hints in the press book published at Montreal, which contains birth-dates, heights and weights for all athletes.

More than 400 of them entered the races 800 meters and longer. The accompanying chart summarizes the figures on them, and in the numbers, the following extremes stand out:

*Youngest.* Francisco Solis, an 800-meter runner from the Dominican Republic, was the "baby" of the men's races at 18 years, 10 months. Another 800 runner, Ileana Hocking of Puerto Rico, was the youngest woman at 17 years, four months. Bengt Simonsen of Sweden was just 18 years, four months old on the day of the walk.

*Oldest.* Who else could it be among the male runners but marathoner Jack Foster of New Zealand? He was 44 years, two months old. Australian Judy Pollock broke two minutes for 800 meters a month after her 36th birthday.

*Alberto Juantorena, Cuba's double gold medal winner, was dubbed the tallest and the heaviest of the male Olympic winners at Montreal. Comparison of vital statistics for Olympians reveals a hint as to what it takes to be the best in the world.*

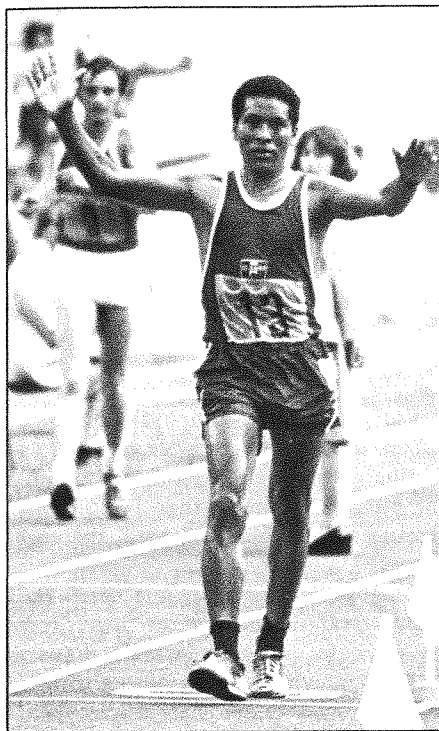


Mark Shearman

Event	Median Age	Age Range	Winner's Age	Median Height	Height Range	Winner's Height	Median Weight	Weight Range	Winner's Weight
<b>MEN'S MIDDLE AND LONG DISTANCES</b>									
800m	24	18-29	24	5'10¼"	5'4¼"/6'3½"	6'2"	146	123/185	185
1500m	24	20-34	24	5'10½"	5'4¼"/6'3½"	6'0"	146	121/172	163
Steeple	25	21-30	30	5'9¼"	5'3¾"/6'2"	6'1¼"	143	117/185	154
5000m	26	19-37	27	5'8½"	5'3"/6'3¼"	5'11"	139	115/181	130
10,000m	27	19-41	27	5'8¼"	5'1½"/6'3¼"	5'11"	137	104/176	130
Marathon	29	20-44	25	5'7¾"	5'3¾"/6'3¼"	5'7"	130	104/174	130
<b>WOMEN'S MIDDLE DISTANCES</b>									
800m	22	17-36	24	5'5"	5'1"/5'9¼"	5'3¾"	121	97-134	104
1500m	23	17-36	24	5'5"	5'0¼"/5'11¼"	5'3¾"	115	88-137	104
<b>MEN'S RACE WALK</b>									
20k	29	18-48	23	5'9"	5'5"/6'4"	5'7"	146	119/172	143

Canadian walker Alex Oakley competed at the age of 48 years, three months.

*Shortest.* India's Hari Harichard, 5'1½" tall, was the smallest of the male runners, and Thelma Wright of Canada, 5'0¼", the smallest of the women. They ran the 10,000 and 1500, respectively.



*Daniel Bautista, Mexico's gold medalist in the Olympic walk, above, was the youngest winner of the Olympians at age 23.*

Khoo Chong Beng of Malaysia, at 5'5", was the shortest walker in the race.

*Tallest.* The lankiest of the males stood 6'3½". They were Milovan Savic of Yugoslavia in the 800 and Ruben Sorensen of Denmark in the 1500. West German 1500 runner Brigitte Krause measured 5'11¼", tallest among women runners. British Walker Oliver Flynn was tops at 6'4".

*Lightest.* John Tau, a marathoner from New Guinea, weighed only 104 pounds at the start—probably less than 100 at the end. Belgium's 1500-meter runner Sonja Castelein came into the Games at 88 pounds. Domingo Colin of Mexico was the lightest walker at 119.

*Heaviest.* Double winner Alberto Juantorena of Cuba didn't quite carry the most weight among runners. He tied for that honor with steeplechase finalist Gheorghe Cefan of Romania at 185



*Anders Garderud (812), above, Sweden's gold medalist in the steeplechase at Montreal, was the oldest of the male winners at age 30.*

pounds. New Zealand's Diane Zorn weighed 137. Vinko Galusic of Yugoslavia led the walkers at 172.

Juantorena was the tallest and heaviest (6'2", 185 pounds) of the male winners, Waldemar Cierpinski the smallest (5'7", 130 pounds), Anders Garderud the oldest at 30 and Daniel Bautista the youngest at 23. Tatiana Kazankina was, of course everything in the women's races because she won both the 800 and 1500.

The figures in the chart show that runners get progressively leaner, shorter and older as the races grow longer. Juan-

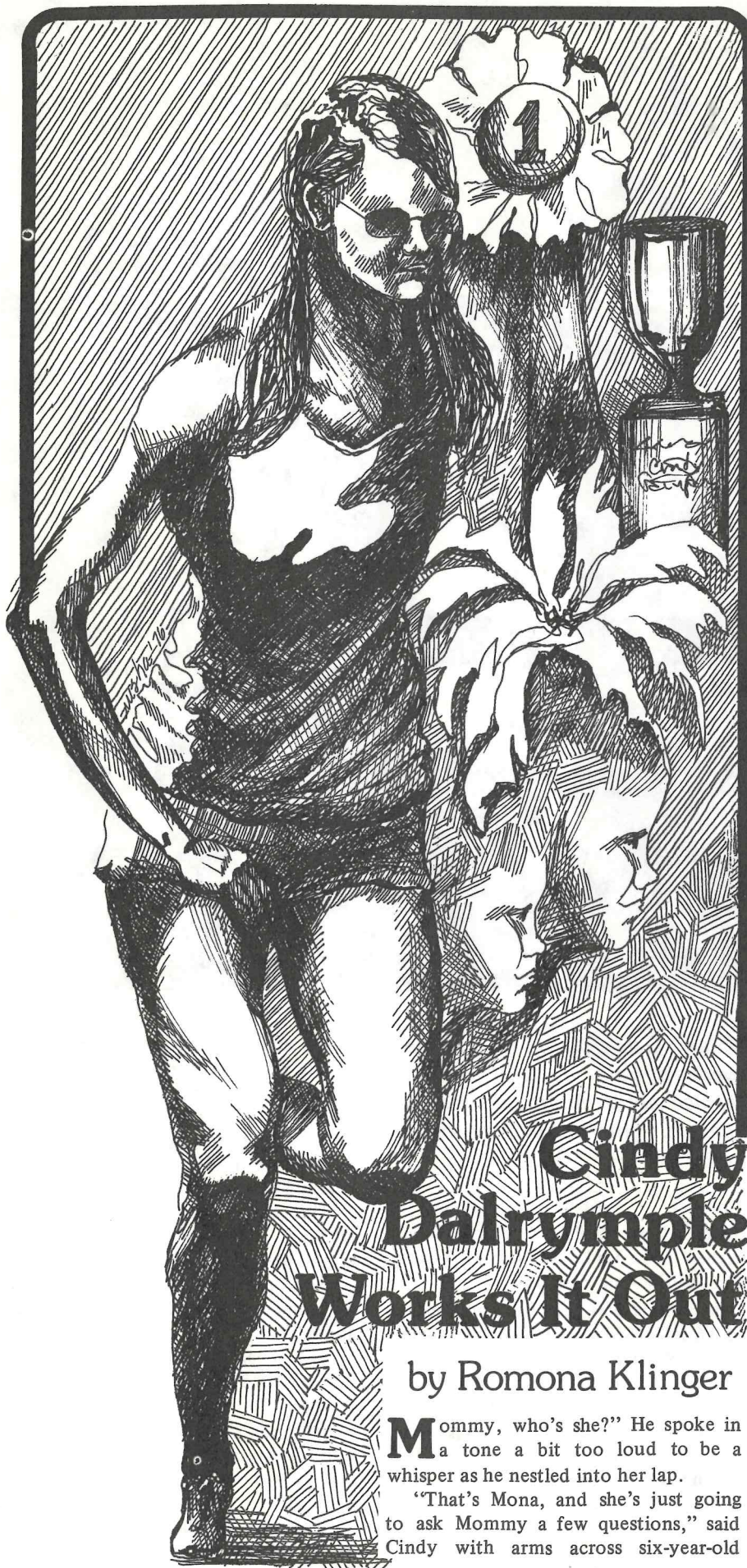
torena and Cierpinski typify the trend.

The ranges between the extremes are larger for women runners than men, and are largest of all for the race walkers. For example, the ages of women 800 runners are 17-36, while the men are 18-29. The walkers are 18-48.

This survey seems to indicate that men of 200-pound weight and 6'5" height have little, if any, chance to become world-class distance athletes. Nor do women with dimensions above 150 and 6'0".

The ideal age for top performance appears to be 25-30 for men, slightly younger for women. The best male athletes are generally in the 5'8"-6'0" range and weight 130-150 pounds. The leading women are 5'3"-5'6" and weigh 110-120.

If you're in those ranges, all you need is speed, endurance and a fortunate accident of birthplace. ●



## Cindy Dalrymple Works It Out

by Romona Klinger

**M**ommy, who's she?" He spoke in a tone a bit too loud to be a whisper as he nestled into her lap.

"That's Mona, and she's just going to ask Mommy a few questions," said Cindy with arms across six-year-old

John, unmistakably her son—the same blond hair, the same intense eyes.

As I looked around the room, three things were apparent: No, it didn't seem much like a room that a person who cleans houses as one way of supporting herself might have. Yes, two healthy, happy, active boys, ages six and eight, were at home in this room. Yes, a world-class runner lived here, as the many trophies and plaques around the room indicated.

I was in the home of Cindy Dalrymple of Honolulu, a successful miler and a top marathoner. When I finished my interview with her, I had an enriched attitude about myself as a runner, about distance runners in general and especially about women like Cindy who run, run well and are good mothers on top of everything else.

For myself, a neophyte distance runner of little talent, I have a whole routine of plausible excuses why I cannot put in the miles that I should: a demanding job, being married, the cost of eggs.

It always seems to me that the really great runners must have soft jobs whose bosses, former runners themselves, would rather have a winner than a worker under their employment—or husbands who devote their entire lives to the careers of their running wives.

Then I met Cindy Dalrymple who, fortunately, made me drop my stereotype of top runners. She planted in my mind the thought that even in a world of shrinking size and human values there are still many people, a good number of them runners, we can call heroes in the old-fashioned sense of the word. These are people who are worthy of emulating for their talent and hard work in pursuit of a worthy goal.

Dalrymple, 34, is a single parent. And she is underemployed, but not by choice. Although she holds degrees in both sociology and education, no teaching jobs currently are available. To keep things together at home while waiting for a full-time teaching position or a job with the Honolulu Police Department ("I passed all of the physical tests"), Cindy has two morning paper routes, she substitute teaches in the Honolulu Public School system, coaches track and cleans houses in addition to her duties as a mother and a runner.

"I often worry," said Cindy as she held son John, "about spending too

much time running and not enough time with my boys. They want and need my attention, which is difficult when my life is so hectic and in some ways so tentative. I never want them to feel I go out to run and leave them."

For a runner such as Cindy who ran the 1975 Honolulu Marathon in 2:54, time must be spent in training, usually two hours per day. She must make sure that she schedules her running around the boys' schedule.

"I may have to miss a few workouts," she said. "But then I try harder when I do have the time. You know, I want to be a good runner. I want to be the best. I know that sounds weird, but somehow I feel if some conditions of my life could come together, I could really be a top runner."

Cindy's running career spans 14 years, but with an "extended vacation" of eight years from 1964-72.

"I began running while still in college in Connecticut. I knew that I had what it would take to be a good runner, but there was no opportunity for me to participate in the sport where I went to school. I used to take the bus all over the state to compete on my own.

"In 1963, I accepted a track scholarship to the University of Hawaii under the direction of Doris Thompson. I ran the 880, primarily, and I have to laugh now, but at that time that was the longest race women could legally participate in. People used to think that the longer races would somehow hurt the women—make them unable to bear children or something like that.

"I competed in the (1963) Pan-American Trials as part of the U.H. team. Later, I headed for the Olympic Tryouts—which, of course, was my dream, but I missed the team.

"After that, I was terribly discouraged and very disappointed. In fact, in 1964 I quit running. I just felt as though I didn't have it anymore. I settled down to married life, had my two boys and got out of shape. I mean, I barely ran an inch in eight years.

"In 1972, I did decide I wanted to run again and I began to try to get in shape for the mile. But, boy, was I unsuccessful! I was discouraged again, and really thought that I was too old or something, and I quit, period. Or so I thought.

"But eight months later when I was student teaching and I had begun to coach, I again picked up on my own training. It was really a strange comeback. In fact, it was almost miraculous as far as I was concerned. Within three

months, I was doing as well as I had been doing when I was at my best nearly 10 years before."

Mildred Cooper, author of *Aerobics for Women*, remarked during a recent trip to Hawaii that not only were there more men runners here than in any other place in the US, but the number of women runners in Hawaii was almost staggering when compared to other parts of the country. Some of the popularity of running for women in Honolulu can be attributed to the achievements of Cindy Dalrymple, as reported in the local media.

In 1974, Cindy entered her first marathon in Honolulu and finished in 3:01, taking first for women. The publicity which followed was an inspiration to women like me who always thought they could run, but didn't know that such a level of competence was even possible for a woman, let alone one in her 30s and a mother of two.

Cindy has one concern regarding women runners. There are, indeed, more of them running now, and they are running better than ever, but the level of competition is not yet what it could be.

"In most races, I only have to half-run because I don't really have to put out to win," she said. "It's hard to shoot for better times when you're out there by yourself in the women's division. It's just not the same feeling to beat the guys. In fact, I don't even try to race the guys, although it's fun to beat them if I can. I know my racing would improve with more girls on the course. I'd try harder."

This desire to race the other "girls" made a difference to Cindy in the 1975 Honolulu Marathon, when she heard that some of the world's best—including *the* world's best, Jacki Hansen, were coming. Cindy felt this would be an opportunity to prove herself.

Cindy said, "Just knowing that Jacki Hansen was coming made me train all the harder than I would have otherwise. 'I would like to beat her' I'd say to myself. I'd be running around Diamond Head Hill day-dreaming, believe it or not, that she was dying and I'd be running some super time. 'Can I beat her?' I'd say. 'She's the best in the world. How can I beat the best in the world? That's a pretty big thing. But somebody's got to be the best in the world. Why can't it be me?' And my goal would be to beat her—not just better her time, but beat her on the same course, under the same conditions, on the same day."

Jacki won the Honolulu Marathon

handily. Her time was about 11 minutes slower than her record, while Cindy ran seven minutes faster than her best.

Cindy feels that given the chance to run a fast course without the humidity factor inherent in Hawaii, she could see what she was truly capable of running.

"What I'd like to do," Cindy said as she pulled out the February issue of *Runner's World* which listed all of the marathons throughout the US for 1976, "is to go to the Mainland to compete. However, I've got no job; there are the boys to take care of. It takes money. Last year, I had my plans worked out to go to Culver City (Calif.), but when there were only a few months before the date, I knew that there was no way I could do it."

"I have other goals, too. I'm confident there'll be a marathon for women in the 1980 Olympics, and I'm sure I can make the team if I try. Of course, being realistic, the marathon for women in 1980 may be like the 880 or the mile is today for women. I know competition will be stiffer and stiffer. For example, the times I'm doing for both the 880 and the mile today would never get me into the Olympics; but, eight years ago, I would have made the teams for both with those times."

"Does it bother you," I asked, "that you'll be 38 for the next Olympics?"

Following a laugh, Cindy said, "You know, I'm never going to stop running. I've got some heroes, too. I figure if (44-year-old) Jack Foster can do it, why can't I? Miki Gorman—how old is she? Forty? She ran a world-class time in a marathon just eight months after giving birth by Caesarian section. That in particular makes me think of my own situation as a mother, a marathoner.

"Or look at Joan Ulyot. She's a doctor, a writer, a mother, a super runner. It *is* possible to achieve the goals you set. I may just have to be a bit more dedicated and try a little harder than the next person, as long as it doesn't interfere with them (the boys)."

I left Cindy's place and felt a renewed enthusiasm about running, and a better attitude about my own running. The kind of life Cindy leads is a lesson in perseverance, dedication, caring about her family, caring about running.

As I crossed the street, I thought about the qualities that set apart the good from the best. I recalled the words, "You know, someone's got to be the best in the world. Why can't it be me?" I thought about Cindy Dalrymple of Honolulu. Why not Cindy, indeed? ●

# The Aerobics Center presents The White Rock Marathon and an important seminar on distance running.

## Seminar

Friday, December 3, 1976, 1:00—6:00 p.m.

Entry fee—race participants \$10.00; non-participants \$15.00. Subject: characteristics of world class runners and physiological considerations for distance running.

Speakers: Kenneth Cooper, MD, MPH, Author, and Director of Aerobics Center. Michael Pollock, PhD, Research Director

of Aerobics Center. Peter Raven, Assistant Research Director of Aerobics Center. Joan Uillyot, MD, author of *Women's Running*. David Costill, PhD, Director of Human Performance Laboratory at Ball State University. Peter Cavanagh, PhD, Associate Professor of Bio Mechanics at Penn State University. Kenny Moore, U.S. Olympic Distance Runner.

## White Rock Marathon Aerobics Seminar '76

## Marathon

Saturday, December 4, 1976, 9:00 a.m. Average temperature 50°—55°.

Full and half marathon.

Entry fee—\$5.00. Late registration—\$8.00 (after December 1).

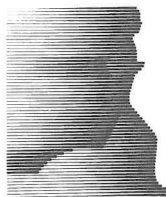
Directed by the Aerobics Center and Dallas Cross Country Club. Course and event sanctioned by the AAU and the AMJA. National Jogging Assoc. sanctions trained participants for both races.

Guest runners: Gary Tuttle, National AAU 1975 Marathon Champion and Kenny Moore. Course—2 loops around scenic White Rock Lake. Aid stations every 2½ miles. With ERG and H<sub>2</sub>O.

All runners eligible to receive awards by sex, position, or age adjusted timetable.

Computerized splits at 5, 10, 15, 20 and finish. Split timers at 1, 3, 5, 10, 15, 20 and 25th mile. Timers up to 6 hours. T-shirts and certificates to all finishers.

For registration and information: Aerobics Activity Center  
c/o Greg Pape  
12100 Preston Road  
Dallas, Texas 75230



# sole repair kit

Something as apparently minor as a worn sole can lead to disaster for your running career.

Continued running on worn soles creates serious imbalances in the feet, lower legs, knees and back. These imbalances in turn lead to abnormal stresses on other parts of the body, with resulting tendon and joint problems of all sorts.

Most runners know this. Yet, with the price of new running shoes going out of sight, it's easy to put off the purchase of a new pair when they're needed.

The Sole Repair Kit can provide a way out of this dilemma. Proper use of the Kit builds up worn areas of the soles, extends the useful life of the shoes and prevents needless injury and expense.

Before your soles start showing dangerous wear, invest in a Sole Repair Kit. The Kit will pay for itself in no time, and the pleasure of injury-free running will go on forever.



## The simplest, quickest and most economical sole repair method

Please send me \_\_\_\_\_ Sole Repair Kits, complete with Sole Repair Gun, ten sticks of special glue, and complete instructions at \$7.95 each. I enclose 75 cents for postage and handling. California residents add 6% sales tax, please.

( ) Send me extra glue sticks.  
( ) 10—.95 ( ) 50—\$4.25 ( ) 100—\$7.50.

Name \_\_\_\_\_

Address \_\_\_\_\_

City/State/Zip \_\_\_\_\_

Starting Line Sports, P.O. Box 8, Mountain View, CA 94040



**Ranked by  
Runner's World  
As No. 1.**

This is the number-one rated training flat. It's the all-around running shoe for the beginning jogger as well as the Olympic runner. There are two layers of cushioning in the wedge/midsole combination. The leather reinforced, flocked nylon upper encases the foot in a nearly frictionless environment. It has the modern, much-wanted flared heel with molded plastic counter for maximum cushioning and great lateral stability. A unique feature of all shoes from New Balance is that they come in various widths. This insures a great fit, no matter what your foot shape. New Achilles tendon pad provides for protection and support. And its lightweight. Royal blue suede and nylon with white sole trim. Sizes 3½-15, B, D, E. \$26.95.

# Starting Line Sports

stocks all the  
Top running shoes  
and offers a unique  
t-shirt Free  
with every order.

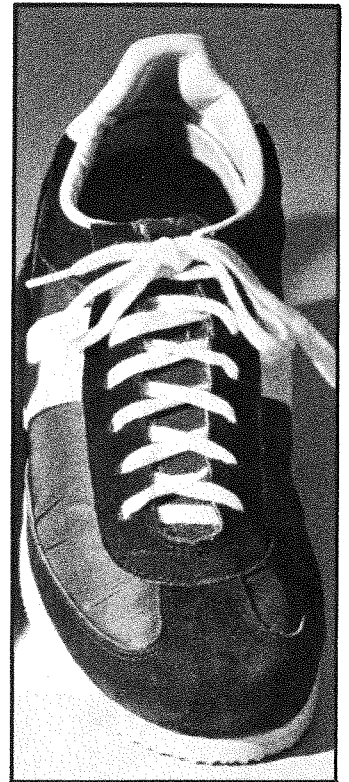


**Brooks  
Villanova**

This model is number one in value. This carefully designed model has good stability—a must for all serious runners. Brooks went all out to produce a quality shoe at a reasonable price. The shoe comes in attractive blue nylon, sizes 7-12. \$19.95.

**LD 1000**

Its unique wide-waffled sole and heel offer you unsurpassed cushioning—greater stability on any terrain. This brand new model presents a radical innovation in training shoe design with its strong heel construction. Blue nylon mesh with yellow trim, sizes 7-12, \$39.95.



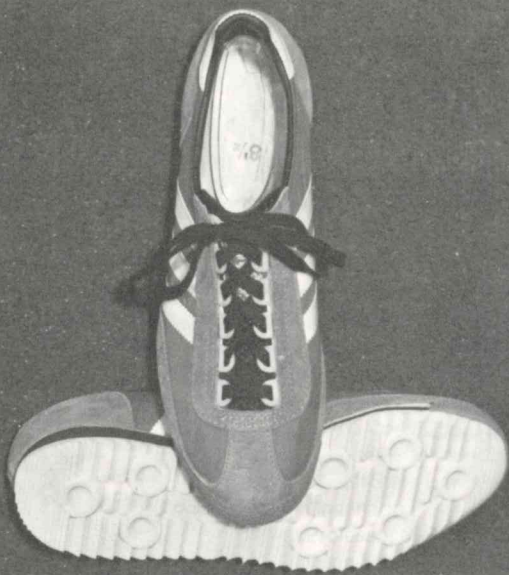
**From the  
Eaton  
Company.  
Ranked 4th.**

Brand new entry into the running shoe market, it will be available in mid-November. Rounded heel allows for normal rolling action and increases landing area. Has modern flared heel for excellent stability and control to protect against roll-over. Eaton has gone to great lengths to get runners' opinions in making this shoe. This is a rugged shoe which will last a long time. Excellent for road racing or training on pavement. Good traction on the sole. Its three layered inner-sole is of soft non-abrasive brushed nylon, polyurethane foam and closed cell. High, wide toe box prevents "runner's toe." Has new McGregor one-piece heel/arch support with sturdy heel counter. Blue suede/blue nylon. Sizes 7-12. \$24.95.

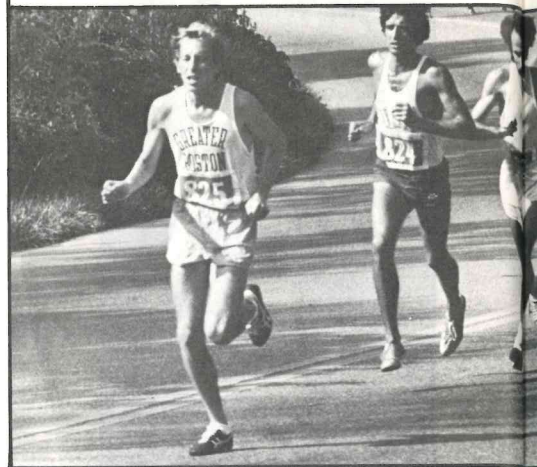
**Starting Line Sports**  
**Box 8, Mountain View, CA 94042**

## Adidas SL-72-76

This is one of the most popular and best selling running shoes. It combines strength and durability with comfort and support—strong heel counter. Nylon uppers allow for fast drying after wet weather workouts. 76 model is green nylon with yellow trim. 72 model is blue nylon with white trim, sizes 5-13, \$30.95.



## Starting Line Box 8 Mountain



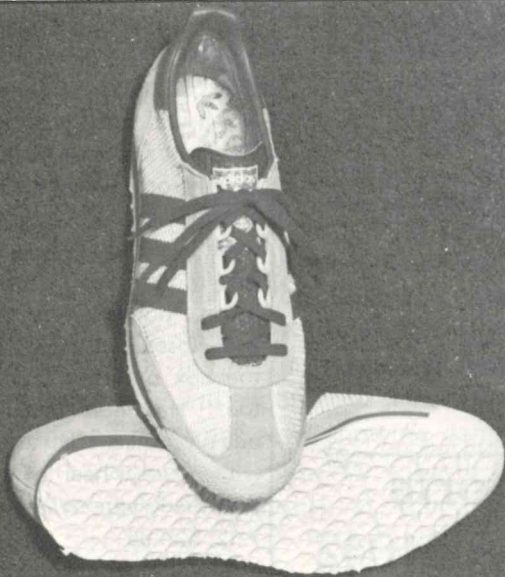
## Nike Road Runner

This trainer is a strong, substantial model. A good shoe for training on roads or highways which have unforgiving surfaces that could cause leg injury. Used for long-distance training, as it absorbs road shock. Its light weight also allows for racing. Green nylon uppers have blue leather and green suede reinforcements, sizes 3-13, \$22.95.



## Adidas Runner

The perfect shoe for the long-distance runner. Good for cross country training in the woods, or road races on pavement. Has beautiful easy-breathing mesh nylon uppers, with velour reinforcements at crucial stress points. Built-in wedge and star profile sole gives lots of good, hard mileage. Yellow nylon mesh with gold suede heel and toe reinforcement, it has blue trim and white sole, sizes 7-12, \$35.95.



### TIGER GRAND PRIX

Flexible upper construction make this trainer one of the most comfortable shoes available. Sizes 4-13, \$26.95.



### TIGER MONTREAL '76

Has a well supported heel with good upper comfort. Navy blue nylon with royal blue heel. Sizes 3-13, \$25.95.

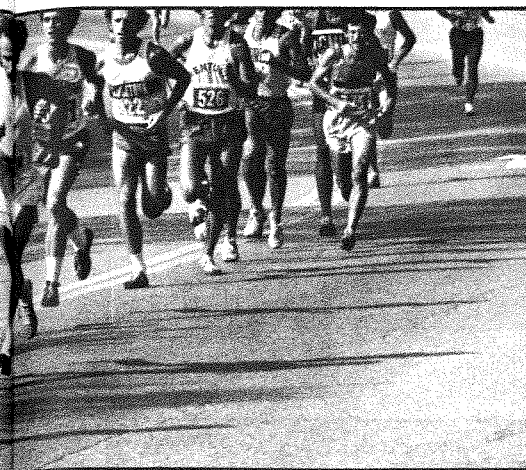


### NIKE OREGON WAFFLE

This shoe presents a unique sole design that resembles a waffle pattern. Sizes 4½-13, \$25.95.

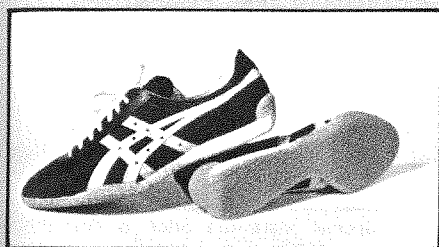
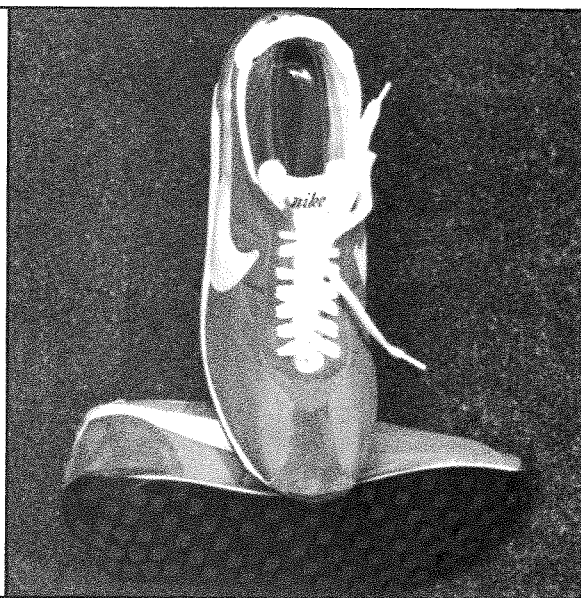


## Line Sports View, CA 94042



### Nike Waffle Trainer

A more conservative version of the LD-1000, has good stability and protection with flared waffle sole design. Unique sole design gives great traction on all types of surfaces. Also, the waffle sole provides resistance to road shock. Is light enough for long-distance racing. Blue nylon with blue suede toe and heel reinforcement. Sizes 7-12, \$28.95.



#### TIGER OHBORI

A light-weight shoe best suited for track racing. Sole has good flex. Has strong heel counter. Sizes 5-13, \$27.95.



#### PUMA 9190S

This shoe has been a long-time favorite of runners. Blue nylon with yellow leather Puma stripe. Sizes 3-13, \$29.95.

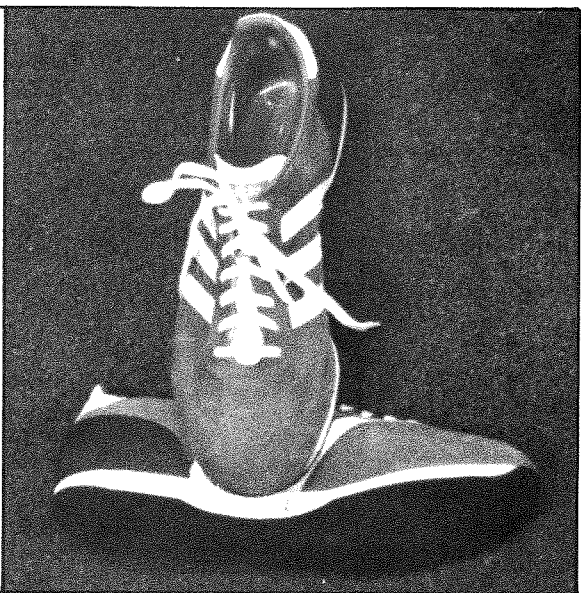


#### NIKE NYLON CORTEZ

Has substantial padding, but is the lightest of any training flat. Light enough for racing. Sizes 7-12, \$26.95.

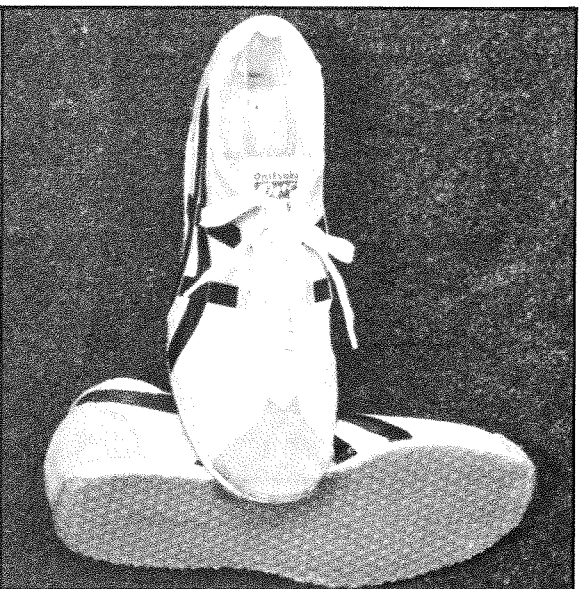
### Adidas Marathon

Truly a marathon shoe, capable of long-distance running. An excellent shoe for marathon racing, or road racing. A comfortable shoe that will give your feet the support they need in a long race. Good inside support—a durable racer. Blue suede and lightweight with white nylon stripes and black rubber heel counter, sizes 6-12, \$39.95.



### Tiger Jayhawk

This is the best racing flat for the money. Good for all types of distance events. Whether it be track racing, road racing, or cross country, this Jayhawk fits the bill. Priced well below the competition. It's light weight, has good sole flex and heel lift. Yellow nylon with yellow suede toe and heel counter. Blue Tiger stripes and white trim, sizes 4-13, \$24.95.

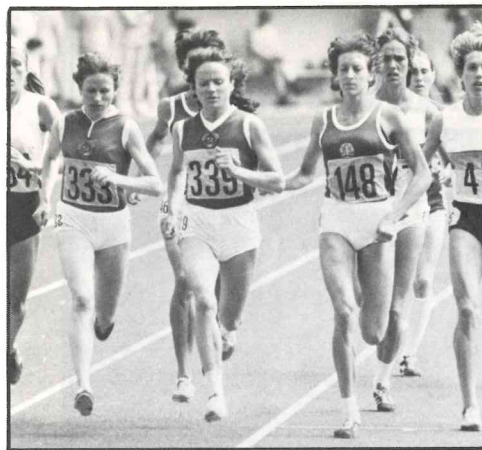


We want to send this T-Shirt to you Free.



Order one pair of shoes from us and we will send you absolutely free, a Starting Line Sports Tee-Shirt. All guys and gals will want to be in style with this 100% cotton fine quality running Tee-Shirt, emblazoned with the Starting Line Sports runners' emblem. One shirt will be sent per order. Please specify size on the order form below. Additional shirts are available at \$3.95 each.

Come by our store: 246 Castro St. Mountain View, Ca.



### Special Team Discount.

Coaches, take advantage of our money saving offer on running shoes. Place an order of three pair or more and you can take a 10% discount off the total amount. Individuals also qualify for this discount if three pair or more are ordered on the order form below. You'll save 10%!

Note: The Nike Special Marathon Shoe is not available until March 1, 1977.

## Special Christmas Order Form

Quan.	Model	Color	Size	Price	Total
<input type="checkbox"/> Please send my free SLS Tee shirt in size s, m, l, xl, postpaid.				Subtotal	
Additional tee shirts available @\$3.95 plus 40c postage				Less 10% 3 or more prs. (Cal. res. 6% tax)	
				Postage*	
				Total	

Name \_\_\_\_\_

Street Address \_\_\_\_\_

City/State/Zip \_\_\_\_\_

**Guarantee:** Your purchase is unconditionally guaranteed by Starting Line Sports. If, for any reason, you are not completely satisfied with your purchase, simply return it to us within ten days and you will receive replacement, credit, or a cash refund.

\*Postage: \$2.00 for first pr. \$.50 each additional pair (Canadian res. \$3.00 and \$1.00)

Charge:

Mastercharge \_\_\_\_\_ Exp \_\_\_\_\_

BankAmericard \_\_\_\_\_ Exp \_\_\_\_\_

Or use our Hotline Number (415) 965-3240, and charge it to your Bankcard.

**Starting Line Sports  
Post Office Box 8  
Mountain View, CA  
94042**

# City Series

by Jim Brown

## Anchorage

There can't be many cities, if any, which have more runners per capita than Anchorage, Alaska. Anchorage is bustling and growing, and the interest in running bustles and grows right along with the city. Much of the growth in running interest directly relates to increased interest in cross-country skiing.

Anchorage weather is conducive to running. It is never too hot to run since the all-time high is 86 degrees, and temperatures above 75 are uncommon. Winter temperatures seldom pose a problem. The record low is minus 36. However, there aren't many days when the temperature is below zero at 2 p.m.

Open races for all levels of runners are conducted from mid-April until enough snow has fallen for skiing in the fall. Most of the races are on weekends, with distances ranging from one to 26 miles, and including road runs, trail and track runs.

Informal runs are held each Tuesday at 5:30 p.m. in September and October, with a variety of distances for runners of all levels. Sponsoring groups include the Road Runners Club of Alaska, Pulsators Running Club and the two local universities.

Anchorage possesses a wealth of running spots. Two extensive trail systems are within the city limits, one at Russian Jack Springs Park on DeBarr Road, the other at Alaska Methodist University on Providence Drive. One can run up to 10 kilometers on either of these trails without repeating the course.

Two more extensive trail systems within a few miles of downtown (but out of the city limits) are Hillside Park

on Abbott Road and Kincaid Park on Raspberry Road, just south of the Anchorage International Airport.

In the winter, running on cross-country ski trails is a "no-no." However, well-packed snow machine trails and sled-dog trails provide excellent footing.

Miles of newly-constructed bicycle trails in the Anchorage area are great for running. All new streets and highways have bicycle paths adjacent to them.

The most scenic trail follows the Chester Creek Greenbelt and extends from Cook Inlet several miles toward the Chugack Mountains. This trail comes within a few blocks of downtown Anchorage.

The high schools and junior high schools in Anchorage have all-weather surfaced running tracks which are widely used during non-school hours. Closest to the downtown area is the track at 15th and C Streets. Nearby is a city-owned track at Mulcahay Park.

Visitors to Anchorage who are staying downtown can run on the Park Strip, a several block-long grassy area between Ninth and 10th Streets.

The access road to the New Seward Highway offers excellent running with very little traffic. It extends some six miles from Dowling Road to near Rabbit Creek, then on beyond to Potter.

Contacts regarding running in Anchorage include John Trent (Pulsators), Bob Layman (Road Runners), Lou Whitmore (University of Alaska), Jim Mahaffey (Alaska Methodist University), and Bob Spurr (Nordic Ski Club). ●

## Ride the

Skateboarding

Jack Brown



A complete guide to the sport!

anybody's  
skateboard  
book



## NEW wave

Before you take your next spin on a skateboard, read these two fantastic new books and see what's in store. Tricks broken down to the finest detail. Great photos to view the action. Equipment, basics and more. Order *Skateboarding* or *Anybody's Skateboard Book* and get going in this fast-growing, fast-moving sport.

Please send the book(s) checked below:

*Skateboarding*, \$3.95.

*Anybody's Skateboard Book*, \$3.00.

Add 40 cents postage per book. Calif. residents add 6% tax.

Name \_\_\_\_\_

Address \_\_\_\_\_

City/State/Zip \_\_\_\_\_

World Publications, Box 366  
Mountain View, CA 94040

Statement required by the Act of August 12, 1970; Section 3685, Title 39, United States Code showing the ownership, management and circulation of—*RUNNER'S WORLD*, published monthly at 1400 Stierlin Rd., Mt. View, CA, for November, 1976. Location of General Business office of the Publisher: same. The names and addresses of the Publisher and Editor are: Publisher, John R. Anderson, 22261 Larkellen Ln., Los Altos, CA 94022. Editor: Joseph Henderson, 253 Frances Dr., Los Altos, CA 94022. Managing Editor: John R. Anderson. Owner: John R. Anderson. The known bondholders, mortgagees and other security holders owning or holding one percent or more of the total amount of bonds, mortgages or other securities are: none.

The average number of copies each issue during preceding 12 months: (A) Total number of copies printed: 53,000. (B1) Paid circulation through dealers and carriers, street vendors and counter sales: 5796. (B2) Paid circulation through mail subscriptions: 45,217. (C) Total paid subscription: 51,013. (D) Free distribution by mail, carrier or other means: samples, complimentary and other free copies: 260. (E) Total Distribution: 51,273. (F1) Copies not distributed: office use, left over, unaccounted, spoiled after printing: 718. (F2) Returns from news agents: 1009. (G) Total: 53,000.

The number of copies for the single issue nearest filing date: (A) Total number of copies printed: 63,000. (B1) Paid circulation through dealers and carriers, street vendors and counter sales: 9125. (B2) Paid circulation through subscriptions: 49,253. (C) Total paid subscriptions: 58,378. (D) Free distribution by mail, carrier or other means: samples, complimentary and other free copies: 282. (E) Total distribution: 58,660. (F1) Copies not distributed: office use, left over, unaccounted, spoiled after printing: 2251. (F2) Returns from news agents: 2089. (G) Total: 63,000.

I certify that the statements made by me above are correct and complete.

John R. Anderson  
Publisher

# Technical Tips

Answering the needs of our readers.



## FIRST FOUR MINUTES

**First Four Minutes**, Roger Bannister. The story of the first man to break the 4-minute-mile barrier. Bannister's account of his exciting life transcends autobiography to become a knowledgeable and appreciative vision of the meaning of running. All serious runners will want to read this fascinating book. Hb., 224 pp., \$4.95.

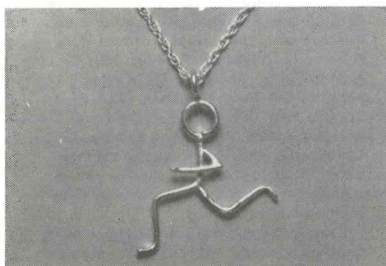
### CUT OUT

Please send me \_\_\_\_\_ copy(ies) of *First Four Minutes*. Enclosed is \$4.95, plus 40c postage per copy. California residents add 6% sales tax.

Name \_\_\_\_\_  
Address \_\_\_\_\_  
City/State/Zip \_\_\_\_\_

Runner's World, Box 366  
Mountain View, CA 94042

## "THE ROADRUNNER" NOW IN YOUR CHOICE OF 14K GOLD OR STERLING SILVER!



A unique, handcrafted 1-inch sterling silver stick runner on an interwoven 18" sterling silver chain. An excellent gift for him or her!

Detach and mail with your order

Please send me \_\_\_\_\_ "Roadrunner" necklaces at \$15 each. (Price includes postage and handling) NY State residents add applicable sales tax.

Name \_\_\_\_\_  
Address \_\_\_\_\_  
City \_\_\_\_\_  
State/Zip \_\_\_\_\_

Group Rates Available

Send check or money order to  
SPORTING LIFE JEWELERS  
Dept. S  
175 5th Avenue  
New York, NY 10010

## WINTER WEAR

Those of us who live where winter means snow, wind and cold can run, be comfortable and healthy all year round. For years winter backpackers, cross-country skiers and snow shoers have known the answer. We can take some tips from our cold-weather friends and use them to our own advantage.

How do they begin a trip where the valley temperature may be 40 degrees, travel an incline that would make our favorite training hill look like a potato mound, emerge on a treeless peak where the wind chill is 20 below zero and remain comfortable?



They do it by adding or removing clothing according to the temperature and the activity they are doing. They make sure they do not break into a sweat. We runners can't be removing clothing when we overheat, but we can adapt this procedure to gloves, hood, zippers and so forth while running.

Sweat in winter mountaineering is very dangerous. It means heat loss through wet clothes, chill and worse. For a one-hour running workout, it's not as important for survival, but it can be uncomfortable and can lead to a cold. The body sweats to cool itself. So, soaking wet sweat shirts and pants are not necessary in winter.

For winter workouts, dress for the conditions of the day. As you begin your run, note how you heat up. The

gloves come off first and can be carried easily in each hand or in a pocket. If you continue to heat up, open your collar or remove your hood. If, on the return, the sun drops or the wind picks up, you can reverse the procedure by closing the collar or returning the hood as needed. Running suits with zippers at the front, wrists and ankles are an asset when ventilating, as are attached hoods.

You can lose a lot of heat off your head but less from the hands. Maintaining comfort and staying healthy is easy. Have enough clothing for the worst conditions, and be able to ventilate off any excess heat to prevent heavy sweating and enjoy winter running.

George McGowan

## JUDGING PACE

"Highlights" in *Runner's World* reports in the August '76 issue the result of a 14.6-mile run in Wisconsin. The race was won by Lucian Rosa, in 1:13:50. How good of a time is that?

Most of us still have some trouble judging from the elapsed times how good a performance is for odd distances. It helps me to put all speeds for all distances into meters per second. I've made up a short table of the current world records for a few distances:

WR (M/S)	Distance	Approx. Pace
9.95	100m	10m/s
9.11	400m	9m/s
7.07	1500m	7m/s
6.06	10,000m	6m/s
5.47	42,195m*	5.4m/s

(\*marathon)

These round numbers measure the finest performances of world-class athletes over the entire range of racing and training. You can plug in the speed in meters per second of any race, for any distance, if you just change the distance in elapsed time to the speed in the meters per second. Then compare it to the above table to get an idea of quality of the performance.

In Rosa's case, the speed turns out to be 5:30 meters per second. (This is calculated by converting the distance to meters and dividing the total by the

time in seconds.) Rosa therefore ran more than half the marathon distance in close to record marathon pace. Not bad!

I defy anyone to do this exact calculation in his head, and it may even confuse you if you have a calculator. So you may want to make a close approximation. First, determine the approximate distance in meters by multiplying 15 miles times 1600 meters (a mile is 1609.34 meters). The total is 24,000 meters.

Then approximate the time in seconds: 75 minutes x 60 = 4500 seconds.

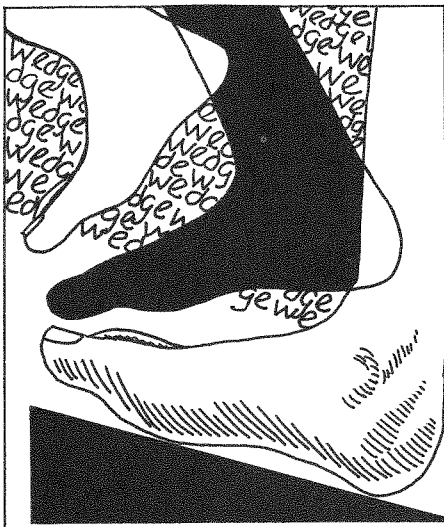
Finally, divide 24,000 by 4500 for a pace of 5.3 + meters per second.

Henry Ryder, M.D.

## A NEW SLANT

If I had been more diligent in leaning against a wall, I probably could have avoided the tendinitis that brought my daily 13 miles down to nearly nothing last spring. A trainer for a football team then told me that the stretching should be more than a once-a-day thing for runners as well as for football players, and he introduced me to the sloping board laid out along a wall in the training room.

I belatedly began utilizing this aid before and after each run, and considered constructing such a device at my home so that I could do a little more tendon stretching than just at my noon-day running time. I determined that the



slope of the board was about 18 degrees.

A visit to the scrap pile at a local woodshop yielded several short lengths of about 4 x 4 inches, and a hasty calculation indicated that a 10 1/4-inch length would make a nice set of 18-degree wedges. With the help of a friendly operator at the radial arm saw, I soon had several sets of wedges placed

about my bed, my den, my desk at the office and in my locker at the gym.

Wedges were everywhere. I stood on them (heels at the low end) when you first get up, while shaving, while opening the mail at work, while changing in the dressing room, while reading the newspaper or watching a moment of TV.

After one month, the tendons were much improved, the miles were still down and a long-planned marathon was at hand. I decided to try it slow and easy and be ready to quit if pain developed. The marathon was slow but it was painless and altogether delightful.

S. Elwyn Taylor

## OUT OF BREATH

Tom Miller's article ("Every Body Is Right," July '76 RW) contains some misinformation and other statements which should be considered controversial at least.

First, he states, "Since carbon dioxide is more soluble, the carbon dioxide would go back into the bloodstream..." This is physically impossible

The source of all the carbon dioxide in the lungs is the blood returning from the body. The blood gives up the carbon dioxide air in the lungs. The portion of the air in the lungs is mixed with fresh air after each breath so the portion of carbon dioxide is decreased and the blood can continue to fire up more carbon dioxide. The carbon dioxide in the blood increases only if ventilation is ineffective in removing it from the blood.

Later, he continues, "... and hasten the formation of lactic acid and fatigue." Lactic acid production is caused by anaerobic metabolism (metabolism that occurs in the absence of oxygen) and isn't a function of carbon dioxide.

Long-distance running is almost completely an aerobic process. When anaerobic metabolism starts to occur and lactic acid starts to accumulate, the body responds by increasing the ventilation to remove more carbon dioxide since a solution of carbon dioxide is actually, carbonic acid. The body works to maintain a balance of acid so the pH (a scale by which acidity normally is measured in which a decrease in pH value indicates increasing acidity) is maintained at 7.4. It is not, then, the inability to remove carbon dioxide but rather the point at which oxygen supply no longer meets the demand that causes the increased lactic acid.

Next, the article says "The vacuum caused by forceful exhale allows the fresh air to be sucked into the lungs with little conscious or physical effort."

(continued on page 68)

## OFFICIAL T-SHIRTS!

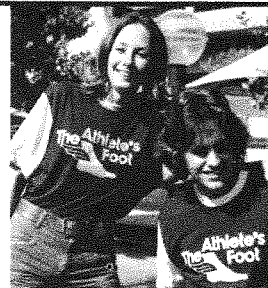


## INTERNATIONAL RICE FESTIVAL MARATHON

### AAU NATIONAL MARATHON CHAMPIONSHIP

S, M, L Youth \$3.50  
S, M, L, XL Adult \$3.95

621 N. Ave. K., Crowley, La.



## The Athlete's Foot FUNSHIRT

100% Orlon Price: \$8.00

Write no. of shirts wanted in size boxes by designated color.

Colors	Sizes			
Royal Blue & White	<input type="checkbox"/> S	<input type="checkbox"/> M	<input type="checkbox"/> L	<input type="checkbox"/> Ex L
Kelly Green & Gold	<input type="checkbox"/> S	<input type="checkbox"/> M	<input type="checkbox"/> L	<input type="checkbox"/> Ex L
Scarlet & White	<input type="checkbox"/> S	<input type="checkbox"/> M	<input type="checkbox"/> L	<input type="checkbox"/> Ex L

Name \_\_\_\_\_

Address \_\_\_\_\_

City/State/Zip \_\_\_\_\_

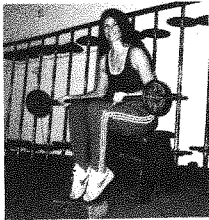
Please include 50c ea. for mailing & handling. Missouri residents include 3% state tax.

Send check or money order to:

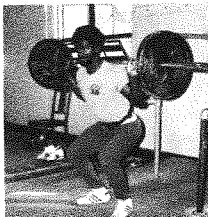
**THE ATHLETE'S FOOT**  
217 LOCUST TRAFFICWAY  
KANSAS CITY, MO 64106

Featuring over 200 styles of competitive & casual shoes.

# Weight Training



Lift yourself above the norm. Improve your physical condition through a weight training program that is designed specifically for your sport. *The Complete Weight Training Book* has more than 75 different workout schedules for fitness fanatics, athletes in every sport, bodybuilders, weightlifters and most important, schedules for the average person. Programs for men and women, aged 6 to 106.



Good advice from a leading authority on weight training, Bill Reynolds. He has coached more than 300 college and professional athletes and now you can receive his coaching help from his new book, *The Complete Weight Training Book*. Hardback, 225 pp., ill., \$6.95

Please send *The Complete Weight Training Book*. Enclosed is \$6.95 plus 40 cents postage per copy. Calif. residents add 6% tax.

Name \_\_\_\_\_  
 Address \_\_\_\_\_  
 City/State/Zip \_\_\_\_\_

World Publications  
 P.O. Box 366  
 Mountain View, CA 94040

Air will only be sucked into the lungs if someone exhales past the point at which he would normally stop a normal resting or quiet breath.

Exhalation in resting condition is a passive act where the lungs are allowed to resume their resting position. The force is provided by the elastic properties of the lungs. An analogy would be to compare inhalation to letting a rubber band go so it can resume its former shape. In the actual situation, the elastic force of the chest wall tends to work opposite the lungs so the lungs aren't allowed to completely collapse at the end of each breath.

When a person exhales past the resting volume of the lungs, (which is known as the "functional residual capacity") he must exert muscular effort to compress the chest cavity. It is only after this effort that air will be sucked into the lungs. The suction will only return the lungs to their resting position.

This concept may be difficult to understand but can be best illustrated at the end of a normal breath by forcefully blowing out all the air you can. As you do this, you will notice increasing difficulty blowing out because as you blow out your wind pipes become smaller and resistance to air movement becomes greater.

Once you have blown out all you can, now relax. Your lungs will suck air back to the position at which you started. But for you to move any more air, you must start an active contraction of your diaphragm to breathe.

Now try breathing in from this resting position what you think to be an equal amount of air and then relax. You will notice that your lungs again return to the same position as when you started to inhale.

The amount of effort in the second movement, where the inhalation was done by muscular effort, was less because wind pipes weren't collapsing but rather expanding. It is for this reason runners will increase their breathing by inhaling deeper and not by the forceful exhalation described by Tom Miller.

Finally, he states, "Belly-breathing contracts the stomach muscles fully to exhale, and then relaxes the stomach muscles to allow the diaphragm to drop and the body to suck in fresh air."

The diaphragm isn't a passive portion of the body. It must contract to move air in, and it can do it with the stomach muscles tense, although it requires greater effort to do. The diaphragm, therefore, contracts and relaxation of stomach muscles allows the diaphragm to do

its job easier. I think runners can benefit by learning to relax their stomach muscles with inhalation. I don't feel it's needed for them consciously to contract them to exhale forcefully.

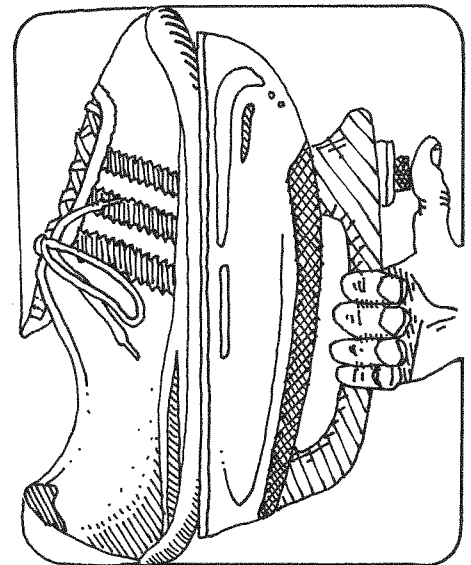
Trying to time your breaths doesn't need to be a conscious effort, either. Although I can't produce a reference, I have discussed this with two exercise physiologists, and it was their opinion the body would take care of the rate of breathing in the most efficient way.

*Thomas Scanlon, M.D.*

## IRON IT OUT

Applying protective layers of melted glue to the heels of running shoes requires so little effort that it is easy to assume it requires no special skills. But, although anyone can apply glue with an electric glue gun, it takes skill, as well as practice, to apply glue in thin, smooth, even layers. And without such skill, it is possible that any efforts directed toward preventive maintenance will do as much harm as good.

Part of the difficulty, I think, rests with the glue gun. It is an excellent tool for melting and applying glue, but an awkward tool for spreading glue and removing excess glue. For these tasks an electric sealing iron is a better tool.



A sealing iron, with its full range of thermostatically controlled temperature settings, functions very much like a clothes iron. But it is lighter than a clothes iron, and it has a smaller sole plate (my iron weighs 11 ounces and has a sole plate about four inches long and two inches wide). Variable temperature and a small, flat sole plate make the sealing iron an ideal tool for spreading and smoothing hot glue.

Before I began using a sealing iron, I was never able to reach the ideal state of wearing out protective layers of glue

rather than the heels of my shoes. Because I found it difficult to spread glue with the nozzle of the glue gun, I waited for wear to appear before I brought out the gun. Applying a layer of glue over the entire heel area was simply out of the question. But now, with the help of my sealing iron, I apply a layer of glue to the heels of every new pair of shoes before I run in the shoes for the first time.

Using a sealing iron is a straightforward, and runners who are already repairing the soles of their shoes with melted glue will soon feel at home with the iron. To get ready to work on a pair of shoes, preheat both the glue gun and the sealing iron. The best temperature setting for the iron will have to be found by experiment, but it generally will be one of the settings in the high end of the range.

Apply the glue with the gun, let the glue cool for a few minutes, and then run the iron back and forth over the slightly hardened layer of glue. Remove excess glue from the iron by allowing it to build up and wiping it off with a rag. Control the thickness of the layer of glue left on the sole by varying the amount of downward pressure that you apply with the iron. You should find the iron easy to handle and a delight to use.

Electric sealing irons are used most commonly for mounting photographs and sealing plastic packaging materials, but they also are used for building model airplanes, and a well-stocked hobby shop is probably the best place to look for one. The cost of an iron is high (\$18-\$20) but it is easy to find other uses for it. As an example, it works well for waxing cross-country skis, the use that I had in mind when I bought my iron last winter.

*Ross Okawa*

## FINDING YOUNG TALENT

*This article summarizes recent Soviet research on the selection and training of young distance runners.*

The problem of selecting teenagers and predicting their potential for distance running is closely related to the problem of beginning training, which should be divided as follows:

- First period—two years (age 13-15).
- Second period—one year (age 15-16).
- Third period—one year (age 16-17).

The complete four-year period of training should be devoted to improving

the capacity of runners so that by the age of 17 they will be able to handle training loads that, in *volume*—not *intensity*—are close to what adults utilize.

In the first period, the young runner should be encouraged to engage in several track and field events—whatever suits his fancy. In addition, attention should be given to developing general endurance—endurance that will enable him to accomplish a high volume running at light and medium intensity.

In the beginning stage of training, special attention should be given to early-morning running combined with general exercises. The young runner

should begin with a run of about a mile at very low speed and then, toward the age of 16-17, gradually increase the running to 3-5 miles.

The main purpose of the second period is to combine improved running technique with increased general endurance.

In the third period, the runners increase motor skill and condition by specializing in running middle and long distances. Relying on the general endurance acquired in the first three years, workouts in the fourth year should be aimed at developing “specialized” en-

*(continued on page 70)*

# Reebok

MADE IN ENGLAND



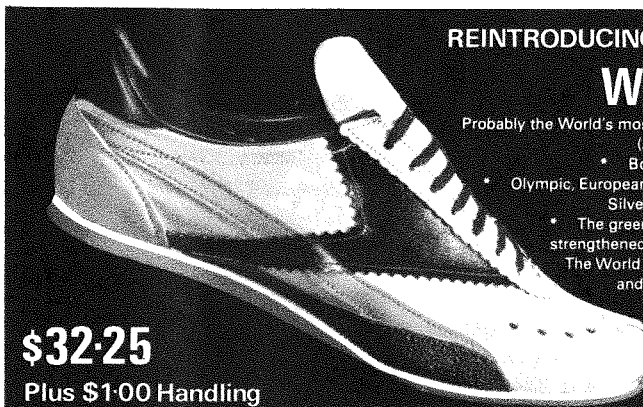
## REINTRODUCING THE FAMOUS WORLD TEN

Probably the World's most exclusive Marathon shoe.  
(Average shoe weight 5 oz.)

- Boston winner in record time.
- Olympic, European and Commonwealth Gold, Silver and Bronze medal winner.
- The green kid upper is fully lined and strengthened with anti-roll side patches. The World Ten has a cushion mid-sole and long wear outer cover with cushion heel wedge and is beautifully balanced with glove-like fitting.

**\$32.25**

Plus \$1.00 Handling



## MARATHON

Super soft white cow hide trimmed in blue/orange with anti-roll side patches, deep cushion mid-sole, heel wedge and high traction long wearing outersole.

A go anywhere shoe that gives a smooth, eventread.

**\$26.75**

Plus \$1.00 Handling



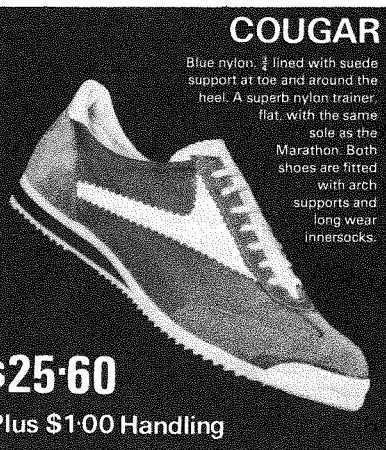
## COUGAR

Blue nylon,  $\frac{1}{2}$  lined with suede support at toe and around the heel. A superb nylon trainer, flat, with the same

sole as the Marathon. Both shoes are fitted with arch supports and long wear innersocks.

**\$25.60**

Plus \$1.00 Handling



**STEP INTO BRITAIN'S LEADING ATHLETIC SHOE  
SEND FOR YOURS TODAY**

**BRADFORD DISTRIBUTORS CORP. P.O. BOX 356  
HUNTINGDON VALLEY P.A. 19006**

**AREA DISTRIBUTORS** We Require Distributors In The South, Midwest, Northwest, and Southwest States.  
For Full Details Write To Reebok International Ltd. Bolton Rd. Bury, Lancs, England.

durance. The volume of running, at different intensities, for the four years should be about 6000 miles.

When using this system for beginning training, one should conduct tests every six months in order to determine the young runner's rate of progress. Rapid progress is an important factor in determining one's potential for distance running.

It is *not* wise to select young runners for middle- and long-distance running on the basis of the times they make during initial test runs. Our four years of research showed that the results of these tests are not reliable enough to evaluate one's potential for distance

running, simply because the correlation between beginning times and the times made after four years of training is extremely low. In other words, one's times without training are not an indication of true potential.

In order to develop objective criteria for evaluating the potential of teenagers for distance running, we analyzed the correlation between the results of various tests at the beginning of training with the results measured in a 1000-meter run and a 20-minute run after four years of training.

We noted that in the first stage of training (the first two years) the best predictors were tests which character-

ized endurance (running at a set speed, 60% of maximum, and the distance covered in the 20-minute run).

If we take the intensity of running as the determining factor, the 1000-meter time trial demonstrates "specialized" endurance, and the distance covered in 20 minutes shows "general" endurance.

Through the first and second years, runners engaging in a large volume of general-development exercises and running at low and medium intensity, greatly improved their aerobic ability, and they occupied approximately equal places in 1000-meter and 20-minute run tests. But after three years of the training, the correlation between these tests decreased substantially, and after four years it dropped even more.

The change seems to be explained by the fact that the training in the last two years became more specialized, allowing the true racing potential of the individual runners to surface. Also, anaerobic capacity increases with age because of an increase in the body's ability to endure oxygen deficiency. In order to develop anaerobic capacity, exercise that forces the body to work with an oxygen debt is the most important.

We studied the relationship between breath-holding and results in the 1000-meter run. For 12-year-old novices and slower 16-17-year-old runners, the correlation between the breath-holding tests and the 1000-meter run time was very high. But for older and faster athletes, the correlation was not reliable. Hence, breath holding tests can be used when selecting candidates for middle and long-distance running, but only in the beginning stage.

A. Lagosha (translated by Bernd Scheithauer, M.D.)



IF RUNNING IS YOUR GAME... RESOLING IS OURS !!!

\*All work supervised by former Track Coach of 13 years—Jerry Power.

Recommended by The National Jogging Association . . . . .  
 ". . . the network of repair centers you are establishing should provide unparalleled convenience for joggers . . ."  
 Gary K. Olsen  
 Executive Dr.  
 NJA

Repair Costs	
Tennis Soles . . . . .	\$12.50 pair
Running Soles . . . . .	\$11.50 pair
Special Wedging and Build Up . . . . .	\$.350 pair
Tennis Toes and Bumpers . . . . .	\$.350 pair
Heels . . . . .	\$.350 pair
Arch Cookies . . . . .	\$.150 pair
Heel Pads . . . . .	\$.50 pair
Power Insoles . . . . .	\$.295 pair

Also

Gluing and Patching  
 Prescription Work

\*For factory repairs refer to the following two locations:

POWER-SOLER INC.  
 1065 West Broad Street  
 Falls Church, Virginia 22046

POWER-SOLER WEST INC.  
 4330 West Desert Inn Road  
 Las Vegas, Nevada 89102

\*For the location of your nearest Power-Soler Dealer please call:

\*Toll Free 1/800/634-6537

Dealerships available



**POWER-SOLER**

Mail Form

Name: \_\_\_\_\_ Date: \_\_\_\_\_  
 Address \_\_\_\_\_ Phone \_\_\_\_\_  
 City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_  
 Work To Be Done: \_\_\_\_\_  
 \_\_\_\_\_ Type Shoe: \_\_\_\_\_ Size: \_\_\_\_\_  
 Am't Enclosed (check or MO) \_\_\_\_\_  
 Shipping: \_\_\_\_\_ Comments: \_\_\_\_\_

Enclose \$1.00 for shipping & handling



**USE YOUR VOTE**

*Runner's World* is very much *your* magazine. What we present and how we present it is geared to our impression of what you want. Each one of you has a say in the structure and development of the magazine. Unfortunately, many of you are not utilizing your right to vote. Consequently, we only hear from a small minority of the magazine's readers. We urge you not to be silent anymore. We need you. If you have any ideas, criticisms, opinions or comments on any aspect of the magazine, please feel free to share them with us. Though we can't guarantee we'll use them all, we will look at every one and answer any questions you might have. Write to: *Runner's World*, Box 366, Mountain View, Calif. 94042. ●



# Looking at People

Notes on the individuals making news this month.

● **Don Kardong**, who has been labeled "Dingy Don" by teammates, may have missed getting an Olympic bronze medal in the marathon by a mere three seconds, but he did not miss altogether getting a medal.

Friends of the lanky marathoner from Stanford University gathered in the rain outside the Stadium clad in "Go Dingy" t-shirts and set for an unofficial medal ceremony.

At least an hour after the marathon had been completed, the friends and fans were able to hang a hand-made fourth place "Dingy" medal on their hero who was still sopping wet from his run in the rain.

● The record for the ascent from the portal of Mt. Whitney in southern California to the highest point in the contiguous 48 states, the summit of the mountain 14,495 feet above sea level, has stood for 16 years. In September of 1960, **Calvin Hansen** had made the run in 2:37.

But this summer that record was broken by **Mike Harrie** of the Rialto, Calif., Road Runners when he made the 10.5-mile run in 2:29.

Hansen still has possession of the round-trip record (ascent and descent) as Harrie ran into difficulties on the way down. The records have been verified by the Lone Pine Chamber of Commerce, which is the record keeper for the run.

● **Ben Hirsch**, the oldest participant in the Pike Peak's Marathon, won for himself a gold medal during the annual run. But his victory for medical science may prove to be more valuable as he carried a heart monitor with him during the 14.5-mile climb to the summit of the mountain. The monitor was for the medical school of the University of Colorado.

● The life-saving attributes of running have been expounded in more than one publication from a healthy point of view, but how often have you read about the advantages of running from the point of view of saving lives from natural disasters?

**Bill and Donna Messenger** and their three children had traveled from their

Rist Canyon, Colo., home to the Pike's Peak for competition in the annual marathon on the mountain.

When the Messengers returned home from that run, however, they found that floodwaters had destroyed a piece of their road, destroyed their bridge, wiped out part of their garden, phased out three ponds, snatched three canoes and totally destroyed their mailbox.

The family lives in a canyon about 35 minutes west of Fort Collins, Colo., and fortunately their running enthusiasm had called them away during a disaster which claimed dozens of lives.



Mark Covert

John Marconi

● **Mark Covert** of Burbank, Calif., has run enough miles in the past eight years to cross the American continent 19 times, almost 2½ times per year.

As of Oct. 1, Covert has run for the past 2973 days consecutively averaging about 15 miles per day or 110 miles per week. During his unbelievably long streak, Covert has amassed more than 46,000 miles. His longest run was 52 miles in 7:35. He will reach the golden 3000th consecutive day on Oct. 27.

"After reaching 3000, I guess I'll head for 4000," Covert said.

● Two years previously, he had attended the event while wearing casts on both legs. One year ago, he attended still wearing one cast. This year, he finished the Wisconsin Mayfair Marathon

50 minutes behind the winner. And yet, **Wayne Rick** considered the event an important personal victory.

Rick was taking an early morning run in February 1974 when he was struck by a motorist. He suffered compound fractures of both legs below the knees, his back was broken in six places, his left hand was broken, his neck was fractured and his face was so disfigured it required plastic surgery. He required four blood transfusions.

After five operations, Rick considers himself lucky because he is on his way back.

"Every time I go out, I'm surprising myself. I'm only 32 and each year is like a segment in a race," said Rick, who wears a special shoe since his right leg is almost an inch shorter than his left as a result of the accident.

● Being a member of a running club has its obvious advantages but at least one member of the Anchorage, Alaska, Pulsators Running Club knows firsthand some of the not-so-obvious advantages.

**Pete Haley**, a member of the Pulsators, was treated to a trip to his native England by the 200 members of the club. The club members raised \$1000 to send Pete back to England for competition in the World Veterans Marathon Championships.

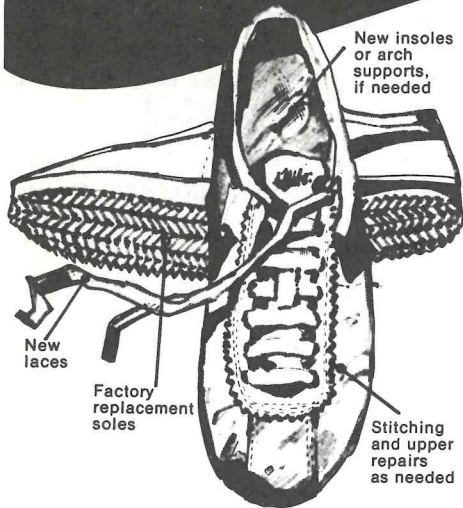
● The vogue reaction these days among some physicians treating middle-aged men for chest pains or for collapsing at home seems to be that the patient is a heart attack victim. But in the case of **Dave Power**, an Australian who won gold medals in the 1958 Commonwealth Games in the six-mile and marathon events, that diagnosis could be no farther from the cause of his discomfort.

Rumors abounded after Power's recent hospitalization that he was being treated for a cardiovascular disorder. Such disorders among runners obviously are not common but when one case pops up, rumors naturally follow.

In this case, however, much worry was spent over nothing. Power is currently back in training after a brief bout with bronchitis.

● Several thousand persons turned out for the **Jim Hershberger 20-Mile Run-R-Walk** for the American Cancer Society at Wichita, Kan., with about \$40,000 being raised for the Cancer Society. Hershberger participated in the event despite the death of his father shortly before the event was scheduled to take place. ●

# New life for old Nikes!



**Your old running shoes can be your new running shoes! And they're already broken in.**

**We can make them nearly new again.**

We'll make other necessary repairs, AND we'll pay postage back to you! And we ship them back fast—prepaid. Usually 3 to 5 days after receipt. Mostly via UPS for extra speed. So, give your old faithfuls new life. We're a factory authorized Nike repair center. Satisfaction guaranteed. You can't lose.

**\$11.95** Running Shoes

**\$12.95** Tennis Shoes



## SHOE RECYCLING CENTER

10564 S.E. Washington St.  
Portland, Oregon 97216

### Shoe Recycling Center

Enclose check, money order or credit card number. NO C.O.D.

Name \_\_\_\_\_

Address \_\_\_\_\_

City/State/Zip \_\_\_\_\_

Model \_\_\_\_\_ Size \_\_\_\_\_

BankAmericard or  
 Master Charge # \_\_\_\_\_

# Best of Times

Statistics and analysis by Ken Young, National Running Data Center.

## MEET OF MILES

To those of you who are not acquainted with the Road Runners Club of America Meet of Miles, this is an annual, postal mile competition, broken down for all affiliations (or lack thereof) and abilities.

Each year, two or three US age records usually are set in the Meet of Miles, and the results include several runners over 10 minutes at the other end of the scale. Ages this year ranged from four for the youngest to 69 for the oldest.

The total participation this year was 1231 runners (848 male, 383 female). Nine sites sent in results, ranging in size from 331 runners at Mahopac, N.Y., to four runners at New Berlin, Wisc.

Two performances are believed to be US age records. These are 6:44.5 by Stephen Muzzonegro (age 5, N.Y.) and 5:28.1 by Mary Czarapata (age 41, Wisc.). The 4:38 mile by Glynn Wood (age 42, Va.) and the 5:23.5 by Clive

Davies (age 60, Ore.) are near US records. Nancy Frank and Kelly O'Toole (both 15 and from New York) turned in sub-5:00 performances with 4:56 and 4:57.2, respectively.

Team competition is based on the cumulative time for the first three finishers from a given team. The diversity of the competition is evident by noting that the 16 different winning teams represent 13 different clubs.

Anyone may hold a section of the Meet of Miles and anyone may run. You do not need to be a member of the RRCA and the only fees collected (a dime per runner) are used to print and distribute the results.

If you are interested in holding a section of the Meet of Miles, please write to me and I'll provide more details.

## CORRECTION

A list of marks in the September *RW* was improperly identified as the marks of a 10-mile update. These marks were actually 15-kilometer age-group records.

## MEN

Division	Entries	Winner	Time	Team Winner	Team Time
under 8	70	Walter Hensley	6:13.4	Mt. Lebanon AA	20:05
8-9	142	Marty Munn	5:30.1	DC CYO	18:01
10-11	158	Roy Swintek	5:11.3	Diablo Valley TFC	16:20
12-13	116	Doug Bergman	4:52.5	Portland TC	14:56
14-15	113	Rob Arkes	4:33.9	New Hyde Park PBC	14:00
16-19	97	Kent Burno	4:17.0	Cavalier TC	13:16
20-29	38	John Heiser	4:23.7	SW Truckers	13:45
30-39	70	Lance Thiede	4:45.4	Clark County TC	14:19
40-49	33	Glynn Wood	4:38.0	Potomac Valley Seniors	15:05
50-59	7	Edwin Barron	5:26.0	Oregon RRC	18:40
60-69	4	Clive Davies	5:23.5	none	

## WOMEN

Division	Entries	Winner	Time	Team Winner	Team Time
under 8	43	Deanna Koffel	6:36.6	Mt. Lebanon AA	21:21
8-9	74	Andrea Cervantes	5:52.3	DC CYO	17:59
10-11	96	Stacy Hartsfield	5:26.5	DC CYO	17:22
12-13	83	Joette Clark	5:20.0	Scottsdale TC	16:26
14-15	42	Nancy Frank	4:56.0	Long Island Golden Spikes	15:22
16-19	23	Susan Niedermeyer	5:15.9	Roseville Gazelles	17:30
20-29	7	Mary Sikes	6:24.0	none	
30-39	12	Mary Williams	5:51.6	none	
40-49	2	Mara Czarapata	5:28.1	none	
50-59	1	Edna Valencia	11:56.8	none	
60-69		none		none	

# THE YEAR'S BEST BOOK BARGAIN



Read in depth about topics as diverse as the Olympic Games, Percy Cerutti, what runners take in by mouth (diet) and what happens at ground level (feet). Read 1000 pages in all, and pay \$12 for the information and pleasure by subscribing to the series.

The sixth year of Runner's Book Series is about to begin. The six books are bigger (and better) than ever, but the price is the same as it has been since the series began in 1971.

Subscribe to the series and receive the six full-length books for \$2 each. These six books purchased separately would cost at least \$24 in paperback or \$36 for hardbound. So do take advantage of the savings and subscribe today.

THE 1976-77 SERIES WILL INCLUDE THE FOLLOWING BOOKS:

## 1976 OLYMPIC GAMES

*Already Published*

A close and complete look at the track and field events by the editors of *Runner's World*. This book captures the "personality" of the Games of Montreal and analyzes their implications. And it tells the story of each men's and women's event, in words and pictures.

## THE RUNNING FOOT DOCTOR

*January, 1977*

The podiatrists (foot doctors) are making revolutionary inroads in the treatment and prevention of running injuries. A leader in this good fight is Dr. Steven Subotnick. Here, he tells in personal and non-technical style what his colleagues are doing to help runners put their best feet forward.

## JOG, RUN, RACE

*March, 1977*

Joe Henderson's primer for beginners. Included are specific programs for beginners of five types: first-time joggers establishing basic fitness; jogging graduates moving to informal racing; school-age runners preparing for their first racing season; short-distance racers progressing to the marathon; racers easing down to a "fun-and-fitness" approach.

## FITNESS AFTER FORTY

*May, 1977*

Hal Higdon is a master among the Masters—a world record-holder and many-times national champion in the over-40 age group. And he writes even better than he runs. In classic Higdon style, he advises older runners on matters of fitness and competition.

## TRAINING WITH CERUTTY

*July, 1977*

Larry Myers was handpicked by the late Percy Cerutti to carry on the Australian's work. Myers brings order to the seemingly chaotic flow of ideas which gushed from the eccentric coach. We see in Myers' book that Cerutti's thinking on matters such as strength training, running technique, breathing and diet may have been far ahead of their time.

## THE ALL-NEW RUNNER'S DIET

*August, 1977*

The original *Runner's Diet* was the most popular book this company ever has produced. But so much new information has come to light on the feeding and watering of athletes since 1972 that a completely revised and expanded volume is required. This one has chapters on general nutrition, exotic diets, supplements and many other topics.

Note that all of the books are *NOT* available now. They are printed according to the schedule listed above and are mailed immediately after publication. Do note that these publication dates can change without notice.

Note also that the books may be ordered individually, but not at this time. Individual prices, to be announced later, generally are in the \$3-5 range for paperback and to \$5-7 for hardback.

Subscriptions are \$12 per year for paperback and \$20 for hardbound. This entitles the subscriber to six consecutive books. Sorry, no substitutions or skipping of books.

Ask about our first 54 booklets and books. Most of them are still in print.

## ORDER TODAY

November 1976

### Runner's World

Box 366, Mountain View, Calif. 94042

Yes, I am interested in you Sixth Runner's Book series. Please start my subscription with the 1976 Olympic Games book and send me the other five books as they are published.

\$12.00 per year paperback       New  
 \$20 per year hardbound       Renewal

Name \_\_\_\_\_  
Address \_\_\_\_\_  
City/State/Zip \_\_\_\_\_  
Add 6% sales tax if Calif. resident.

# Highlights

Frank Shorter suffered one of the worst defeats of his road running life in September. Bill Rodgers beat him by more than a minute at 10 miles. However, Shorter reportedly was injured during that race. Earlier, he had won the big Charleston, W. Va., 15-Mile in record time. Kim Merritt led the women runners at Charleston with a mark believed to be the fastest ever for this distance.

The National Women's 10-Kilometer was a match of speed vs. strength. Olympic track runner Cyndy Poor raced 10-K record-holder Peg Neppel. This time, speed won out, with Poor leading by more than a minute at the end.

Frank Bozanich ran the second fastest track 50-mile by an American, and Greg Hill ran an incredible time for a 10-year-old.

Larry Young bounced back from the disappointment of not making the Olympic race walking team. In late summer, he won two national titles, including the prestigious 50-kilometer.

## NORTHEAST

The half-marathon isn't yet considered a "standard distance." It has no records and no national championship. But it has become one of the most popular road racing distances. Recently, nearly 400 runners competed in the Puerto Rican-Hispanic Marathon in New York City. Fittingly, the winner was Puerto Rican Olympian Tony Colon who lives in the US (results follow).

Tom Fleming experienced a rare local loss during September when Morgan Fennell beat him at 30 kilometers, 1:38:18 to 1:40:37 (New York City, Sept. 19). Nina Kuscsik won the women's race in 2:11:43.

Nick Marshall ran 50 miles on the track in 5:54:00, with Dan Marvel (6:00:23) and John Ress (6:15:03) following. The run was part of the *RW* Eastern 24-Hour Relay competition at Ft. Meade, Md., Aug. 14-15.

Four runners averaged under five-minute pace during a five-mile dash along the C & O Canal Towpath (Hagerstown, Md., Aug. 27). Heinz Wiegand won in 24:01, leading 17-year-old Chris Fox (24:12), Terry Baker (24:19) and another 17-year-old, Scott Haack (24:22). First woman was Lorre Stottlemeyer in 32:29.

Mark Finucane was an easy winner in a 10-kilometer race at Fredonia, N.Y., Aug. 21. He ran 30:12.

## PUERTO RICAN-HISPANIC

New York, N.Y., Aug. 29—13.11 miles: 1. Tony Colon (24, New York AC) 1:08:55; 2. Norbert Sander (33, Millrose AA) 1:10:15; 3. Bill Bragg (27, NYAC) 1:11:40; 4. Remulo Mejia (23, East Coast AC) 1:11:50; 5. Francisco Vargas (17, Puerto Rico) 1:11:57; 6. Art Hall (29, Oakwood TC) 1:12:18; 7. Joel Pasternack (26, NYAC) 1:12:20; 8. Gary Muhrcke (35, Millrose

AC) 1:13:20; 9. Steve Fiamengo (21, Central Park TC) 1:13:47; 10. Carlos Quinones (18, Puerto Rico) 1:14:10 . . . 33. Bill Gordon (42, Millrose AA) 1:19:18 . . . 107. George Sheehan (57, Shore AC) 1:29:42 . . . 214. William Bobston (63, Saugerties) 1:42:39. Women: 1. Donna Draycott (16) 1:28:54; 2. Nancy Frank (15, Long Island Golden Spikes) 1:30:38 . . . 15. Ann De Groff (41) 1:55:14. (363 finished, 35 under 1:20, 109 under 1:30, from Joe Kleinerman).



Cyndy Poor (4), Peg Neppel (2) and Judy Graham (12) at the Women's National.

AA) 1:13:20; 9. Steve Fiamengo (21, Central Park TC) 1:13:47; 10. Carlos Quinones (18, Puerto Rico) 1:14:10 . . . 33. Bill Gordon (42, Millrose AA) 1:19:18 . . . 107. George Sheehan (57, Shore AC) 1:29:42 . . . 214. William Bobston (63, Saugerties) 1:42:39. Women: 1. Donna Draycott (16) 1:28:54; 2. Nancy Frank (15, Long Island Golden Spikes) 1:30:38 . . . 15. Ann De Groff (41) 1:55:14. (363 finished, 35 under 1:20, 109 under 1:30, from Joe Kleinerman).

## SOUTHEAST

The two biggest races of the period being covered in this issue were only two weeks and a few hundred miles apart—in Charleston, W. Va., and Lynchburg, Va. The first four finishers at Charleston—Frank Shorter, Gary Tuttle, Lucian Rosa and John Vitale—all broke the course record. Shorter averaged better than five-minute miles. Meanwhile, Boston women's winner Kim Mer-

ritt was running 1:28:50—a time no female apparently had approached before. Laura Craven, 11, ran an equally remarkable time of 1:33:00.

Shorter and Bill Rodgers had raced to a near-tie at Lynchburg last year. But this time Rodgers moved away to a fast and easy victory, 47:48 to 48:53. Julie Shea led the women with 57:57. The race drew 782 starters, slightly fewer than Charleston (results of both races follow).

In a 10-kilometer cross-country race (Louisville, Ky., Sept. 4), the Englishmen at Western Kentucky University took most of the top places. Nick Rose

Lucian Rosa (31, Sri Lanka) 1:15:34; 4. John Vitale (27) 1:15:49; 5. David Long (22, Great Britain) 1:16:33; 6. Chris Ridler (23, Great Britain) 1:17:07; 7. Amby Burfoot (30) 1:17:10; 8. Barry Brown (32) 1:17:11; 9. Richard Hughson (27, Canada) 1:17:24; 10. Bob Varsha (25) 1:17:36.

11. Sam Bair (30) 1:17:46; 12. Daniel Rincon (23) 1:17:58; 13. Hamilton Amer (24) 1:18:05; 14. Jack Fultz (28) 1:18:18; 15. Benji Durden (25) 1:18:27; 16. Don Kardong (27) 1:18:37; 17. Scott Eden (23) 1:18:49; 19. Marty Sudzina (24) 1:18:52; 20. Carl Hatfield (29) 1:19:21.

won in 31:09, but Jim Buell broke up the British monopoly by placing second in 31:27. Earlier, Buell had run 11 miles 882 yards in an hour (Lexington, Ky., Aug. 11). He also finished third at Lynchburg.

Lee Fidler and Louis Blount won the 10- and five-mile races at Stone Mountain, Ga., Sept. 18. Fidler was a runaway winner in the long race with 49:58, while Blount's fast 23:56 didn't put him far ahead of Rick Musick (24:02) and Phil Barker (24:03) in the short one. Grady Silver paced the Masters with 27:50 and Lisa Lorrain won the women's five-mile in 30:32.

In a Tennessee 10-mile (Townsend, Sept. 12), Marshall Adams was the winner with 50:36, and 53-year-old Charles Gibson outran most of the younger men with 58:21.

## CHARLESTON 15-MILE

Charleston, W. Va., Sept. 4—1. Frank Shorter (26) 1:14:37; 2. Gary Tuttle (28) 1:15:14; 3.

21. Michael Buckley (22) 1:19:21; 22. Paul Talkington (29) 1:19:24; 23. Ron Kurrle (28) 1:19:25; 24. John Slaughter (20) 1:19:37; 25. Mark Linder (21) 1:19:49; 26. Kevin Foley (21) 1:20:06; 27. Paul Stemmer (23) 1:20:11; 28. Tom Fleming (25) 1:20:11; 29. Ed Leddy (24, Ireland) 1:20:36; 30. Tommy Preston (24) 1:20:38.

54. Jim Lyons (18) 1:23:12 . . . 71. Ralph Thomas (40) 1:25:01 . . . 369. Don Liljequist (50) 1:44:40 . . . 434. Robert Boal (64) 1:48:22.

Women: 1. Kim Merritt (21) 1:28:50; 2. Laura Craven (11) 1:33:00; 3. Gayle Barron (31) 1:34:51; 4. Susan Mallory (22) 1:38:49; 5. Lisa Matovcik (21) 1:39:19; 6. Lisa Lorrain (21) 1:39:44. (844 finished, 131 under 1:30, 294 under 1:40).

## LYNCHBURG 10-MILE

Lynchburg, Va., Sept. 23—1. Bill Rodgers (28) 47:48; 2. Frank Shorter (27) 48:53; 3. John Vitale (29) 49:26; 4. Jim Buell (21)

Lorraine Rorke

49:36; 5. Barry Brown (31) 49:50; 6. Tom Burrige (20) 50:15; 7. Jack Fultz (27) 50:24; 8. Daniel Rincon (23) 50:43; 9. Ed Leddy (28, Ireland) 50:46; 10. Will Albers (20) 51:25.

11. Ric Shriver (23) 51:28; 12. Stephen Mahieu (29) 51:44; 13. Bruce Robinson (25) 51:47; 14. Ron Martin (25) 51:53; 15. Bob Varsha (25) 52:00; 16. Jeffrey Peterson (20) 52:41; 17. Steve Milmoie (24) 52:45; 19. Steve Nobles (23) 52:58; 20. Rex Wiggins (20) 53:04 . . . 22. Mark Nenow (18) 53:13.

Women: 1. Julie Shea (17) 57:57; 2. Mary Shea (15) 1:01:19; 3. Gayle Barron (31) 1:01:46. (753 finished, 41 under 55:00, 122 under 1:00; from Frank Land).

## MIDWEST

At age 17, the Heart of America Marathon is one of the country's longest lasting. The latest run (Columbia, Mo., Sept. 6) was the largest with 134 runners. The leaders: 1. Tony Rodiez 2:34:07; 2. Rick Katz 2:38:09; 3. Tim Hendricks 2:38:42; 4. Dick Hessler 2:39:45.

In the first CCAP Marathon (Clay City, Ill., Sept. 4), Fred Shaffstein won by about 20 minutes with 2:37:51. The fastest woman was Karen Kokesh with 3:26:08.

Dike Stirrett and Paul Heck both posted fast victories in the Steamboat Classic (Peoria, Ill., Aug. 1). Stirrett ran 15 kilometers in 48:13, Heck four miles in 19:31.

Other recent marks of note: Warren Eide, 20 kilometers in 1:05:46 (Brookings, S.D., Aug. 21); John Samore, 10 miles in 51:55 (Sioux City, Iowa, Sept. 5); Alex Ratelle age 53, 10 miles in 58:51 (St. Paul, Minn., Sept. 6); Jim Draws, seven miles in 35:06 (Mayville, Wisc., Sept. 25).

## SOUTHWEST

George Stewart and Bill Orthwien seemed to be running by themselves in a 10-miler at Tulsa, Okla., Sept. 4. They put four minutes between themselves and the rest of the field as Stewart barely outran Orthwien, 49:49 to 49:51. Tom Kempf, 52, did 57:58. Earlier, Stewart had tied for first with Mike Manke in a 10-kilometer race at Stillwater, Okla. They ran 31:58. Steve Wolf won another Oklahoma race (seven miles at Oklahoma City, Aug. 21) in 36:46.

## ROCKIES

Runners and race organizers in

the Rockies often take advantage of the area's unique natural features. Two cases in point are recent races in Montana and Colorado.

Branch Brady led the charge up and down Mt. Helena, Mont. The 5.3 miles (which Brady ran in 37:35) included a 1400-foot climb and descent). Mike Lanyman and John Downey tied for second in 38:35. Patty Sodja, 12, won the women's division in 50:25.

Steamboat Springs, Colo., was the scene of the Steve Prefontaine Memorial 10,000-meter run at 10,000 feet elevation. The leaders: 1. Charley Vigil and Steve Floto 40:08; 3. Steve Flanagan 40:43. Don McMahill won the Masters division in 53:34, and Donna Messenger, the women's winner, ran 56:14.

## WEST

Peg Neppel, national record-holder at 10,000 meters, reportedly had stitch problems during the AAU 10-K race. Both Cyndy Poor and Poor's former teammate Judy Graham beat Peg. Jeanie Kayser-Jones took the Masters title (results follow).

Only Martin Smith's American track record of 5:26 is faster than the 50-mile which Frank Bozanich ran recently (Santa Monica, Calif., Sept. 12). Bozanich did 5:30:31, with runner-up Bob Branch a distant second in 6:02:19. Equally amazing was Greg Hill's time of 6:49:29 at the age of 10. Donna Gookin ran 8:29:42.

Eight runners finished the first run around Lake Tahoe on the California-Nevada border. Don Choi won in 9:45:14 for 72 miles at 6000 feet elevation. Ralph Paffenbarger, 53, finished next with 11:34:24.

Ole Kristensen led the Equinox Marathon runners along the mountainous cross-country trails near Fairbanks, Alaska, Sept. 18. He ran 2:53:59 to runner-up Don Wells' 3:07:36 and Paul Vanture's 3:12:05. Vanture was the first Master, and Marcie Trent, 58, won the women's race with 4:24:51.

A trip to the International Women's Championship was at stake in California's Ocean-Bay Marathon (Half Moon Bay to Belmont, Aug. 21). Judy Gumbs earned the trip by running 3:07:55 on a course which climbs from sea level to 2000 feet and returns to zero. The men's race went to Denis O'Halloran with 2:41:02, and Ulrich Kaempf was the first of the over-40s with 2:58:43.

Phil Camp outran a field of nearly 5000 in the Coronado, Calif., Half-Marathon. His time was 1:06:42.

More than 500 runners

donated \$5 each to the Steve Prefontaine Foundation, then ran races on Pre's Trails (Eugene, Ore., Sept. 6). Damien Koch won the 10-kilometer event on the wood-chip-and-sawdust trails in 35:14, with Mike Davecka second in 35:17 and Bill McChesney third in 35:30. McChesney also finished second to Scott Daggett in the five-kilometer, 17:17 to 17:18. Sandi Nevis and Debbie Koffel both ran 22:26 in the women's 5000.

Jon Anderson easily beat Damien Koch, 34:08 to 35:13, in a 6½-mile race (Sun River, Ore., Sept. 18). Third was veteran Ray Hatton, 35:36.

### WOMEN'S 10-KILOMETER

San Francisco, Calif., Sept. 12 —1. Cyndy Poor (23, San Jose Cindergals) 34:32; 2. Judy Gra-



*Fred Shaffstein*

ham (23) 34:57; 3. Peg Neppel (23, Iowa State U) 35:36; 4. Katy Schilly (19, Iowa State U) 35:50; 5. Carol Cook (22, Iowa State U) 36:04; 6. Vicky Bray (15, SJ Cindergals) 36:11; 7. Carol Urish (24, Cameron TC) 37:02; 8. Leal-Ann Reinhart (28, San Fernando Valley TC) 37:08; 9. Judy Gumbs (25, West Valley TC) 37:38; 10. Stacey Kearns (16, Peach Bowl Pacers) 37:59.

11. Nadia Garcia (22, San Diego TC) 38:25; 12. Joan Ulyot (36 West Valley TC) 38:40; 13. Karen Bain (15) 38:52; 14. Sharon Furtado (18, West Valley TC) 38:52; 15. Dede Mavis (15, SJ Cindergals) 39:03 . . . 26. Jeanie Kayser-Jones (40, Pama-kid) 42:14; 27. Ruth Anderson (47, Nor Cal Seniors) 42:32 . . . 34. Ruth Waters (42, Nor Cal Seniors) 44:40 . . . 73. Kay Atkinson (59, Nor Cal Seniors) 53:41. Teams: 1. Iowa State

University; 2. San Jose Cindergals; 3. West Valley TC. (102 finished, 21 under 40:00, 35 under 45:00, from Penny DeMoss).

## INTERNATIONAL

Lots of races claim to be the "world's largest," but they'll all have to grow some to top the City to Surf run in Sydney, Australia. This year, it had 10,100 finishers, the first of whom was Tim O'Shoughnessy in 42:04 for about nine miles. Chasing him were Robert de Castello (42:26), Bill Scott (42:34) and Chris Wardlaw (42:34). Wardlaw had won another of the biggies, San Francisco's Bay to Breakers, earlier this year.

A number of Americans traveled to Scotland for the Two Bridges 36-mile. Winner M. Orton ran 3:27:58, while Max White led the US runners by placing seventh in 3:48:55. Other Americans: 12. Ed Ayres 4:02:51; 14. Ray Morrison 4:04:19; 23. Lester Page 4:19:46; 3. R. Harper 4:29:30; 38. P.H. Farrier 4:44:36; 46. Don Logan 5:11:50.

## WALKS

No US walker except Larry Young himself has ever walked faster than the 4:11:08 which Larry did in winning the AAU 50-Kilometer title. He also won the 30-K championship (results of both races follow).

Surviving the 50-mile track walk at Ft. Meade, Md., on Aug. 14 were Tom Hamilton (9:51:36), Wes Mathews (10:20:10), Paul Robertson (10:28:30) and Bruce Douglas (11:34:00).

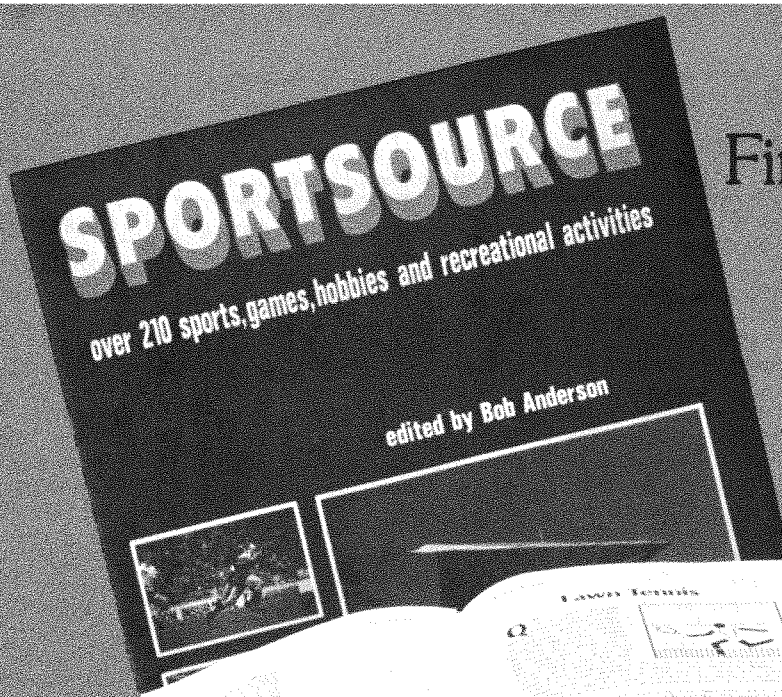
John Knifton recorded a good 15-kilometer time of 1:13:05 (Houston, Sept. 12).

### AAU 50-KILOMETER

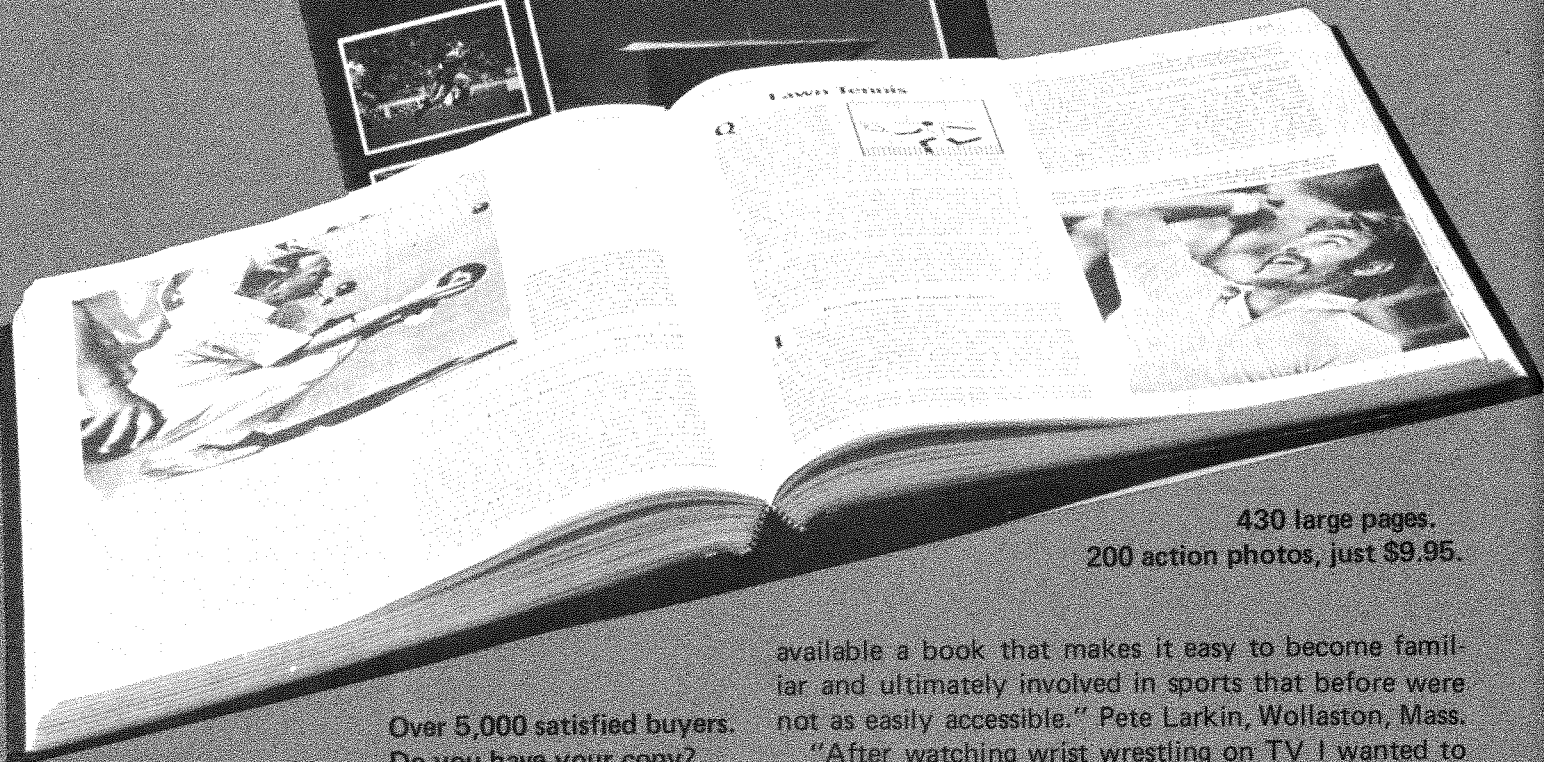
Columbia, Mo., Aug. 15—1. Larry Young (33) 4:11:08; 2. Augie Hirt (25) 4:19:44; 3. Dan O'Connor (24) 4:23:13; 4. Floyd Godwin (31) 4:25:45; 5. Bob Rosencrantz (20) 4:31:36; 6. Paul Ide (24) 4:45:14; 7. Randy Mimm (22) 4:46:32; 8. Alan Price (29) 4:49:42; 9. Tom Knatt (36) 5:05:54; 10. Jim Murchie (18) 5:06:58; 11. Bob Chapin (44) 5:25:09 . . . 15. Rob Spier (54) 5:46:06. (16 finished; from Joe Duncan).

### AAU 30-KILOMETER

Des Moines, Iowa—1. Larry Young 2:27:26; 2. Floyd Godwin 2:30:27; 3. Augie Hirt 2:39:19; 4. Ron Laird 2:44:03; 5. Mike Hale 2:53:48; 6. Pete Van Arsdale 2:53:18; 7. Mike Rummelhart 2:58:54; 8. Jim Breitenbacher 3:03:36; 9. Paul Lightsey 3:06:11; 10. Robert Young (56) 3:08:45. (16 finished). •



Finally . . . A Book  
That Everyone  
Needs . . . Great  
Gift Idea!



Over 5,000 satisfied buyers.  
Do you have your copy?

They are saying some nice things about the *SportSource*. "Yesterday I received your new book *SportSource*. You guys outdid yourselves on this one. You have my highest regards and gratitude for making

430 large pages.  
200 action photos, just \$9.95.

available a book that makes it easy to become familiar and ultimately involved in sports that before were not as easily accessible." Pete Larkin, Wollaston, Mass.

"After watching wrist wrestling on TV I wanted to get involved. Thanks to your *SportSource* I found out how. I am already training for my first match." Barry Foster, Kansas City, Kansas.

"I have never spent so much time with a sport book. The photos are excellent. How did you get so many great action shots." Bob Carman, St. Louis, Mo.

The *SportSource* is a unique book. One of a kind. 210 different sports are covered in enough detail to get you involved.

Inside *SportSource* you'll find essays by big-name athletes like Bruce Jenner, Decathlon great; Frank Shorter, Marathon champion; Gale Sayers former professional football player; Al Unser, professional auto racer and Micki King, Olympic diving champion.

You will find information on organizations, periodicals, books and equipment sources available in each sport.

If you are looking for a perfect gift, the *SportSource* is it. With 430 pages (8½ x 11) and over 200 photos it is a book everyone interested in sports would want to own. Just \$9.95 each.

## A Great Gift Idea!

Please send me \_\_\_\_\_ copy(ies) of the *SportSource*. I am enclosing \$9.95 plus 40 cents postage for each book. (California residents add 6% tax).

Name \_\_\_\_\_

Address \_\_\_\_\_

City/State/Zip \_\_\_\_\_

World Publications, Box 366, Mountain View, CA 94042

# December Coming Events

## NORTHEAST

- 8 Metropolitan AAU and Open 50-Kilometer, Jamaica, N.Y. (10 a.m., Alley Town Park; Kurt Steiner, 1660 E. 21 St., Brooklyn, N.Y. 11210).
- 7 Maryland Marathon, Baltimore, Md. (Memorial Stadium; Hy Levasseur, Maryland Marathon Commission, Fifth Floor, 201 W. Preston St., Baltimore, Md. 21201).

## SOUTHEAST

- 4 Camp Creek One- and Five-Mile Road Races, Atlanta, Ga. (9 a.m., Camp Creek Parkway; Bruce Labudde, 4316 Fawn Lane SE, Smyrna, Ga. 30080).
- 5 Bluegrass Invitational Marathon, Lexington, Ky. (Henry Clay High School; Jerry Stone, Bluegrass RC, 15 Merlin Dr., Georgetown, Ky. 40324).
- 18 Peach Bowl Marathon, Atlanta, Ga. (noon, Westminster School; Tim Singleton, Dean of Men, Georgia State University, University Plaza, Atlanta, Ga. 30303).
- 26 Melbourne Marathon, Melbourne, Fla. (Wickmen Park; Melbourne Recreation Department, 1551 Highland Ave., Melbourne, Fla. 32935).

## MIDWEST

- 4 ITC Eight-Mile Run, Eau Claire, Wisc. (Jerry Foote, 606 Fourth Ave., Eau Claire, Wisc. 54701).
- 4 North Central Marathon, Naperville, Ill. (11 a.m., North Central College; Bo Schrader, North Central College Fieldhouse, Naperville, Ill. 60540).
- 4 Mel Vos Memorial Marathon, Topeka, Kan. (1 p.m., Lake Shawnee; Karlton Naylor, 120 NW 35th Topeka, Kan. 66617).
- 4 MV AAU RRC and Open 30-Kilometer, Columbia, Mo. (Joe Duncan, 4004 Defoe Dr., Columbia, Mo. 65201).
- 4 Sioux Falls to Harrisburg Road Race, Sioux Falls,

S.D. (1 p.m.; Rich Greeno, 917 Pam Rd., Sioux Falls, S.D. 57105).

- 11 AAU Junior Olympics cross-Country, St. Louis, Mo. (Bob Lafferty, AAU House, 3400 W. 86th St., Indianapolis, Ind. 46268).
- 19 RRC 50-Mile, Toledo, Ohio (8 a.m., Secor Park; Jim Edwards, 3809 Maxwell, Toledo, Ohio 43613).

18 15-Kilometer, Tulsa, Okla. (11 a.m., Mohawk Park; Vern Whiteside, 6916 S. Knoxville Ave., Tulsa, Okla. 74136).

19 RRC Three-Mile and One-Mile, Houston, Tex. (1 p.m., Savine Street Bridge; J. Geller, c/o Fred Johnson, 200 Houston Natural Gas Building, Houston, Tex. 77002).



Participants in the 1975 Western Hemisphere race.

## SOUTHWEST

- 4 American National Marathon, Galveston, Tex. (Seawall Boulevard; Gerrit M. Hoogenboezem, Box 2052, Galveston, Tex. 77550).
- 11 Arkansas One-Hour Track, Little Rock, Ark. (11 a.m., Old Main High School; James Baugos, Box 572, Sheridan, Ark. 72150).
- 11 30-Kilometer, Stillwater, Okla. (10 a.m.; Vern Whiteside, 6916 S. Knoxville Ave., Tulsa, Okla. 74136).
- 18 Fiesta Bowl, Cave Creek to Scottsdale, Ariz. (9 a.m.; Race Director, Fiesta Bowl, 3410 E. Van Buren, Phoenix, Ariz. 85009).

7 Lozano Marathon, San Antonio, Tex. (Jesse Martinez, 1715 N. Panam, San Antonio, Tex. 78208).

## ROCKY MOUNTAIN

- 4 Rocky Mountain AAU 15-Kilometer Championship, Denver, Colo. (Denver Track Club, 4881 South Acoma, Englewood, Colo. 80110).
- 18 Pueblo Holiday Marathon, Pueblo, Colo. (10 a.m., Pueblo County High School; Jeff Arnold, 131 Garfield, Pueblo, Colo. 81004).

## WEST

5 Las Vegas Mini Marathon,

Las Vegas, Nev. (9 a.m.; Tommy Hodges, 6245 Hobart, Las Vegas, Nev. 89107).

5 Western Hemisphere and AAU Women's Cross-Country Championship Marathon, Culver City, Calif. (8 a.m., Veteran's Memorial Auditorium; Carl Porter, 4117 Overland Ave., Culver City, Calif. 90230).

11 Livermore Marathon and PA AAU Marathon Championships, Livermore, Calif. (10 a.m., Lawrence Radiation Lab; Dan Moore, 663 Jefferson Ave., Livermore, Calif. 94550).

12 National AAU Masters Marathon, Honolulu, Hawaii (Mid-Pacific Road Runners Club, 47-316 B. Hui Iwa St., Kaneohe, Hawaii 96744).

12 Honolulu Marathon 26.2 Miles, Honolulu, Hawaii (Mid-Pacific Road Runners Club, 47-316 B. Hui Iwa St., Kaneohe, Hawaii 96744).

12 PA AAU Junior Cross-Country Championships 10-Kilometer, Belmont, Calif. (11 a.m., Crystal Springs Cross-Country Course; Jack Leydig, Box 1551, San Mateo, Calif. 94401).

16 AAU Masters Championship Marathon, Honolulu, Hawaii (Thomas J. Ferguson, 4191 Halupa St., Honolulu, Hawaii 96818).

18 Madera Marathon, Madera, Calif. (noon, Madera High School; Coach Dee DeWitt, 200 South L. St., Madera, Calif. 93637).

19 Fourth Annual Christmas Relays 50-Mile, Santa Cruz, Calif. (9 a.m.; Jack Leydig, Box 1551, San Mateo, Calif. 94401).

26 Pamakid 50-Mile and 100-Kilometer, Point Pinole Regional Park, Calif. (7 a.m.; Jack Wiley, 662 12th Ave., San Francisco, Calif. 94118).

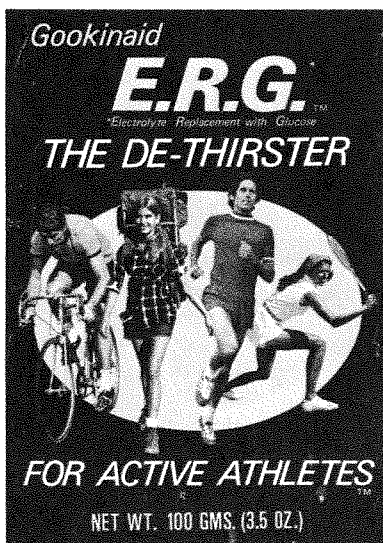
7 Arrowhead Marathon, San Bernardino, Calif. (Chamber of Commerce, Box 658, 546 W. Sixth St., San Bernardino, Calif. 92402).

## WALKS

12 GA AAU 50-Kilometer Walk, Houston, Tex. (8 a.m., Memorial Park; John Evans, 4011 Old Galveston Rd. No. 133, Houston, Tex. 77017). ●

Bill Leung Jr.

# E.R.G. Close Out



We're clearing our warehouse. All the E.R.G. has to go to make room for *Body Punch*. So, we're offering you \$4.00, per case, off the regular price.

We have an over supply of lemonade that we are offering at this incredibly low price.

Order now and take advantage of this close-out sale.

You won't find E.R.G. priced any lower, anywhere. Orders will be filled as stock remains available.

Every case must go!

## Order it here

Please send me \_\_\_\_\_ case(s) of E.R.G. at \$12.55 per case, post-paid.

Enclosed is \$ \_\_\_\_\_

Name \_\_\_\_\_

Address \_\_\_\_\_

City/State/Zip \_\_\_\_\_

Starting Line Sports, Box 8  
Mountain View, CA 94040

# Fun-Run Update

Where and when the Runner's World events are scheduled.

Halloween morning, Oct. 31, was our 200th consecutive Fun-Run in Los Altos Hills, Calif. We have three races each Sunday, which means we have had 600 races here over the last four years. With an average of 50 people per race (which is probably a low estimate), that gives us a total of 30,000 runners. Not bad for something that started as a selfish way to have races close to home.

I had the opportunity to attend another Fun-Run recently, and I would like to share some additional ideas which other directors and with people who are thinking about starting one.

First of all, don't hold your races—not even the shorter ones—on a track. There is too much pressure associated with running on the track. Keep in mind these are Fun-Runs, a way for a raw beginner to start racing and a way for a seasoned runner to keep racing.

We do not use a track at all. We thought about it, and I am glad now we didn't get permission to do so. We run the quarter-mile around the parking lot. We run the half-mile down the road and back up. We run the mile one lap around a college campus. We run all the longer distances on the roads off-campus, all on out-and-back courses except for the four-mile.

When you run on the track, it is to clear who is doing what. When a first-timer is lapped for the second time in the mile, he may not come back. When we run our mile around campus, no one can get lapped. No one sees you, and you don't feel like you are holding up the show. And for me, a mile in one lap always seems shorter than four laps around a track.

Secondly, pick a course which is not on busy roads and complicated to follow. Pick an out-and-back course for your long races—one which may be more uphill going out but downhill coming home so you can feel great coming in. Find a course which is fun to run, not one which is hard to run or one with a lot of hills near the finish.

Why an out-and-back course? It gives all the runners closer contact with the other runners. I know I am always yelling encouraging words to those bring-

ing up the rear. And you always know how far you have to go.

Thirdly, fill out at least the time on the certificates. Have someone at the table ask the runners for time and age. Then find the color for them and fill in their time. They can fill in the rest at home. Also give them some encouragement. This may be the first award they have ever gotten.

We have a Fun-Run packet available for the asking for anyone who is thinking about setting up a program. Just write: Bob Anderson, *Runner's World*, Box 366, Mountain View, Calif. 94040.

Bob Anderson

## THE OFFICIAL FUN-RUNS

● **Site 001** — Foothill College (lower parking lot) Los Altos Hills, Calif. Weekly, Sunday 10:30 a.m., in progress. Bob Anderson, Box 366, Mountain View, Calif. 94040.

● **Site 002** — Spring Lake Park (fairground entrance), Texarkana, Tex. Weekly, Saturday 8 a.m., in progress. Bill Jones, 1209 Trinity, Texarkana, Tex. 75501.

● **Site 003** — Doughboy Field, Fort Benning, Ga. Bi-monthly (first and third), Saturday 10:30 a.m., in progress. Dr. Edward Carns, 127 Rainbow Lane, Fort Benning, Ga. 31905.

● **Site 004** — Stewart Park (behind the Gloucester County YMCA), Woodbury, N.J. Weekly, Sunday 10:30 a.m., in progress. Sports East, 238 South Broadway St., Woodbury, N.J. 08096.

● **Site 005** — Hooker Oak Recreation Area (within Bidwell Park), Chico, Calif. Weekly, Saturday 9 a.m., in progress. Jim Remillard, Box 106 Cohasset Stage, Chico, Calif. 95926.

● **Site 006** — Pine Banks Park (on the Malden-Melrose border), Malden, Mass. Weekly, Saturday 10 a.m., in progress. Michael Morrill, 21 Elmwood Park, Malden, Mass. 02148.

● **Site 007** — Heather Farm Park (off Ygnacio Valley Rd. on San Carlos), Walnut Creek, Calif. Weekly, Sunday 10 a.m., in progress. Rich Vasquez, 3 Barcelone Way, Clayton, Calif. 94517.

● **Site 008** — Gerlach Field, Fort Leonard Wood, Mo. Bi-weekly, Saturday 8:30 a.m., in progress. Rex Frazer, 41 Totten Place, Fort Leonard Wood, Mo. 65473.

● **Site 009** — Dike Road, Granite Falls, Minn. Weekly, Saturday 10 a.m., in progress. Pat Foley, 315 11th Ave., Granite Falls, Minn. 52641.



● **Site 010** — Tawas Area High School (highway M-55), Tawas City, Mich. Weekly, Sunday 10:30 a.m., in progress. Tess Haislip, Box 165, Tawas City, Mich. 48763.

● **Site 011** — Fresno High School (Roeding Park), Fresno, Calif. Bi-weekly, Saturday 7 a.m., in progress. Sid L. Toabe, 4566 N. Del Mar, Fresno, Calif. 93704.

● **Site 012** — Cross-country course at the old airport, Salina, Kan. Weekly, Saturday 12:30 p.m., in progress. John Schlife, Salina YMCA, 315 West Iron, Salina, Kan. 67401.

● **Site 013** — West High School and Beach Park, alternately, Bakersfield, Calif. Bi-weekly, Saturday 8 a.m., in progress. Larry Arnt, 5000 Belle Terr., No. 72, Bakersfield, Calif. 93309.

● **Site 014** — Methuen High School track, Methuen, Mass. Bi-weekly, Sunday 10 a.m., in progress. John Cahalane, 38 Weybosset St., Methuen, Mass. 01844.

● **Site 015** — Southeast YMCA, Pittsford, N.Y. Bi-weekly, Sunday 9 a.m., in progress. Elizabeth A. Francis, Southeast YMCA, 111 Jefferson Rd., Pittsford, N.Y. 14534.

● **Site 016** — Windward Hills golf course, Talafofo, Guam. Monthly, Saturday 4:30 p.m., in progress. Robert Wade, No. 5 Windward Hills, Talafofo, Guam 96914.

● **Site 017** — Carthage High School, Carthage, Ill. Weekly, Saturday 10 a.m., in progress. Philip Clark, RR2, Carthage, Ill. 62321.

● **Site 018** — Incline High School, Incline Village, Nev. Weekly, Sunday 10:30 a.m., in progress. Lawrence Watkins, Box 3193 or Skip Youngdahl, Box 4745, Incline Village, Nev. 89450.

● **Site 019** — Eisenhower High School track, Saginaw, Mich. Weekly, Saturday 10 a.m., in progress. Ray F. Bartels, 4440 Winfield, Saginaw, Mich. 48603.

● **Site 020** — R.W. Nebel Memorial Track, Munising, Mich. Bi-weekly, Tuesday 8 p.m., in progress. Norma Harger, RR 1 Box 284E, Munising, Mich. 49862.

● **Site 021** — Hosmer Field, Rumford, Me. Bi-weekly, Sunday, 10 a.m., in progress. Bea von Tobel, Box 346, Canton, Me. 04221.

● **Site 022** — Nathan Calder Stadium, Menasha, Wisc. Weekly, Friday 6:30 a.m., in progress. John T. Lingnofski, 110 W. N. Water St., Neenah, Wisc. 54956.

● **Site 023** — Page High School, Greensboro, N.C. Bi-weekly, Friday 6:30 p.m., in progress. Bill Howard, 1305 Valleymede Rd., Greensboro, N.C. 27410.

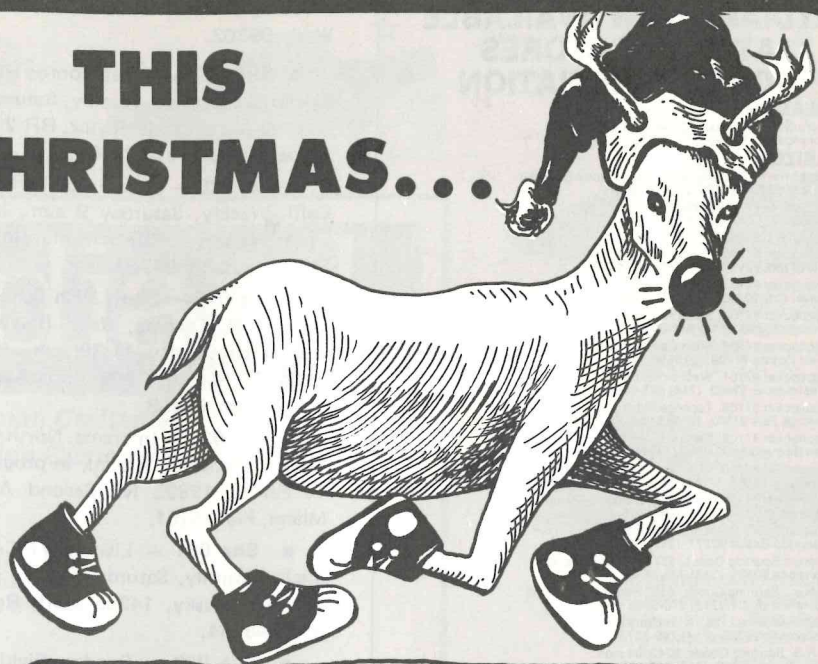
● **Site 024** — Robinson Junior High School, Kingsport, Tenn. Weekly, Sunday, 6 p.m., in progress. Tom Coughenour, 4817 Tinker Lane, Kingsport, Tenn. 37664.

● **Site 025** — Weatherbee-McGraw School, Hampden, Me. Weekly, Sunday, 9:30 a.m., in progress. Paul Howard, Box 562, Bangor, Me. 04401.

● **Site 026** — Next to Walla Walla High School track, Walla Walla, Wash. Monthly, (fourth) Saturday 8 a.m., in progress. Paul C.

(continued on page 80)

# THIS CHRISTMAS...



## RUNNER'S WORLD

Make this Christmas one to remember for the runners among your family and friends. Give them a subscription to *Runner's World*. *Runner's World* is a unique gift idea that will keep bringing back the Christmas spirit every month as it keeps them up to date on what's happening in the world of running. They're sure to appreciate the latest advice from the experts and they'll certainly enjoy the entertaining and informative stories of runners and races.

If you're looking for a special present, just send us the names and addresses of your favorite runners. We'll send them a card signed with your name for Christmas and they'll get the first issue of *Runner's World* in January to start the new year off right.

Don't forget to take advantage of our special Christmas discount! Send in one gift subscription for the regular \$9.50 per year and we'll give you all the further gift subscriptions you want for only \$7.50 per year.

Why not start your Christmas shopping now? Fill out the order blank below, attach additional sheets if necessary, and mail them to us. We'll do the rest.

### SPECIAL RUNNER'S WORLD ORDER FORM

Please send me a one year subscription to *Runner's World* as a Christmas present to the names and addresses listed below. I would like the signature on the special gift card to read: \_\_\_\_\_

Name \_\_\_\_\_ Name \_\_\_\_\_

Address \_\_\_\_\_ Address \_\_\_\_\_

City/State/Zip \_\_\_\_\_ City/State/Zip \_\_\_\_\_

I have enclosed \$9.50 for the first subscription and \$7.50 for each additional subscription.

Total amount enclosed \_\_\_\_\_

Please charge to my Master Charge/BankAmericard (circle one)

No. \_\_\_\_\_ Exp. \_\_\_\_\_

My Card Name is \_\_\_\_\_

Address \_\_\_\_\_

City/State/Zip \_\_\_\_\_

or call *Runner's World* Hot Line and charge it: (415) 965-3240.

*Runner's World* Magazine, P.O. Box 366, Mountain View, CA 94042

# LYDIARD NOW AVAILABLE AT RETAIL STORES ACROSS THE NATION

## ALABAMA

Ron's Sporting Goods, Cloverdale Road  
Florence 35360 (205) 764-6852

## ARIZONA

Roger Harris Sporting Goods, 3119 North Cambell  
Tucson 85705 (602) 326-4444

Footlocker #7101, Metro Center  
Phoenix 85021 (602) 997-5391

## CALIFORNIA

Footlocker #7100, Puente Hills Mall  
City of Industry 91744 (213) 965-9060

Footlocker #7103, Fox Hill Mall  
Culver City 90230 (213) 397-0528

Footlocker #7104, Santa Anita Fashion Mall  
Arcadia 91006 (213) 445-9031

Footlocker #7106, West Covina Fashion Plaza  
West Covina 91709 (213) 962-0210

Footlocker #7107, Westminster Mall  
Westminster 92683 (714) 893-9596

Footlocker #7108, Topanga Plaza  
Canoga Park 91303 (213) 340-9403

Footlocker #7109, Central City Mall  
San Bernardino 92401 (714) 885-9482

Footlocker #7110, Tyler Mall  
Riverside 92503 (714) 689-9372

Footlocker #7112, Lakewood Shopping Center  
Lakewood 90712 (213) 634-9375

Muzik's, 1012 S. Pacific Coast Highway  
Redondo Beach 90277 (213) 748-2178

Steve's Sporting Goods, 2577 Pacific Coast Hwy.  
Torrance 90505 (213) 326-3736

Steve's Sporting Goods, 4330 Redondo Bch Blvd  
Torrance 90504 (213) 370-5585

Slub Five Shoes, 265 N. Hickory St  
Escondido 92025 (714) 746-3377

T R S Sporting Goods, 9242 Slauson  
Pico Rivera 90660 (213) 949-1254

## COLORADO

Footlocker #7114, Southglen Shopping Center  
Littleton 80122 (303) 794-9826

The Front Runner, 2825 E. Second Ave  
Denver 80206 (303) 355-3876

The Front Runner, Cinderella City  
Englewood 80110 (303) 781-0702

Sporting Feet, 30th at Baseline  
Boulder 80303 (303) 447-0875

## ILLINOIS

The Front Runner, 1812-14 N. Clark  
Chicago 60614 (312) 642-2042

## INDIANA

Bob's Tennis Shop, 583 Broadway  
Anderson 46012 (317) 643-3010

## MASSACHUSETTS

Marathon Sports, 1654 Massachusetts Ave  
Cambridge 02138 (617) 354-4161

Runner's Shop, 15 Strong Ave  
Northampton 01060 (413) 586-1971

## MISSISSIPPI

Bill Brumley Sporting Goods, 313 Main St  
Columbus 39701 (601) 328-0935

## MINNESOTA

Body in Sole, 4006 20th Ave. So  
Minneapolis 55407 (612) 721-4743

Footlocker #7102, Ridgedale Shopping Center  
Minnetonka 55343 (612) 545-0008

Footlocker #7105, Maplewood Shopping Center  
Maplewood 55109 (612) 770-5111

Footlocker #7111, Brookdale Shopping Center  
Brooklyn Center 55443

## NEW JERSEY

The Athlete's Foot, Woodbridge Center Mall  
Woodbridge 07095 (201) 636-2024

## NEW YORK

The Achilles Heel, Northtown Plaza  
Buffalo 14226 (716) 834-3338

The Athlete's Foot, Kings Plaza  
Brooklyn 11234 (212) 253-7555

The Athlete's Foot, Sunrise Mall  
Massapequa 11758 (516) 795-2030

Long Island Track Equipment, 1935 Wantagh Ave  
Wantagh 11793 (516) 781-0203

Runner's World, 198 Seventh Avenue  
New York 10011 (212) 691-2565

The Ski Market, Transitown Plaza  
Williamsville 14221 (716) 634-8160

Tom Kat, Route Six  
Mahopac 10541 (914) 628-9292

## OHIO

All Sports, 3160 West Broad St  
Columbus 43209 (614) 272-1829

Churchill's Adventure Shop, 2140 So. Byrne  
Toledo 43614 (419) 385-4599

## OREGON

The Athlete's Foot, 9510 S.W. Washington Sq Rd  
Portland 97227 (503) 639-8328

The Locker Room, 405 N. First  
Hermiston 97838 (503) 567-9559

Running Necessities & Such, 233 N. E. 28th  
Portland 97232 (503) 232-1575

## TENNESSEE

The Athlete's House International, 1700 Portland Ave  
Nashville 37212 (615) 292-8110

## TEXAS

Footlocker #7113, Six Flags Shopping Center  
Arlington 76011 (817) 649-0055

## VIRGINIA

Power Athletics, 1065 West Broad St.  
Falls Church 22046 (703) 532-8333

## WASHINGTON

Super Jack 'n' Jill, 401 N. E. 71st  
Seattle 98115 (206) 522-7711

## WISCONSIN

Barefoot Sports, University Square Mall  
Madison 53715 (608) 251-8900

The Running Foot, 707 Westhaven Road  
Chippewa Falls 54729 (715) 723-7375

Fredericks, 1712 Durant St., Walla Walla,  
Wash. 99362.

● **Site 027** — James Monroe High School,  
Fredericksburg, Va. Weekly, Saturday 9 a.m.,  
in progress. O. Dale Saylor, RR 2 Box 17-B,  
Fredericksburg, VA. 22401.

● **Site 028** — Fritz-Grupe Park, Stockton,  
Calif. Weekly, Saturday 9 a.m., in progress.  
Frank Hagerty, 3525 Benjamin Holt No. 314,  
Stockton, Calif. 95209.

● **Site 029** — Curtis High School (Univer-  
sity Place), Tacoma, Wash. Bi-weekly, (first  
and third) Sunday 11:30 a.m., in progress.  
Craig T. Hatton, 7505 96th Ave. SW, Ta-  
coma, Wash. 98498.

● **Site 030** — Interama, North Miami, Fla.  
Weekly, Saturday 9 a.m., in progress. Victor  
T. Palffy, 12895 NE Second Ave., North  
Miami, Fla. 33161.

● **Site 031** — Livonia YMCA, Livonia,  
Mich. Monthly, Saturday 8 a.m., in progress.  
Jeff Sandowsky, 14255 Stark Rd., Livonia,  
Mich. 48154.

● **Site 032** — Condon Field, Hancock,  
Mich. Weekly, Tuesday 7 p.m., in progress.  
Bob Olson, 1054 N. Lincoln Dr., Hancock,  
Mich. 49930.

● **Site 033** — Community Center, Sharon,  
Mass. Weekly, Saturday 8 a.m., in progress.  
Dale L. Van Meter, 66 Summit Ave., Sharon,  
Mass. 02067.

● **Site 034** — Citrus High School Track,  
Inverness, Fla. Weekly, Saturday 7:30 a.m.,  
in progress. Paul Schwarting, RR 3 Box 244,  
Inverness, Fla. 32650.

● **Site 036** — Rice Festival Building,  
Crowley, La. Bi-monthly, Saturday 3:30 p.m.,  
in progress. Don Stuckey, 627 E. 11th St.,  
Crowley, La. 70526.

● **Site 037** — Runner's Mecca (running  
camp), Mesa, Ariz. Weekly, in progress. Rich  
Heywood, Box 2186, Mesa, Ariz. 85204.

● **Site 038** — Memorial Field (Rock Island  
Arsenal), Rock Island, Ill. Bi-monthly, Sat-  
urday (second and fourth) 8 a.m., in progress.  
Dick Clarke, 1821 Pineacre, Davenport, Iowa  
52803.

● **Site 039** — South Park (children's park  
playground parking lot), Pittsburgh, Pa.  
Monthly, Saturday (last each month) 9:30  
a.m., in progress. Jim Enright, 1700 Patrick  
Place, Apartment T-10, Library, Penn. 15129.

● **Site 040** — Windmont Park, Kewanee,  
Ill. Monthly, Saturday 1:30 p.m., in progress.  
Steve Ryan, Wichita Running Club, 9804 W.  
12th St., Wichita, Kan. 67212.

● **Site 042** — Gypsy Hill Park, Staunton,  
Va. Bi-monthly, Wednesday 7 p.m., in pro-  
gress. Gwyn R. Sanders, REcreation Depart-  
ment, Box 58, Staunton, Va. 24401.

● **Site 043** — Columbus AFB (recreation  
track), Columbus, Miss. Weekly, Saturday  
10 a.m., in progress. Gaylon M. Bates, 211  
Holly Hills Road, Columbus, Miss. 39701.

● **Site 044** — Worthington High School  
track, Worthington, Ohio. Bi-monthly (first  
and third) Sunday, 10 a.m., in progress. Don-  
ald K. Fox, 321 Highland Ave., Worthington,  
Ohio 43085.

● **Site 045** — Marina High School track,  
Huntington Beach, Calif. Weekly, Sunday  
10 a.m., in progress. Gary Moody, 5322 Ken-  
ilworth Dr., Huntington Beach, Calif. 92649.

● **Site 046** — Cordova Park, Rancho Cor-  
dova, Calif. Bi-weekly, Saturday 9 a.m., in  
progress. Henry Rosendale, 2513 Augib Way,  
Rancho Cordova, Calif. 95670.

● **Site 047** — Corner of Wallace Hill Rd.  
and Lafayette Dr., Franconia, N.H. Weekly,  
Sunday 10 a.m., in progress. William Funi-  
cella, RR 2, Landaff, N.H. 03585.

● **Site 048** — 40th and Fairview Park,  
Downers Grove, Ill. Weekly, Sunday, 3 p.m.,  
in progress. David Tworkowski, 6801 S.  
Main, Downers Grove, Ill. 60515.

● **Site 049** — Sheridan College track en-  
closure, Oakville, Ontario, Canada. Weekly,  
Sunday 9:30 a.m., in progress. Richard Mah-  
ler, 2413 Breton Close, Oakville, Ont., Canada.

● **Site 050** — Cabrillo College, Santa Cruz,  
Calif. Weekly, Saturday 9 a.m., in progress.  
John H. Smead, Box 718, Soquel, Calif.  
95073.

● **Site 051** — Dr. Powers Park, Tracy,  
Calif. Weekly, Sunday 11 a.m., in progress.  
Kurt Schroers, 1801 Newport Court, Tracy,  
Calif. 95376.

● **Site 052** — Riverview Park, St. Joseph,  
Mich. Monthly, Saturday 10:30 a.m., in pro-  
gress. Dick Sharkey, Benton Harbor-St.  
Joseph YMCA, 233 Michigan St., Benton  
Harbor, Mich. 49022.

**Site 053** — St. Louis County Fairgrounds,  
Hibbing, Minn. Weekly, Sunday, noon, in  
progress. D.R. Stewart, Memorial Building,  
Hibbing, Minn. 55746.

● **Site 054** — White Rock Lake (Big Thick-  
et Cabin), Dallas, Tex. Weekly, Sunday 9  
a.m., in progress. David L. Branning, Cross-  
Country Club of Dallas, 6891 Avalon, Dallas,  
Tex. 75214.

● **Site 055** — Pritchard Stadium, Fort  
Hood, Tex. Weekly, Saturday 8 a.m., in pro-  
gress. John T. Parker, 51704-4 Karankawa  
Circle 22-16, Fort Hood, Tex. 76544.

● **Site 056** — Highland High School Track,  
Highland, Ind. Weekly, Sunday 9 a.m.,  
in progress. Jim Tarka, Omni 41 Health Club,  
222S Rt. 41, Schererville, Ind. 46375.

● **Site 057** — Imperial Palace Moat, Tokyo,  
Japan. Bi-weekly, Sunday (first and third of  
month), 8 a.m., in progress. R.F. Connelly,  
Akasaka, Box 10, Tokyo, 107-91 Japan.

● **Site 058** — Pottersville Middle School,  
Pottersville, Mich. Weekly, Monday 7 a.m.,  
in progress. Tom Swanson, Pottersville Middle  
School, Pottersville, Mich. 48876.

● **Site 059** — Snug Harbor State Park, North  
Muskegon, Mich. Weekly, Sunday 10 a.m.,  
in progress. Dwayne Weeda, 425 W. Circle  
Dr., North Muskegon, Mich. 49445.

● **Site 060** — Perkins Stadium, Las Vegas,  
N.M. Bi-weekly, Sunday 8:30 a.m., in pro-  
gress. John C. Drissel, Drissel and Associates  
PA, 314 National Ave., Las Vegas, N.M.  
87701.

● **Site 061** — St. John's College, Santa Fe,  
N.M. Monthly, Sunday 9:30 a.m., in progress.  
Norm Muggleston, 141 E. Lupita Rd., Santa  
Fe, N.M. 87501. ●



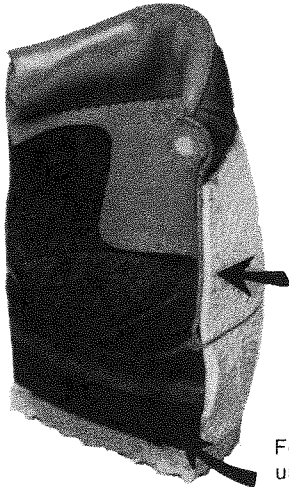
★  
**1919 SAO PAULO** - Handmade. Super light exclusively for racing. Seamless toes, pressure proof suction cup sole provides great traction on wet or dry surfaces. Blue/White available in sizes 3½-13 \$39.95 postpaid



★  
**1130 ROADRUNNER** - Handmade. This design will absorb the continual stress of covering long distances on the road. All new long wearing sole for "76" with greater flexibility. Beige Orange available in sizes 3½-13. \$36.95 postpaid

# Lydiard

**Handmade by German Craftsman  
 Assuring Custom Quality Features!**



Molded heel cup positions the heel in the shoe for stability and cradles it like an egg to distribute the shock load.

All shoes marked ★ have these exclusive Lydiard molded heel cup and arch support features.

Four layers of rubber under the heel for proper road shock absorption.

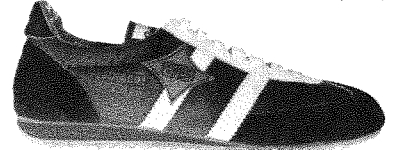


★  
**1977 MARATHON** - Handmade. A light training shoe with all of the same support and protection as the road runner. It offers ventilated, seamless toes, a contoured interior which has an arch-supporting effect. Beige/Red available in sizes 3½-13.

\$36.95 postpaid



★  
**1144 SPURT** - Training shoe, with hard wearing herring bone pattern sole. Blue/Red/Green. Available in sizes 5½-13. \$31.95 postpaid



★  
**1810 JUNIOR** - Nylon training and racing shoe with cupped outer heel for stability. Blue/Red/White. Available in sizes 7-11. \$19.95 postpaid



★  
**1140 CHAMPION** - Nylon all purpose training shoe. White/Blue. Available in sizes 5½-13.

\$34.95 postpaid



★  
**1533 SPRINT** - Suction cup sole provides great traction on wet or dry surfaces. Interchangeable six spike system. The Shank-to-heel wedge provides padding for protection of the heel and Achilles tendon. Blue/Red/Green in sizes 3½-13. \$31.95 postpaid



★  
**1575 INTERVALL** - Originally designed as a training shoe, the seamless toe and lightweight pressure proof suction cup sole with six removable spikes have made this model a favorite racing shoe for many. The elastic shank-to-heel wedge protects ligaments, joints and heel against injury. White/Green in sizes 3½-13. \$36.95 postpaid



★  
**1572 MUNICH** - Super light shoe. The new interchangeable six spike position together with newly developed suction cup sole. Provides great traction on wet or dry surfaces even under the most adverse conditions. Red/White. Available in sizes 3½-13. \$43.95 postpaid

SEND ALL MAIL ORDERS TO:

**Sport International**  
 6117 Reseda Boulevard, Reseda, CA 91335  
 Telephone: (213) 345-1021  
 For mail order be sure to enclose a foot tracing & street shoe size to insure proper fit.

Master Charge: Acct. No. \_\_\_\_\_ Exp. Date \_\_\_\_\_  
 BankAmericard: Acct. No. \_\_\_\_\_ Exp. Date \_\_\_\_\_  
 American Express: Acct. No. \_\_\_\_\_ Exp. Date \_\_\_\_\_

pairs	model	size	unit price	total price

Calif. residents add 6% sales tax  
**TOTAL ENCLOSED**

Name \_\_\_\_\_  
 Address \_\_\_\_\_  
 City \_\_\_\_\_  
 State, Zip \_\_\_\_\_



## RUNNER'S MECCA

Suggests That You Plan Ahead . . . .

It is a few months yet until we open our training center for the summer of 1977. We suggest that you plan early to attend. (We open in June). We expect to fill the training center with hundreds of enthusiastic runners. Running may be your primary objective or you may just want to run as a secondary activity to a great vacation. Whatever or whichever, we would like to say . . . YOUR WISH IS OUR COMMAND! Tentative plans for the summer include: Visits by the E.C. Frederick Family and by Chuck and Carol Smead in July. Scenic running tours daily with some overnighters to Grand Canyon, Bryce Canyon and Zion Canyon. . . . We have many other plans for the summer and we can include your entire family whether they run or not. Please write us soon to make reservations. We would like to assist you in your planning.



Rich Heywood  
Executive Director  
Box 2186  
Mesa, Arizona 85204  
(602) 834-0496

# Club Notes

*News from the sport's organized groups and ruling bodies.*

● A new championship athletic team has popped up at Stanford University without the aid of a coach, without the dressings of new uniforms and without any money. And, say organizers, the team needs none of these.

The Angell Field Ancients, members of the faculty and staff at the California school, range in age from 24-59. They have just won a national title by competing with several hundred runners from nine other colleges and universities.

James Gere, 51, a professor of civil engineering, is the coordinator of the group. He holds the national record in the over-50 group for the 440, has earned points for the team in all races from the 440 to five miles and has run the Boston Marathon.

"Winning is really the frosting on the cake because our goal is to improve our own performances by racing against the clock," Gere said. "I hope other Stanford people join us this fall."

Points are awarded in the national competition on the basis of the numbers of persons participating in each event and the individual times and places in each event. This year about 50 Stanford runners, more than any other school except Syracuse, entered the competition.

Gere and Dave Stevenson organized the Angell Field Ancients in 1965. Since that date, the participants have secured at least eight national titles. One went to Marshall Clark (440 in 53.8 at age 40), who has coached Don Kardong, Duncan Macdonald and Tony Sandoval.

● The Belle Isle Runners of Detroit, Mich., are experiencing an increased interest in their weekend runs, Bob Keiss, a key contact for the club, said recently.

The group meets every Saturday, Sunday and holidays on the Canadian side of the island. A seven-mile course encircles the island and crosses the bridge to the island.

The group is composed of about 150 runners, he said. At least 40 and usually more runners show up for each of the runs.

Although the club does not sponsor any races, many of the Belle Isle runners belong to the Motor City Striders who sponsor, among other races, the Belle Isle Marathon the fourth Sunday in October. The group is encouraging all in the area to join in the runs.

● Eight runners participating in the Boston Post Relay ran from the steps of Faneuil Hall at Boston, Mass., to the steps of the State Capitol in Providence, R.I., this summer to commemorate the spirit of the pioneers who traveled on foot, Ken Pugh, a participant and relay coordinator, said recently.

The route of the relay followed the Old Boston Post Road, which is the present US Route 1, a highway which has been in use since the 1600s.

Enclosed in the baton carried along the way were souvenir envelopes which were mailed to each participant from Providence. The baton itself was forwarded to Jeff Darnen, co-president of the Road Runners Club of America, for presentation in Washington, D.C.

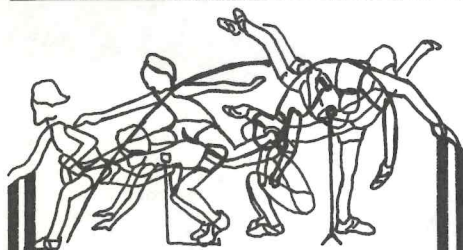
● In an effort to add a little "umph" to what they considered a "blah" annual running schedule, San Antonio runners sponsored what they called a bike-run team race which would take participants over a 12-mile road circuit on the city's northside.

That little "umph" soon turned into "hrrmph" as, first, the weather went bad. Winds gusted to about 30 m.p.h. so that cyclists felt like they were standing still. On the second half of the race, slow finishers were caught in a torrential downpour of two-inch rain in a half hour.

The route confused some participants as three runners and one bicyclist got lost by wandering from the marked course.

Organizer T.A. Tannehill, however, said the biggest problem of all was that "everybody liked the race!"

"They even made us promise to schedule it again for next year, God forbid! When they told us this, my partner began crying like a baby, and I took off for the nearest bathroom," he said.



## TRACK and FIELD OMNIBOOK

by Ken Doherty

Track and Field Omnibook, Ken Doherty. An almost unbelievably comprehensive look at every track and field event. Technique, strategy, training routines, records, statistics, quotes from standout athletes, history, references are all covered. Jam packed with all the information you need to know, it's a must for every track and field enthusiast.

Order yours now. Hb., 488 oversize pp., \$13.95.

Please send me \_\_\_\_\_ copy(ies) of Track and Field Omnibook. Enclosed is \$13.95, plus 40c postage per copy. California residents add 6% sales tax.

Name \_\_\_\_\_

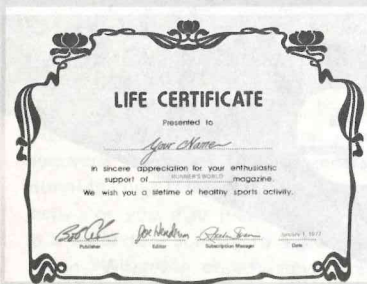
Address \_\_\_\_\_

City/State/Zip \_\_\_\_\_

Runner's World, Box 366  
Mountain View, CA 94042



# Do yourself a **BIG** favor



Think about it.

Running is an important part of your life. You will probably never stop. *Runner's World* is the magazine for all runners. It will offer you, through the years to come, information vital to you on all aspects of the sport that has become so much a part of your life. Why not do yourself a big favor? Why not, sign up forever? For only \$100.00 you will receive, every month without fail, your issue of *Runner's World* . . . including expanded issues covering: the Boston Marathon, Running Shoes, and Marathon. Of course, you will never again receive a renewal slip, and you will be saving money! Your subscription will never be affected by increases in subscription rates due to inflation. But . . . best of all . . . you will never be concerned about missing a single issue. Do it, just this once! Complete the coupon below, enclose it in the handy envelope included in this issue, enclose the amount, and get set to enjoy *Runner's World* . . . for the rest of your life.

I have enclosed \$\_\_\_\_\_ for \_\_\_\_\_ Life subscriptions @ \$100.00 each to *Runner's World*, or charge my:

Mastercharge \_\_\_\_\_

Exp \_\_\_\_\_

BankAmericard \_\_\_\_\_

Exp \_\_\_\_\_

Name \_\_\_\_\_

Address \_\_\_\_\_

City/State/Zip \_\_\_\_\_

( ) New ( ) Renewal

[ ] Additional names and addresses are enclosed.

**Runner's World, Box 366,  
Mountain View, CA 94042**

# Good News

*New products, publications and services for runners.*

## PUBLICATIONS

● If your goals in life include improving your sex life, feeling more relaxed, being more physically fit while strengthening your heart against heart attack, increasing your energy or heightening your senses, then a program developed by Thaddeus Kostrubala, M.D., in his book *The Joy of Running* might be your answer.

Using scientifically accurate and easily understood terms, Dr. Kostrubala explains why running is far more effective in improving body and mind than such forms of exercise as tennis, squash and handball. In addition, the doctor describes the beneficial effects of running and diet on such diseases as hypertension, atherosclerosis, diabetes and obesity.

Published by J.B. Lippincott Co. of Philadelphia and New York, the hard-bound volume (153 pages) sells for \$8.95.

● If you have tried all the diets and most of the exercises, perhaps you would be interested in trying the *Eat and Run, Diet, Exercise and Engagement Calendar* compiled by Jan Ferris Koltun to help you change some of the bad habits and reinforce the good. The calendar provides a year's record on what you did with your body during those 365 days of discipline.

Included in the daily charts are categories for time, food, calories, exercises, engagements and comments as well as a section for a weight record. The book enables the reader to keep an accurate record of activities to establish a long-term view of a year's physical activity.

The book is published by Holt, Rinehart and Winston of New York and is selling for \$4.95 in paperback.

● A mixture of the prophecies of physical fitness and of Biblical teachings is available from Harvest Press of Fort Worth, Tex., entitled *Toward Physical Excellence for the Glory of God*. Author E. Eugene Greer blends the benefits of exercise with the benefits he has derived from spiritual discipline for interesting reading on a new twist to athletic training.

"My prayer for myself and for others

is that we will read the Bible in terms of its teachings on physical fitness, and that we will feel deep convictions to positively improve our personal physical health," Greer says in his introduction.

The 185-page paperback is on sale from Harvest Press for \$1.95.

● Tony Isaacs, a member of the Association of Track and Field Statisticians, has completed a statistical survey of athletics in the Pacific islands including all-time lists, South Pacific Games results and photos of leading athletes.

The unique but comprehensive coverage of the little-known athletics area is available for \$2.40 by writing to Tony Isaacs, ATFS, 68 Kennedy Ave., Macclesfield, Cheshire, SK10 3HQ, England.

● Tom Ecker, whose *Track and Field Dynamics* met with wide acceptance a few years back, applies those principles to each event on the track and field program in his new release entitled *Track and Field: Technique Through Dynamics*.

The book affords American coaches a chance to keep abreast of new developments in the scientific approaches to individual events. The 128-page book, including several sequential photos, is being sold by Tafnews Press for \$4.50.

## PRODUCTS

● The first film to summarize the recent changes in girls' sports, *Girls Sports: On the Right Track* is narrated by Kathrine Switzer, a world-class marathon runner and the first woman to run officially in the Boston Marathon.

Written, produced and directed by Ellen Freyer, a former instructor in film history at St. Peter's College and freelance film critic, the film has been screened at the Museum of Modern Art. The film was a finalist at the American Film Festival and will be seen at the Second International Festival of Women's Films.

The film is available for purchase (\$250) or rental (\$25) through Pheonix Films, Inc., 470 Park Ave. South, New York, N.Y. 10016.

● MacLevy Products Corp. has made available low-cost, motorized treadmills

designed to meet the needs of joggers. Two models of the treadmill are available from the company, including the standard unit and the new professional unit.

The standard unit has a speed range from zero to 9.5 m.p.h., which is equal to a fast run. The unit utilizes regular house electrical current and requires no high-cost electrical wiring. The unit sells for under \$700.

The professional unit is designed for use by spas, health clubs, condominiums, physicians, testing labs and rehabilitation centers. This unit sells for under \$1000.

The treadmills can be ordered from MacLevy by writing to 92-21 Corona Ave, Elmhurst, New York, N.Y. 11373.

• A chart illustrating a series of stretches to be used before and after running is available from Robert and Jean Anderson of Englewood, Colo.

The chart graphically illustrates 17 stretches to be done prior to running and 15 stretches to be utilized after running. The illustrations are displayed on a chart 22½ inches by 34 inches. The cost is \$2.

More information can be obtained by writing to Stretching, Box 1002, Englewood, Colo. 80110.

• Those who have encountered lactose intolerance problems presented by milk, might be interested in the introduction of a milk modification enzyme called Lact-Aid. The enzyme is added to cold milk and most or all of the lactose can be converted into the simple sugars, glucose and galactose.

The additive is available from Sugar-Lo Co., 3540 Atlantic Ave., Box 1017, Atlantic City, N.J. 08404.

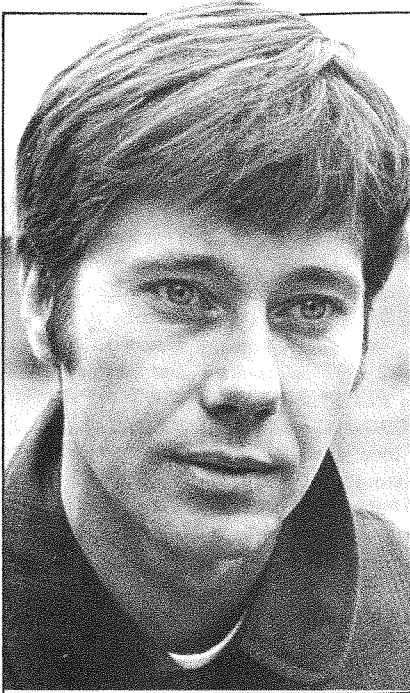
• Microsel, Inc., of Santa Clara, Calif., has introduced the Racer Digital Electronic Watch Two-in-One. The six-function watch shows hours, minutes, seconds, month, date and day of week. A nine-function stopwatch is available which shows hours, minutes, seconds and hundredths of seconds in addition to standard stop-start, splits, event timing and many various combinations in a 99-hour timing range.

The watch, made with space-age materials, high impact Polyurethane with stainless steel, is lightweight, water resistant and shock resistant.

The Racer sells for \$89.95. plus \$2.50 for shipping and handling (California residents add 6% sales tax). More information can be obtained by writing to Ray Zinn, Microsel Inc., Box 4848, Santa Clara, Calif. 95054. •

JUST RELEASED...

# The Self-Made Olympian



He did it himself, Ron Daws tells his, most unique, story in this just published book. All runners will share in the excitement he felt in winning his place on the Olympic team of 1968.

Not the usual running biography, *The Self-Made Olympian* details the lessons Ron had to learn to get-back-up after his failures. With a beginning that saw him not breaking 4:40 for the mile in high school, and collapsing from heat in the Olympic trials, to adopting the training methods of New Zealand-er, Arthur Lydiard which drastically changed his pattern, from failure . . . to success!

In this thoroughly captivating story, Daws tells exactly what the winning combinations are. He does not pretend that his methods will turn 4:30 milers into Olympic marathoners, but he does offer practical hints for helping all runners who are seeking ways to close the gap between . . . what a runner is, and . . . what a runner can become.

You will want a copy of *The Self-Made Olympian*, it promises to be one of your all time favorites.

**Order Today!**

**Call the Hotline and order today! (415) 965-3240**

### RUSH ME MY COPY

Please send me \_\_\_\_\_ copy (ies) of *The Self-Made Olympian*.

[ ] Hardback, \$5.95

[ ] Paperback, \$3.50

Enclosed is 40 cents postage for each book (Cal. res. add 6% tax)

I have enclosed \$ \_\_\_\_\_.

Name \_\_\_\_\_

Address \_\_\_\_\_

City/State/Zip \_\_\_\_\_

**Send to: Runner's World, Box 366, Mountain View, CA 94042**

**Call: (415) 965-3240 and charge to my BankAmericard or  
Master Charge**

# Classifieds

November 1976

**MIDWEST SPORTS LTD.**—The largest supply of Nikes at the lowest prices available in the Midwest. T-shirts Galore . . . Custom printing on quantity orders. Immediate delivery on all orders. Write or call: Midwest Sports LTD., 1203 E. Harding Dr., Urbana, IL 61801 (217) 367-0808

**SIXTH ANNUAL PARIS MOUNTAIN**—classic 12.3 mile road race. Saturday, December 4. Register 1:15 p.m. Start 2:00. Trophies, medals, merchandise, T-shirts. Divisions: high school, women's, 18-29, 30-39, 40-49, 50 and over. Contact Adrian Craven, Rt. 9, Woodhaven Drive, Greenville, SC 29609.

**CAROLINA MARATHON**—1st annual. Columbia, SC, February 5, 1977, 9:00 a.m. Certified course, ideal weather (40-50°), luncheon, excellent prizes, top competitors. Organized by marathoners, for marathoners. Contact: Governor's Council on Physical Fitness, 1800 St. Julian Place, Columbia, SC 29204.

**RE: SOLES BY RUNNER'S SHOP**—all major brands, Adidas, Nike, Tiger, New Balance, Puma, etc. Re:soled for only \$11.00 postpaid. Shoes returned by UPS, not parcel post. Re:soles by Runner's Shop, 15 Strong Avenue, Northampton, MA 01060.

**EASTERN 100-EVENT SCHEDULE**—For schedule of races ranging from 880 yards to 100 miles, plus current entry blanks, send a stamped, self-addressed envelope to: Road Runners Club of New York, P.O. Box 881, New York, NY 10022.

**RON HILL FREEDOM SHORTS** The ultimate in running gear. Union Jack, Stars/Stripes, nylon. Stamped, Self-addressed envelope for brochure. Smartt Products, 6142 Navajo, Westminster, CA 92683.

**TEE-SHIRTS CUSTOM PRINTED**—Sweat shirts, jackets and jerseys. Schools, teams and clubs. Minimum: 12. Quantity discounts. Free Catalog. Mandelker's RW, 2603 N. Downer Ave., WI 53211.

**FREE**—New Balance T-shirt with every order of NB 320—only \$23.95 postpaid. Send length and width (plus shirt size) to: Steve Hoag, 1618 Grand Ave., St. Paul, MI 55105.

**ALL AMERICAN 3RD ANNUAL**—13 November 1976, 10 a.m. Certified course, point to point. Transportation to starting point. Shirts, certificates, awards. Entry details, course map, write: Commander, 82D Airborne Division, Attn.: Recreation Services Officer (AFVCGA-RS), Fort Bragg, NC 28307. Phone (919) 396-4516.

**BODY 'N SOLE NOVEMBER COMBO**—Tiger Montreal '76. Orange (size 3-14) plus Montreal '76 T-shirt, \$25.95 (includes postage and handling). Send check or money order to: Body 'N Sole, 327 14th Ave. SE, Minneapolis, MN 55414.

**NEW BALANCE 320's**—\$24.95; 305's \$22.95; 220's \$21.95; Trackster's \$25.95; Super Competitions \$21.95. Jayhawks \$19.95. Nylon shorts, Boston T-shirts \$3.25. ERG still available, three flavors, four sizes, 10 gallons \$9.95, Gatorade 10 gallons \$9.95, Body Punch 12 gallons \$13.95. Bauman's, 8308-91st Terrace, Seminole, FL 33542. (813) 392-7061.

**TIGER MONTREAL '76**—\$21.95, Jayhawk—\$19.95, Nairobi—\$18.95, Sizes 6-12, Team Prices Available. Send self-addressed, stamped envelope. Nike-Boston '73—\$16.00, 7½, 8, 8½, 10½. Add \$1.50 postage—one pair, plus 50c each additional pair. Write: James Morris, THE JOG SHOP, 1203 E. Warren, Brownfield, Texas 79316.

**IV ANNUAL BARRIO RUN AND FIESTA**—sponsored by Van Camp Sea Food. Saturday, 4 Dec. Check in 9:00 a.m.—10:00 a.m. at the park, Sigsbee St. & National Ave., San Diego. The course will begin under the Coronado Bridge on Dewey St. 3 mile run is open to runners who have not competed in college varsity track and field/cross country within past two years; All senior runners; (30 yrs. & over) high school and jr. high. 6 mile run is open to all runners, all ages, regardless of sex or competitive background. Trophies, medals and T-shirts. Special awards: first place following age categories: 30, 35, 40 and over. Entry fee: 75c at the time of registration. For additional information: Francisco Saiz, 8512 via Mallorca "F", LaJolla, VA 92037. (714) 452-8032.

**DISTANCE DOUBLE HEADER**—11-27, National AAU Senior Men's Cross Country Championship. 11-28 Bicentennial Marathon. Meet and compete with top national, international, and olympic stars. Added extra distance clinic 11-26. T-shirts for sale. For information send self-addressed stamped envelope to Tom Sander, 515 West Godfrey Ave., Philadelphia, PA 19126.

**1977 RRCA NATIONAL MARATHON CHAMPIONSHIP**—Convention and clinic (also 10,000 meter run), St. Louis, MO, February 26-27, 1977. Contact Jerry Kokesh, 1226 Orchard Village Lane, Manchester, MO 63011.

**IN DALLAS**—9th Annual Turkey Trot, an 8-mile road race sponsored by the Downtown YMCA. 9:00 a.m., Thanksgiving Day. Patches to all finishers. Trophies awarded, three places for men and women in six age groups plus seven special categories. Entry fee \$3.50. For application write: K. Chenery, Downtown YMCA, 605 North Ervay, Dallas, TX 75201.

**INVITATION**—to former Mecca guests and participants: If you will be attending the Fiesta Bowl Marathon, Sandy and I would welcome the opportunity to help you find accommodations with runners in the Phoenix area. Contact: Rich Heywood, Box 2186, Mesa, AZ 85204. (602) 834-0496.

**RUNNER, LAW GRADUATE**—(December 1976), moving to San Diego, seeks employment. B.A. Princeton, J.D. William and Mary, registered California bar exam. Mark Landsman, 139-L Lake Powell Road, Williamsburg, VA 23185.

**CANADIAN RUNNERS!**—New Balance shoes are now available in Canada. For information please contact: Distance Runners Supply, Box 13190, Kanata, Ontario. (613) 836-3602.

**FREEDOM SHORTS**—from Ron Hill Sports, from \$5.75. Nylon, sunburst, flag styles. For brochure, send stamped, self-addressed envelope to: Total Environmental Sports, 424 W. 4th St., Rochester, MI 48063.

**SHOES, T-SHIRTS, EQUIPMENT**—Nike, Brooks, Tigers, Adidas, Puma, Men's-Women's shoes. For information must send self-addressed stamped envelope to: The Athlete's House, 1700 Portland, Nashville, TN 37212.

**WHAT TO GIVE**—the runner-jogger for Christmas? The National Jogging Association's newsletter, "The Jogger" is the perfect gift and provides motivation for the New Year. Yearly subscription \$8.00. Contact, NJA, 1910 K St., NW, Suite 202-N, Washington, D.C. 20006.

**67TH ANNUAL BERWICK RACE**—9.3 miles, November 25, 2:00 p.m., AAU. Trophies for 4 member teams, masters categories and awards for the first 15 finishers. For information and entry blanks, write Clyde Noble, 6175 4th St., Bloomsburg, PA 17815.

**STIFF, PAINFUL, JOINTS?**—For free information about the miraculous yucca plant write: Sports Nutrition, 1330 E. Dover St., Mesa, AZ 85203.

**3RD ANNUAL BAKERSFIELD MARATHON**—Saturday, February 6, 1977, 8:00 A.M. Certified course, flat and fast. Age group trophies and T-shirts. Photos and certificates. Course record 2:24:13. Mini Marathon also. Contact Larry Arnt, 5000 Belle Terrace No. 72, Bakersfield, CA 93309 for information and entry forms.

**THE MARYLAND HARRIER**—Complete high school cross country results from the Old Line State. \$5 for all 8 issues. Jeff Whitmore, 32 Clearwater Ct., Damascus, MD 20750.

**MIDWEST MASTERS SWEDISH TOUR**—Charter flight direct from Chicago to Gothenburg, August 8-15, 1977. Write: Wendy Miller, 351 Birkdale, Lake Bluff, IL 60044.

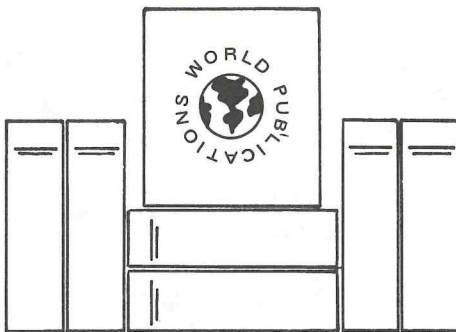
**2ND ANNUAL HIDDEN VALLEY MARATHON**—Sunday, February 13, 1977; 8:00 a.m. Half and quarter marathons also. Certificates and T-shirts to all entrants. For applications and maps, contact: Marathon, 180 Academy Dr., Newbury Park, CA 91320. (805) 498-2191.

**SOLE SAVER**—Rebuild your soles the economical way. \$4.95 for a one pint can. Add 75 cents postage, plus 6% tax (CA res. only). Order from Starting Line Sports, Box 8, Mountain View, CA. 94042.

**CLASSIFIED RATES**—Race Notices: 40c/word, \$10.00 minimum. General Notices: 75c/word, \$20.00 minimum. Ads must be paid in advance. Next issue for ads. January 1977 Closing date: Nov. 18. Contact Advertising Manager, P.O. Box 366, Mountain View, CA 94043.







## Bound to be Useful

Protect your back issues in style. Handsome hard-back binders, custom-designed in red and gold, will protect 12 issues *Runner's World*. And now you can keep *Runner's World* right where it belongs, on your library shelf.

A binder full of *Runner's World* magazines is an excellent reference for any runner. Turn through the pages year after year and you'll find the articles on training, diet, technique, physiology and psychology never get out of date.

Back issues of *Runner's World* will prove invaluable to you many times over, as long as you maintain your running interests. So, save your back issues and put them in a protecting binder. Years from now, you'll be glad you did.

Please send me \_\_\_\_\_ *Runner's World* Binders @ \$5.95 each, postpaid. Calif. residents add 6% tax, please.  
Name \_\_\_\_\_

Address \_\_\_\_\_

City/State/Zip \_\_\_\_\_

**runner's world**

P.O. Box 366

Mountain View, CA 94040

# Readers' Comments

Reactions to events in the sport and features in the magazine.

## CORONARY CASES

I suspect the reason Jim Shettler never finished a marathon (which I infer from the Sept. '76 "Running Commentary") was because his pace was fast. I've been looking at his times and hearing his name since I started running about three years ago.

As a 44-year-old ex-coronary case, I started running long slow distance before the words were heard. I still do LSD with an infrequent sprint to the finish when the terrain is downhill.

I thank my lucky stars very often when considering the positive results of my myocardial infarction. I am in great health and a long active life is ahead.

I encourage other ex-heart, ulcer, bad back and other patients to share their experiences with running.

*Keith Weaver  
Oakland, Calif.*

Despite George Sheehan's protestations, runners do hope for protection from heart disease through exercise, as intimated in your "Commentary" (Sept. '76) on the death of long-time runner Jim Shettler from a sudden heart attack (which was caused, so the autopsy seems to show, from partial blocking of a large artery with cholesterol).

For those of this group who are interested in combining exercise with nutrition, I have news. For the last five years, it has been a practice of mine to comb the nutritional literature for health-giving information.

In regard to prevention of heart attacks, by far the most valuable articles appeared in the November and December 1975 issues of *Prevention* under the heading of "Atherosclerosis, Prevention and Cure." The author is a Ph.D. research chemist, J. Rinse, who suffered a heart attack in 1957, cured himself, gave his formula to others and saw them become healed.

His suggestions involve intake of about four supplements daily, such as wheat germ and brewer's yeast, Vitamin E and lecithins. Folks might like to examine these two articles and draw their own conclusions.

*Julian Griggs  
Tippecanoe, Ind.*

## GOING TOO FAR

Danile Ellison's item "Injury Free" ("Technical Tips," Aug. '76) prompts me to unburden myself.

He writes of "the school of thought that recommends at least six miles a day for general health, especially cardio-respiratory health. This includes the opinions of Dr. Ernst van Aaken and Dr. Thomas Bassler."

Now, I'm a duffer as serious runners go. Depending on time and inclination, I generally go 2-4 miles at a pop, from 5-12 times a week (I do swim and walk, too). Like others, I got turned on seven years ago by Dr. Kenneth Cooper whose prescription for "general health" is substantially more modest than Ellison's six miles a shot.

For the sake of all I have invested in time, energy and faith, I sure hope Cooper and others are right and Ellison, Van Aaken and Bassler are wrong. I'm also certain I represent far more folks than does spartan Ellison.

*Marvin Rogoff  
Bethesda, Md.*

## BREATHERS BEWARE

I find myself in agreement with much that Dr. Harry Daniell wrote in "Try Not to Exhaust Yourself" (Sept. '76) but also find considerable variation between research data and the opinions he expressed. He wrote, "It has been estimated that 60% of the carbon monoxide in our environment is produced by motor vehicles."

In truth, research has shown that mankind with all his activities produced 270 million tons of carbon monoxide per year while nature produces 3.6 billion tons. Even though there are nine times as many motor vehicles in the northern hemisphere as in the southern, there is no higher carbon monoxide concentration in the northern hemisphere.

The concentrations of carbon monoxide shown in the table accompanying the article are correct for the most part as they are "typical." Actually, a poorly ventilated room filled with smokers will probably have a carbon monoxide concentration of 200 parts per million. A heavy smoker in downtown Los Angeles traffic who refrains from smoking

for a period of several hours will have a reduction in the carbon monoxide content of his blood.

As Dr. Daniell says, we should avoid concentrated exhaust fumes and smoke.

*Ron Ostrander  
Wausau, Wis.*

## DISCUSSION DIETS

I would like to direct my comments to the article "How Diet Can Change You," by Donald Monkerud published in your August issue.

Monkerud describes the case of a 55-year-old Los Angeles attorney whose coronary arteries document 100%, 89% and 75% closure. It is stated that within three months of diet therapy from the Longevity Research Institute, this same man had a "normal" treadmill test. The reader is left to assume that the test was *not* "normal" prior to the diet therapy.

For your readers' protection, I feel a clarification of terms is in order. A "normal" treadmill implies a negative test for myocardial insufficiency, or an absence of cardio-vascular impairments significant enough to reduce heart muscle contractility. Approximately 94% of all positive treadmills are due to coronary artery disease, or the "clogging up process." Usually, the coronary artery must be at least 50% closed to make a positive test.

I would like to point out that a positive or abnormal treadmill rarely runs "normal" or negative. The exception to this rule is seen after myocardial infarctions (heart attacks). Due to the balancing of electrical forces after the heart attack, a formerly positive treadmill may look negative.

Certainly diet and exercise are of cardinal importance in the treatment of coronary artery disease. However, let's not further complicate this delicate and blooming science by making invalid assumptions from vaguely supported case studies.

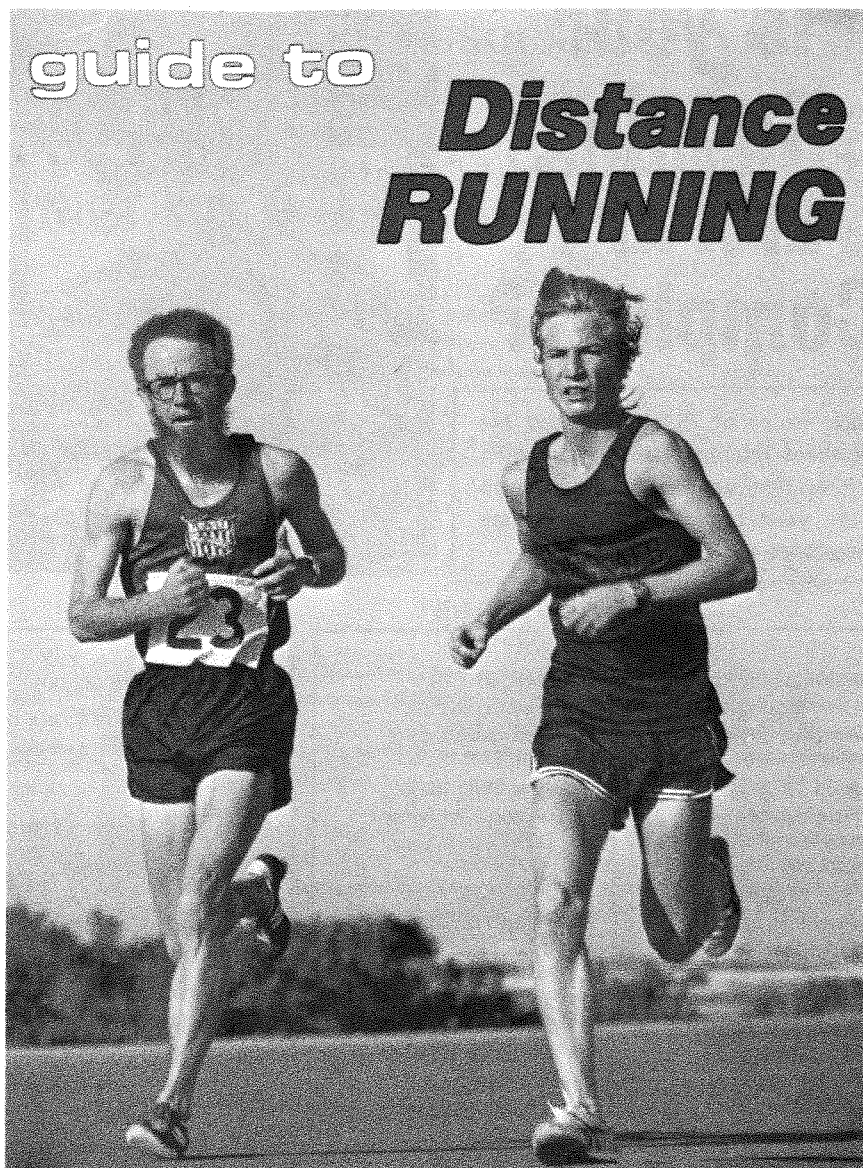
*Jo Schroeder, R.N.  
Honolulu, Hawaii*

In your August 1976 issue, Donald Monkerud in his article entitled "How Diet Can Change You" quoted Dr. Nathan Pritikin concerning one runner who tried carbohydrate loading on the advice of a marathon physician and had a heart attack while running. As has been typical of Dr. Pritikin up to this time, this statement is inaccurate.

I might comment further to say that the same runner one month later started on a low-fat diet as outlined by Dr.

*(continued on page 90)*

This Christmas, Give...



This Christmas, get three copies for the price of two. When you buy two copies of the Guide to Distance Running, we will give you a third one free. This year, remember those new runners on your list. Give them the one source for all information they need. All of their questions on physiology and technique, races and racing, coaching and training, psychology and well-known runners are answered. They will also find a pictorial survey of distance running with 100 fine photos. The appendix gives world, American, Boston Marathon and Olympic Records. Edited by Bob Anderson and Joe Henderson. 1974 Ppb., 206 (oversize) pp., ill., \$5.95.

### ORDER FORM

#### CHRISTMAS COUPON . . . BUY TWO, GET ONE FREE!

[ ] Please send me three copies of the Guide to Distance Running. I have enclosed \$11.90, plus \$1.20 postage, total of \$13.10.

Please send \_\_\_\_\_ copy(ies) at \$5.95 each plus 40c postage. Calif. add 6% tax.

Name \_\_\_\_\_

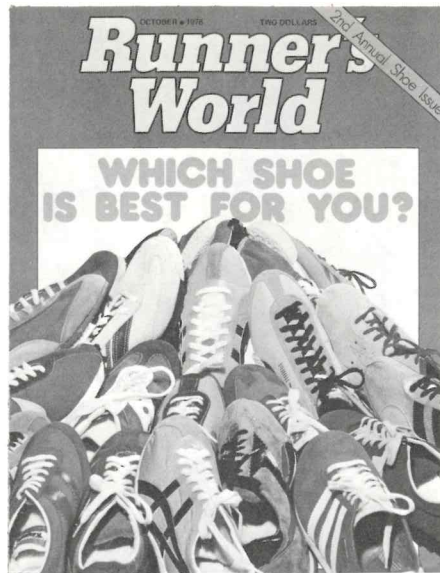
Address \_\_\_\_\_

City/State/Zip \_\_\_\_\_

Runner's World, Box 366, Mtn. View, CA 94042

# Is your Running Library Complete?

Back issues of *Runner's World* are excellent references for any running information you might need. Complete your collection, before these magazines go out of print.



**November 1971**  
Larry Young Interview  
Another Look at LSD

**April 1973**  
Reaching the Peak  
The New Frontier

**May 1973**  
Family Running  
ITA's First Meets

**June 1973**  
Your Best Beat  
Boston's 77th

**July 1973**  
What Diet Can Do  
Shoe Inserts

**August 1973**  
The New Africans  
Runs That Never End

**December 1974**  
David Pain  
Women's Weapon

**May 1975**  
Training to Peak  
Endurance Limits

**June 1975 (\$2.00)**  
Boston Supplement  
Using Biorhythms

**July 1975**  
Pause That Refreshes  
Steve Hoag Interview

**August 1975**  
Pre's Last Miles  
US China Tour

**September 1975**  
Win Cross-Country  
AAU Views

**December 1975**  
Bob Anderson  
Women's Marathon

**January 1976**  
Year of the Miler  
Black Runners

**February 1976 (\$2.00)**  
Marathon Handbook  
Ruin an Athlete

**April 1976**  
AAU Dissension  
Running Beginnings

**June 1976 (\$2.00)**  
Joan Uillyot  
Boston Supplement

**July 1976**  
Rick Wohlhuter  
Don Kardong

**August 1976**  
Olympic Trials  
What Diet Can Do

**October 1976**  
Annual Shoe Supplement  
Put Your Diet in Reverse

Nov. 1971	Dec. 1974	Sept. 1975	June 1976 (\$2.00)
May 1973	May 1975	Dec. 1975	July 1976
June 1973	June 1975 (\$2.00)	Jan. 1976	August 1976
July 1973	July 1975	Feb. 1976 (\$2.00)	Oct. 1976 (\$2.00)
Aug. 1973	Aug. 1975	Apr. 1976	

( ) Enclosed is \$1.50 (postpaid) per issue circled above, unless otherwise indicated.

( ) Please send the entire set for \$28.95.

Name \_\_\_\_\_  
Address \_\_\_\_\_  
City/State/Zip \_\_\_\_\_

Runner's World, Box 366, Mountain View, CA 94040

Pritikin and 3-4 months later, while still following the diet, died. Also, several months before his death, body fat percentage was calculated from underwater weighing and repeated after two months on his diet and the results showed that he had lost 20 pounds, 15 pounds of which were lean muscle mass and only five pounds of fat.

I think the point here is that Dr. Pritikin and I both know the situation and in neither case can one incriminate the carbohydrate loading of the low-fat diet as being the causative factor. In both situations, the runners' own personal modifications were probably more causative.

John O. Wagner, M.D.  
Honolulu, Hawaii

## ABOUT THE AAU

I understand your desire to end the AAU debate and go on to more important issues, such as training for the marathon and curing knee injuries, but AAU executive director Ollan Cassel's statement (August '76) should not go unanswered. He accuses me of distorting the facts, then distorts them so badly himself that they are unrecognizable.

1. Ollan claims I wrote the AAU article several weeks before its publication in *Runner's World*, timing the magazine's appearance to coincide with a national wire service story. Ridiculous! The AAU article was written many months before its appearance. As a contributor, rather than a staff member, I do not set publication schedules.

2. He indicates I willingly accepted funds from the Indiana LDR travel fund. I did when those funds were offered. During 12 years of membership in the Indiana AAU (including several years as LDR chairman), I received a total of \$50 in expenses (to defend a national title in California). I made no "last request for money" before quitting. The Indiana Striders requested support to travel to two national championship races. The refusal of the Indiana AAU to allocate funds, despite contributions of our 300 members to the LDR travel fund, was one—and only *one*—reason for that club's withdrawal from AAU membership.

3. His comment that I "never wanted to see Masters track and field develop into a unified program" verges on slander. In truth, the current Indiana AAU president seriously blocked the Masters movement in the state.

Finally, Ollan ends with a plea that runners avail themselves of the "democratic procedures of the AAU," which seems to throw me into the camp of

(continued on page 92)

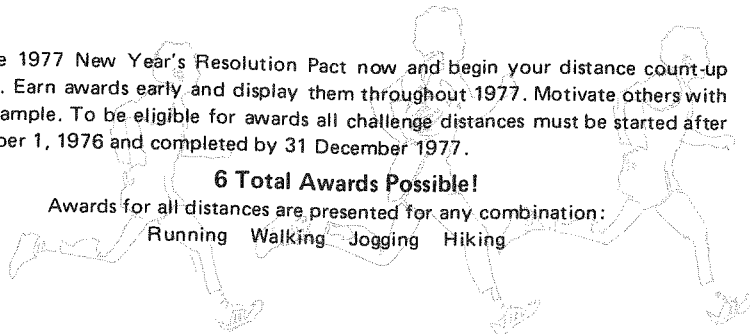


# The National Jogging Association (NJ Association) proudly announces the 1977 NEW YEAR'S RESOLUTION CHALLENGES [Run Walk Jog Hike]

Join the 1977 New Year's Resolution Pact now and begin your distance count-up this fall. Earn awards early and display them throughout 1977. Motivate others with your example. To be eligible for awards all challenge distances must be started after September 1, 1976 and completed by 31 December 1977.

### 6 Total Awards Possible!

Awards for all distances are presented for any combination:  
Running Walking Jogging Hiking



### 3 MILE CHALLENGES (1 Mile = 1.60934 Kilometers)

- 1. 365 Miles (587.39 Kilometers)** A mile a day may be just right for you to start and get in the swing of things. We dare say you'll soon be increasing the average distance, tho, and be the first kid on your block to receive the attractive, embossed silk ribbon that will be presented to you on completion.
- 2. 1,000 Miles (1,609.34 Kilometers)** Are you good for three miles per day? If so, you will be eligible for the red, white and blue 1,000 mile emblem, especially made for this NJ Association milestone.
- 3. 1,977 Miles (3,181.67 Kilometers)** The greatest challenge of all and an achievement that will lay to rest doubts about your sanity and willingness to go the extra mile (or more!) Completion and certification will earn you an embroidered emblem of superior design, and national publicity.

### 3 KILOMETER CHALLENGES (1 kilometer = .62137 miles)

- 1. 365 Kilometers (226.8 miles)** A modest challenge for beginners or those with physical limitations. If you're in a way where a mile a day isn't quite your style, gear up for "A K per day." One will lead to another and when you've reached the full 365, send for your embossed, silk ribbon right away.
- 2. 1,000 Kilometers (621.37 miles)** An achievable challenge in a year's time at 3 K's per day. Advanced runners may meet this challenge in two or three months. Completion will earn a distinctive embroidered "1,000 Kilometer" emblem for your shirt or jacket.
- 3. 1,977 Kilometers (1,228.45 miles)** The Challenge of the Year. And an achievement worthy of admiration and respect. Completion and certification will earn an exclusive, embroidered emblem and enrollment in NJ Association's 1977 Resolution-Conquered Club.

### THE PERSONAL LOGBOOK & CERTIFICATE PROCEDURE

Upon receipt of your Application (below) and enrollment fee, the National Jogging Association will promptly send you a letter of acknowledgement and your personal 1977 New Year's Challenge Logbook. You may embark upon your goals as of Sept. 1, 1976 or immediately upon receipt of log. Enter the distance covered daily and the total distance to date in your log. As you complete each of the cumulative challenges for 365 and/or 1,000 kilometers or miles, notify NJ Association headquarters by card or letter for presentation of your earned award. Entrants completing the 1,977 Kilometer or Mile Challenge must submit their Logbook for certification and presentation of award. The Logbook will be returned with your award.

Throughout 1977, the NJ Association Newsletter, *The Joggler*, will carry reported stories of interest on particular courses or distances run in accomplishing challenges.

### APPLICATION/The National Jogging Association's 1977 New Year's Challenge

I accept the challenge of NJ Association's 1977 New Year's Program. Enroll me today!

- Kilometer Challenge. I hope to complete:  365  1,000  1,977 Kilometers (Enrollment fee \$5.00, enclose with application)  
 Mile Challenge. I hope to complete:  365  1,000  1,977 Miles (Enrollment fee \$5.00, enclose with application)  
 Both Challenges above (Enrollment fee \$10.00, enclose with application)

Name/Age \_\_\_\_\_  
 Street \_\_\_\_\_  
 City/State/Zip \_\_\_\_\_

**For Gift Enrolees:**

Name/Age \_\_\_\_\_  
 Street \_\_\_\_\_  
 City/State/Zip \_\_\_\_\_



Return with remittance to: National Jogging Association, 1910 K St. NW, Suite 202, Washington, D.C. 20006

N

## 1977 RUNNING CALENDAR

Last year's calendar was a success. Since we have received many requests to publish a 1977 calendar for runners, we have decided to do one. This calendar is designed specifically for runners.

It will include many key features. Reserve yours now! Quantities will be limited. 11" x 17" Suitable for hanging. Notice to Clubs/teams: Buy 10 or more and get a 20% discount. Individuals may also take advantage of this offer.

Please send \_\_\_\_\_ copy(ies) of the 1977 Running Calendar, as soon as available @ \$1.95 each, postpaid. I have enclosed \_\_\_\_\_

Name \_\_\_\_\_  
Address \_\_\_\_\_  
City/State/Zip \_\_\_\_\_

Runner's World, Box 366,  
Mountain View, CA 94040

## Change Of Address

If you're moving, please let us know four weeks in advance. Attach your mailing label to the space provided and supply all new information below. If you wish to enter a new subscription, check the box below and fill in name and address.

Attach Magazine Label Here

Runner's World (12 issues/\$9.50)

New Address \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Runner's World  
P.O. Box 366  
Mountain View, CA 94040

the Commies and people who defile God and country. The AAU and its defenders have been using this knee-jerk, flag-wrapping defense for decades.

The point is that long distance runners are not interested in politics. We only want to run. Why waste time reforming an out-of-date dinosaur like the AAU when another organization, which deals more directly with our needs, beckons? I'm speaking, of course, of the Road Runners Club of America.

*Hal Higdon  
Michigan City, Ind.*

### WHO IS THAT GUY?

Who's kidding whom?

In your June issue, one of your reporters indicated that he had an interview with Mr. Kardong ("Don Kardong, the Big Winner in Third", July '76 *RW*).

As part of this interview, the gentleman reported that his diet is as follows: orange juice and Froot Loops with milk for breakfast; for lunch, peanut butter and jelly sandwich and cookies; and for dinner, pizza and beer. The total caloric intake from such a diet is, in round numbers, about 1780 calories. The protein content is 48 grams, or less than one gram per kilogram. This data is estimated from a textbook of nutrition by Birch and Bowers, 11th edition.

It is quite obvious that someone is teasing someone. This is a diet which would barely sustain one's body weight, let alone sustain a healthy, vigorous athlete in high competition for long-distance running. My purpose in writing is to raise some skepticism among your reporters in accepting at face value what somebody seems to tell them.

*William J. Grace, M.D.  
New York, N.Y.*

### SOMEBODY IS RIGHT

I recently read your July '76 article in *RW* entitled "Every Body Is Right" by Tom Miller. I agree with the basic reason for the writing of the article (that everyone would enjoy running and set realistic goals according to personal limitations). But I must disagree with Miller on many other points.

I am an engineer and have an entirely different point of view from Miller. It is impossible to use the so-called optimum 2:1 weight to height ratio for all people of all heights. A person's weight is proportional to his volume (the proportionality constant is called density).

As height increases, weight must increase at a greater rate in order for the person to maintain the same physical proportions. Therefore, as height increases, the only way a 2:1 weight to

height ratio can be maintained is by reducing the person's measurements (or in other terms, his cross-sectional area).

Miller's relative performance tables are misleading. His tables are fine for a person who wants to determine the "potential" effect of losing weight. But there is no way that people of different heights can use these tables as a gauge of relative performances.

The only conclusion that can be reached now is that the 2:1 weight/height ratio only can hold for people of relatively normal height (5'8" to 6'0").

Most tall people would have to lose more weight than they should in trying to fit the 2:1 ratio and most short people would have to gain more weight than they should. Both of these practices could be extremely unhealthy.

The article stimulated my thought but I am afraid that others may be taken in by its inaccuracies.

*William A. Fischer  
Enfield, Conn.*

### ONLY SO FAR

I am perfectly willing to look skinny, undernourished and withdrawn (especially skinny); wave at passing motorists (that lets them know I'm there); and not collapse dramatically or undramatically on the finish line (the winners are so far ahead of me I sometimes can't even find the finish line).

But I absolutely refuse to let my beard grow into a mean looking stubble for a couple of days before a race ("Beginner and Vet," August '76 *RW*).

*Lois Price  
San Rafael, Calif.*

### WHO NEEDS HILLS?

I re-read my article on hill training (Sept. '76, "What the Hill" in "Runner's Forum") just a few days before running at Charleston. Unlike my last attempt at that 15-miler, this time I followed my own advice on hill training, or rather the lack of it, with excellent results.

Two years ago I ran 619th in 1:47:12. I did about two months of quality hill training, once a week. It killed me. This year I ran 219th in 1:35:50. I did two runs in the hills during the preceding three weeks, one of 18 miles and one of 24 miles. This was all of my "hill training."

I'm bragging. I had no trouble running those hills. In fact, I enjoyed running those hills that even Frank Shorter was calling hard.

*Fred Lawrence  
Owensboro, Ky. •*

# ORDER FORM

USING THIS FORM TO ORDER WILL PUT YOU ON THE ROAD TO FITNESS

**RUNNER'S  
WORLD  
BOX 366  
MOUNTAIN VIEW CA.  
94042**

Ship To:  
Name \_\_\_\_\_  
Address \_\_\_\_\_  
City \_\_\_\_\_ State \_\_\_\_\_ Zip \_\_\_\_\_  
Enclosed payment in full \$ \_\_\_\_\_

## BANK CARD INFORMATION

*Do not send card.*

Card Owner's Name \_\_\_\_\_

Billing Address \_\_\_\_\_

City/State/Zip \_\_\_\_\_

Card Number \_\_\_\_\_

Four Digit Number (Master Charge) \_\_\_\_\_

Expiration Date & Letter Code \_\_\_\_\_



Order through our Bank Americard and Master Charge  
Hot Line (415) 965-3240

SUBTOTAL THIS SIDE	
SUBTOTAL FROM BACK	
TAX	
POSTAGE	
TOTAL ENCLOSED	

California residents add 6% sales tax.  
Postage 40c per book \$2.00 maximum  
Prices subject to change without notice

## BOOKS PUBLISHED BY RUNNER'S WORLD

QTY.	TITLE	PRICE	TOTAL
	All About Bicycle Racing (Ppb.)	2.95	
	All About Winter Safety (Ppb.)	1.95	
	Always Young (Hb.)	4.95	
	Always Young (Ppb.)	2.95	
	Around-Town Cycling (Ppb.)	2.50	
	Basic Soccer Guide (Ppb.)	3.50	
	Basic Swimming Guide (Ppb.)	2.50	
	Bicycle Track Racing (Ppb.)	3.95	
	Building Bicycle Wheels (Ppb.)	1.95	
	Comp. Book of Ballooning (Hb.)	8.95	
	The Complete Runner (Hb.)	10.95	
	Comp. Wt. Training Book (Hb.)	6.95	
	Dr. Sheehan on Running (Hb.)	5.95	
	Dr. Sheehan on Running (Ppb.)	3.50	
	Ency. Athletic Medicine (Ppb.)	1.95	
	Exercises for Runners*	1.95	
	Food For Fitness (Hb.)	5.95	
	Food For Fitness (Ppb.)	2.95	
	Guide to Dist. Running (Ppb.)	5.95	
	The Inner Game of Soccer (Hb.)	6.95	

QTY.	TITLE	PRICE	TOTAL
	Inter. Bicycle Touring (Ppb.)	2.95	
	1976 Olympic Games (Ppb.)	3.95	
	1976 Olympic Games (Hb.)	6.95	
	The Long Run Solution (Hb.)	5.95	
	The Long Run Solution (Ppb.)	3.95	
	Manual for Youth Soccer (Ppb.)	1.95	
	Run Gently, Run Long (Ppb.)	2.50	
	The Runner's Diet*	1.95	
	Runner's Training Guide (Ppb.)	2.95	
	The Running Body*	1.50	
	Running After Forty*	1.00	
	Self-Made Olympian (Hb.)	5.95	
	Self-Made Olympian (Ppb.)	3.50	
	Snow Camping (Ppb.)	2.50	
	SportSource (Hb.)	9.95	
	Traveling by Bike*	1.95	
	Van Aaken Method (Hb.)	5.95	
	Van Aaken Method (Ppb.)	3.95	
	Women's Running (Hb.)	5.95	
	Women's Running (Ppb.)	3.95	

\*Saddle stitched, paperbound.

SUBTOTAL THIS SIDE

## OTHER BOOKS AVAILABLE FROM RUNNER'S WORLD

QTY.	TITLE	PRICE	TOTAL
	The Book of Yoga (Hb.)	12.50	
	Autobiography of a Yogi (Ppb.)	3.00	
	Complete Ill. Bk. of Yoga (Ppb.)	1.95	
	Yoga For All Ages (Ppb.)	3.95	
	Light on Yoga (Ppb.)	4.95	
	Yoga and Sex (Ppb.)	1.95	
	Yoga Self-Taught (Ppb.)	2.95	
	Comp. Bk. of Vitamins (Hb.)	13.95	
	All About Meat (Hb.)	14.95	
	The Good Goodies (Ppb.)	4.95	
	Food For Sport (Ppb.)	4.95	
	Fasting Can Save Lives (Ppb.)	1.75	
	Diet For A Happy Heart (Ppb.)	4.95	
	Save Your Life Diet (Hb.)	7.95	
	Nutrition & Athletes (Hb.)	7.95	
	Superior Nutrition (Ppb.)	4.50	

QTY.	TITLE	PRICE	TOTAL
	New Aerobics (Hb.)	5.95	
	Aerobics (Hb.)	5.95	
	Aerobics For Women (Hb.)	5.95	
	Biorhythm: Personal Sci. (Hb.)	8.95	
	Comp. Conditioning (Ppb.)	3.95	
	Fountain of Youth (Ppb.)	1.45	
	Sports Psych., Tutko (Hb.)	6.95	
	Tot. Fitness 30 Min. Week (Hb.)	6.95	
	The Perfect Exercise (Hb.)	6.95	
	Enc. of Diseases (Hb.)	19.95	
	Live Longer Now (Ppb.)	2.95	
	Comp. Mid. Dist. Runner (Hb.)	6.95	
	Comput. Run-Train Prgm (Ppb.)	4.50	
	First Four Min., Bannister (Hb.)	4.95	
	Track & Field Omnibook (Hb.)	13.95	
	Anybody Skatebrd. Bk. (Ppb.)	3.00	

## MORE BOOKS PUBLISHED BY RUNNER'S WORLD

QTY.	TITLE	PRICE	TOTAL
	African Running Revolution (Ppb.)	2.50	
	Age of the Runner *	1.75	
	Athletes' Feet *	1.75	
	Beginning Running *	1.00	
	Bicycle Frames*	1.75	
	Boston Marathon *	1.00	
	Coaching Distance Runners *	1.50	
	Dave Wottle Story *	1.50	
	Discover Cross-Country Skiing *	1.50	
	Female Runner *	1.25	
	Finnish Running Secrets (Ppb.)	2.50	
	First Steps to Fitness*	1.50	
	Frank Shorter Story*	1.00	
	Guide to Sprinting *	1.25	
	Hurdling & Steeplechasing *	1.75	
	Interval Training *	1.95	

QTY.	TITLE	PRICE	TOTAL
	New Views of Speed Training *	1.25	
	Nightmare of Success (Hb.)	6.95	
	Practical Running Psychology *	1.50	
	Race Walking *	1.50	
	Racing Techniques*	1.50	
	Runner's Training Diary*	1.50	
	Running with Style*	1.50	
	Running with the Elements *	2.75	
	Shoes for Runners *	1.95	
	Step up to Racing *	1.75	
	Tale of the Ancient Marathoner*	1.50	
	Training for Nordic Skiing (Ppb.)	2.95	
	Varied World of Cross-Country*	1.25	
	Yoga and the Athlete (Ppb.)	2.50	
	Young Runner *	1.00	

SUBTOTAL THIS SIDE



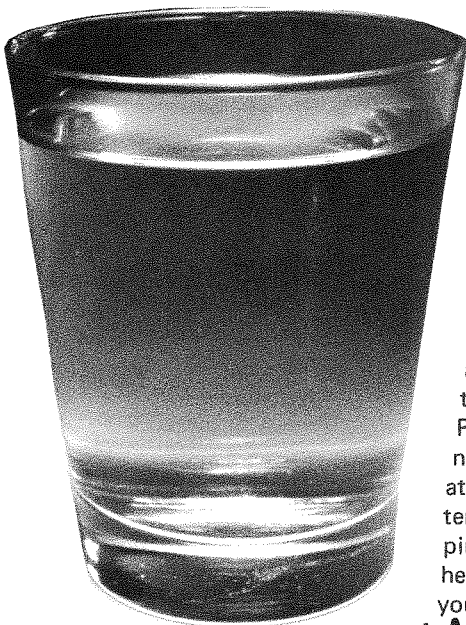


# The Answer is Simple. BODY PUNCH

It's the Answer! Body Punch, the fluid replacement drink, means . . . top performance. After a work-out, training session, or event, you need a drink. A drink that will provide all that your body requires to recover the essential elements lost. You need a drink that will pick-you-back-up and do it fast. You need Body Punch. It leads the field. It's exclusive formula contains all your body needs and it tastes cool and refreshing with no after-taste.

Athletes know that as they participate in sport they lose important minerals. The minerals sodium and chloride, also called electrolytes, pass through the pores in perspiration. They must be replaced. Body Punch contains these critical minerals and replaces them at an astonishing rate. Long work outs can cause extreme fatigue, this is due to a reduction in body sugars. Body Punch restores energy fast. Many athletes drink it before, during, and after vigorous sessions. You will to. Body Punch contains just the right amount of carbohydrates to give quick energy and sustain you to go on to win.

Your body temperature raises as body fluids are lost. Long runs or other sustained activity will cause you to perspire continuously. This loss dehydrates the system and can cause serious damage to your circulatory system. When mixed as directed, and consumed, Body Punch restores this much needed body fluid allowing normal circulation to resume. It's cooling effect, taken at 45-55 degrees Fahrenheit helps to maintain body temperature which allows you to compete without stopping. Body Punch mixed according to directions, will help you be a winner. Use the coupon below and solve your problem. Get Body Punch, it is the answer.



Please send me the winning formula—  
Body Punch.

Lemonade  Fruit Punch

- Sample Packet 3-½ gallon pkgs. \$2.50
- Bulk Package (makes 5 gallons) \$4.40
- Box 10 (½ gallon packages) \$6.75
- Case 24 (½ gallon packages) \$13.50
- 3 Case 72 (½ gallon packages) \$36.95

All orders shipped postpaid

(Dealerships are still available write for information)

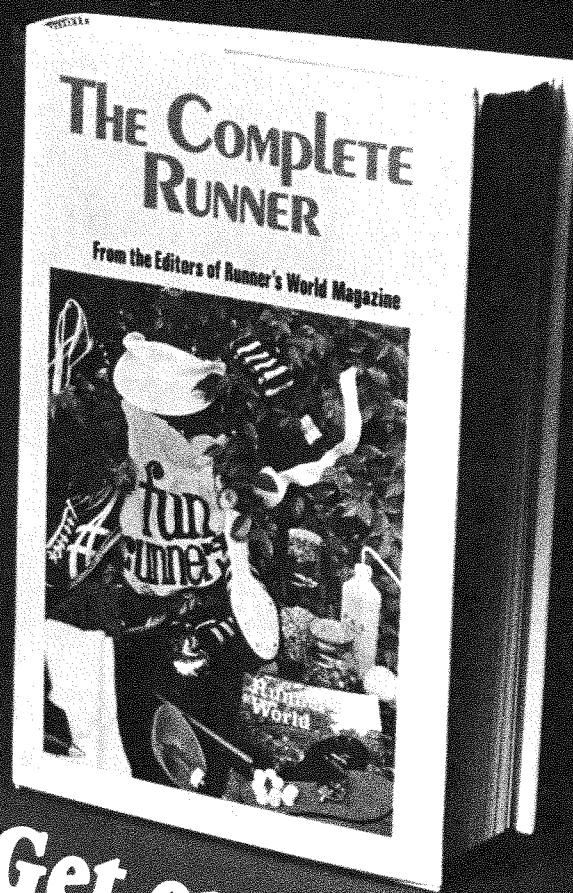
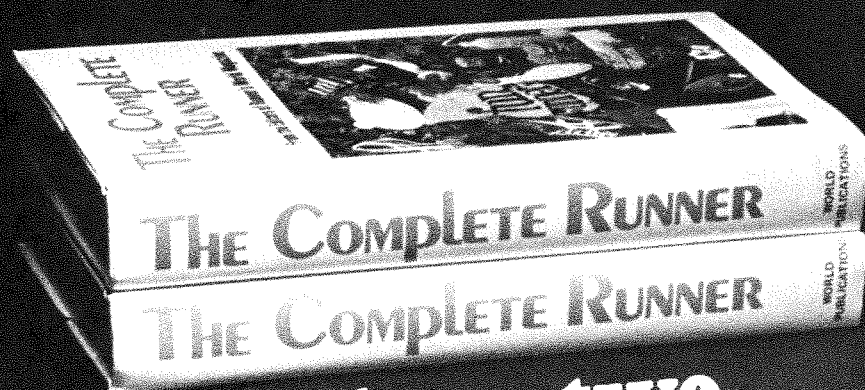
Send to \_\_\_\_\_

Address \_\_\_\_\_

City/State/Zip \_\_\_\_\_

Starting Line Sports, Box 8, Mtn. View, CA 94042

# The Complete Christmas Gift



Buy these two... Get one free

In a word, *The Complete Runner* is practical. You aren't reading about someone else's running. You're learning ways to make your own running faster, healthier, more rewarding, more fun—more complete. This is the raw material you need to make yourself into the kind of runner you can be.

I'll take you up on your offer.

Please send me 3 copies of *The Complete Runner*, for \$21.90. I have enclosed \$23.10 which includes 40c postage for each book.

Please send \_\_\_\_\_ copy(ies) of *The Complete Runner* @ \$10.95, add 40c postage per book.

Calif. res. add 6% tax

Name \_\_\_\_\_

Street Address \_\_\_\_\_

City/State/Zip \_\_\_\_\_

Call our hotline and charge to BankAmericard or Mastercharge (415) 965-3240.

Runner's World, P.O. Box 366, Mtn. View, CA 94042

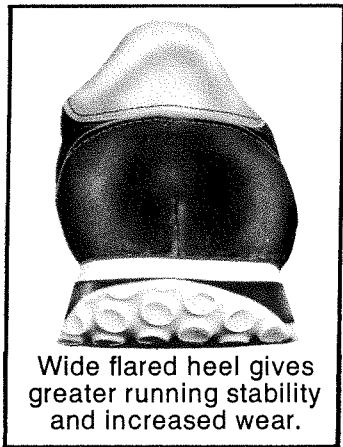
*The Complete Runner* is for all runners: the milers whose Olympic ambitions propel them through 100-mile training weeks, the marathoners who win by going the distance, or those who run for fun and fitness.

There are articles on footwear, physiology, nutrition, philosophy and other general topics that will interest everyone who relishes the sensation of breaking out of a walk. There are also discussions on starting blocks, hurdling technique, altitude training and many other specialized subjects that are aimed at very specific groups. Whatever your running needs, you can bet that you'll find plenty to read and think about in *The Complete Runner*.

The editors of *Runner's World* have gathered 60 articles by 42 writers, 88 photos from 31 photographers. They know and live what they're talking about and they're giving you the chance to do the same. This year take advantage of our Christmas offer and give *The Complete Runner*. For the price of two, you will receive three. It's that simple.

# SORRY ADIDAS..... BROOKS now has the best

**Because;**  
**We listened to Runners World.**  
**We listened to World Class Runners.**  
**We listened to a top sports physician.**



Wide flared heel gives greater running stability and increased wear.

**HEEL COUNTER A**  
 Non-breakable rigid counter covering entire heel

**HEEL LIFT A**  
 1" thick soft crepe heel dropping to 1/2" at ball

**SHANK SUPPORT A**  
 Solid shank

**INSIDE SUPPORT A**  
 Built-in orthopedic arch support covered with sponge

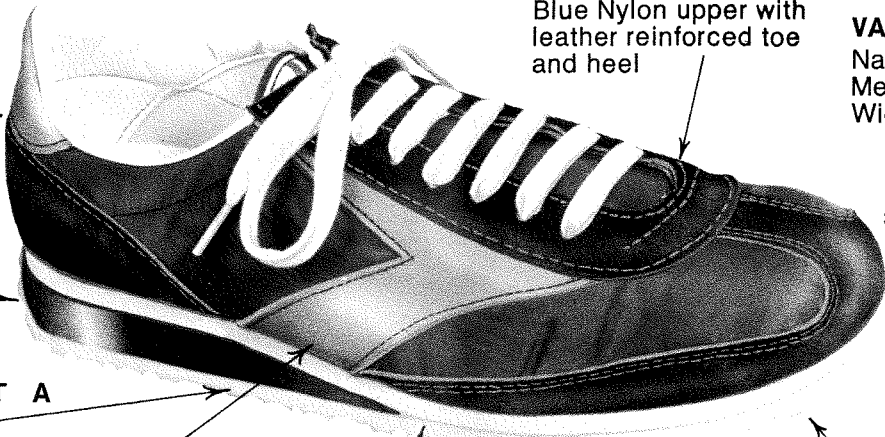
**SOLE BEND A**  
 Special flexibility at ball normally found in racing shoes

**VARIABLE WIDTHS A**  
 Narrow 8-11  
 Medium 4-13  
 Wide 8-11

**SHOE WEIGHT B**  
 11 ozs.—ideal training shoe weight

**SOLE MAKE-UP A**  
 2 layer sole—1/2" thick at ball

**UPPER SOFTNESS A**  
 Blue Nylon upper with leather reinforced toe and heel



When you add up the scores, it's the new Villanova II by BROOKS that has all the best features plus the extra wide flared heel for greater running stability and durability. Help us help you. We need your comments to stay on top.

	Retail Price	Variable Widths	Number of Users	Drop Rate	Sole Makeup	Sole Bend	Shank Support	Heel Lift	Inside Support	Upper Softness	Heel Counter	Shoe Weight	Total Score
Villanova II	A	A	C	C	A	A	A	A	A	A	A	B	17 Points
SL 72/76	B	C	A	B	B	A	A	A	B	A	A	B	19 Points

Rating Criteria established by Runner's World A = 1 B = 2 C = 3

Use Coupon To Order

**The ATHLETIC ATTIC**  
 3411 West University Ave.  
 Gainesville, Fla. 32607

Villanova II **\$19.95** per pair **\$1.00** per pair for handling

My order..... \_\_\_\_\_ Enclosed is my check for \$\_\_\_\_\_

Quantity      Size      Width

NAME \_\_\_\_\_

ADDRESS \_\_\_\_\_

CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_ A

# A FOOTNOTE TO LAST MONTH'S ISSUE OF RUNNER'S WORLD.\*



The Elite (Special Marathon). Ranked #1 in Racing Flats category.



The Sting. Ranked #2 in Racing Flats.



Vainquere. Ranked #2 in Track Spikes.



LD1000. Ranked #5 in Training Flats.



Waffle Trainer. Ranked #6 in Training Flats.



Boston 73. Ranked #9 in Racing Flats.



Nylon Cortez. Ranked #10 in Training Flats.

68147ASHEW2619 00RW  
 WILLIAM A SHERRARD  
 2619 LINDA ST  
 OMAHA NE 68147  
 A SEP 78

## \*NIKE BEAT THE SOX OFF THE COMPETITION

Nobody came close to Nike last month when an independent panel of experts rated the best running shoes in the world in a special report in this magazine.

We had seven out of the top 30 shoes. Our closest competitor had only four in the top 30.

The experts evaluated shoes from more than 100 manufacturers on all the things that are really important to a serious

runner. Everything from heel width and counter to sole make-up and upper softness.

And when all the results were in, Nike ran away with more top-10 honors than anybody.

Quite an achievement. But hardly a surprise. It only proves what we've been saying all along: When you're running with Nike, you're running with a winner.



Blue Ribbon Sports • 6175 S.W. 112th Ave., Beaverton, Oregon 97005