

JUNE 1976 • ONE DOLLAR

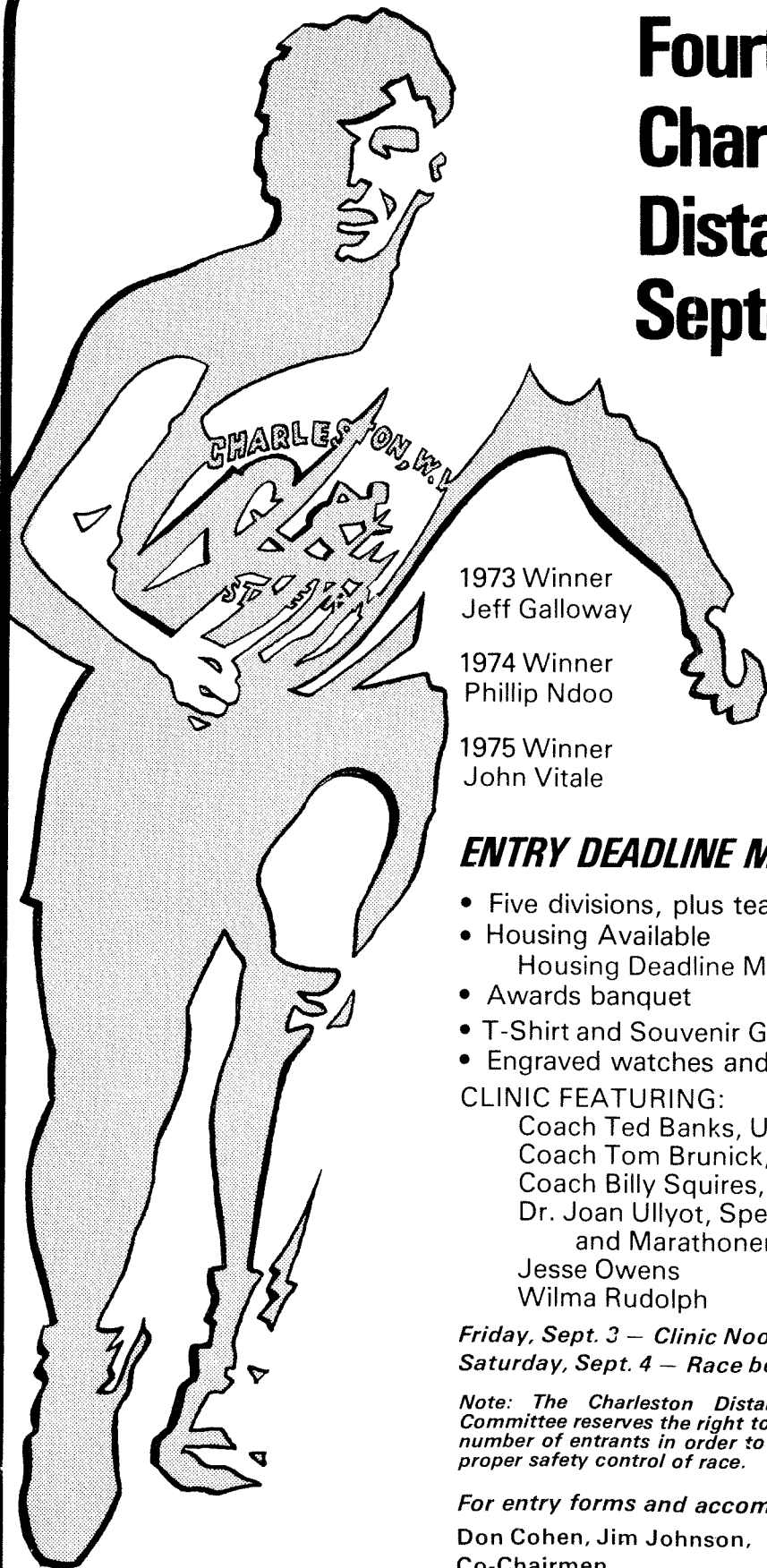
ISSN 0035-9939

Runner's World



**1976
BOSTON
MARATHON
SPECIAL**

Fourth Annual Charleston Distance Run September 4, 1976



1973 Winner
Jeff Galloway

1974 Winner
Phillip Ndo

1975 Winner
John Vitale

A 15 MILE RACE SPONSORED
BY THE CITY OF
CHARLESTON,
WEST VIRGINIA
Sanctioned by AAU and USTFF

ENTRY DEADLINE MIDNIGHT, AUGUST 28, 1976

- Five divisions, plus team awards
- Housing Available
Housing Deadline Midnight, August 16, 1976
- Awards banquet
- T-Shirt and Souvenir Glass To All Entrants
- Engraved watches and trophies

CLINIC FEATURING:

Coach Ted Banks, University of Texas at El Paso
Coach Tom Brunick, Lewis University
Coach Billy Squires, Boston State College
Dr. Joan Ulyot, Specialist in Medical Exercise
and Marathoner
Jesse Owens
Wilma Rudolph

Friday, Sept. 3 – Clinic Noon-5 p.m.

Saturday, Sept. 4 – Race begins 9 a.m., Awards Banquet 2 p.m.

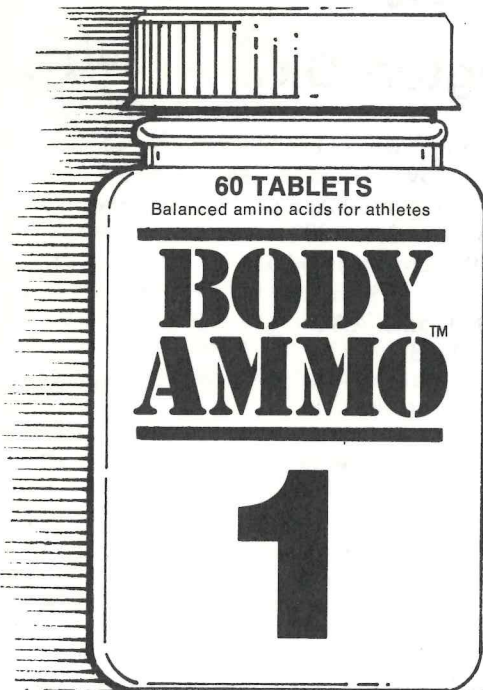
*Note: The Charleston Distance Run
Committee reserves the right to limit the
number of entrants in order to maintain
proper safety control of race.*

For entry forms and accommodation information contact:

Don Cohen, Jim Johnson, P.O. Box 1524
Co-Chairmen Charleston, W. Va. 25325

THE HOME OF THE NATIONAL TRACK AND FIELD
HALL OF FAME OF THE UNITED STATES OF AMERICA

A message to runners from Protein Research Laboratories.



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. Stated simply, Body Ammo I and II are non-drug, non-toxic natural products that have been specially prepared to help maximize athletic performance under strenuous physical conditions.

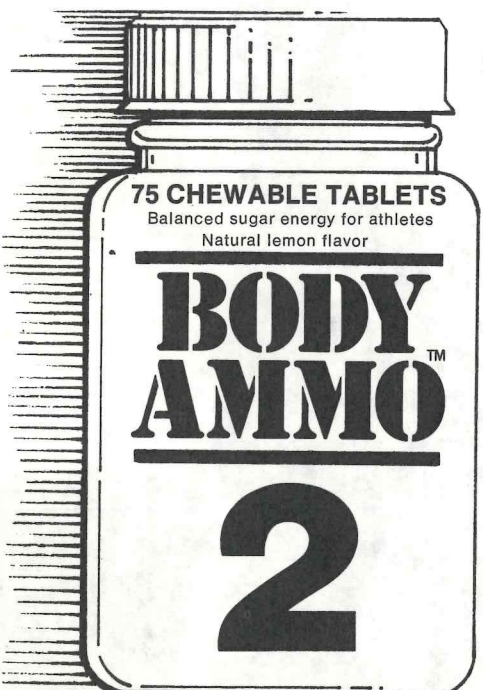
Body Ammo I

“The more nutrients present in your system when you finish running, the faster you’ll recover.”

Body Ammo I contains concentrated amino acids derived from milk protein. (Amino acids, the “building blocks” of the body, are normally depleted during strenuous exercise. Body Ammo I helps to prevent this deficiency.)

Body Ammo I enters the bloodstream rapidly. (On the average, within 30-40 minutes.)

Body Ammo I provides a practical and convenient way to build up amino acid levels immediately prior to physical exertion, and to replenish them during strenuous exercise, facilitating post-activity recovery.



Body Ammo II

“The more nutrients present in your system when you start running, the better you’ll perform.”

Body Ammo II contains two kinds of energy to burn: glucose, the fastest acting nutrient an athlete can take to provide energy, and fructose, which while also an excellent source of energy, is absorbed more slowly. Together, they provide a “time capsule” effect.

Body Ammo II keeps blood sugar high, helping to minimize fatigue.

Body Ammo I and II are available only from Protein Research Laboratories. If you are a serious runner, and interested in improved performance, we encourage you to use the order form below.

PLEASE SEND _____ BOTTLE(S) BODY AMMO I @ \$4.50
 _____ BOTTLE(S) BODY AMMO II @ \$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.

First Annual Marine Corps Reserve Marathon

Sunday, November 7, 1976, 10 AM, Washington, D.C.

The United States Marine Corps Reserve invites you to participate in its first Annual Marathon.

The competition is open to all. Nine categories, with awards to

the top three finishers in each. And everybody who finishes gets a Marine Corps Certificate. All entrants receive a Marine Marathon patch.

The out & back course is flat and scenic, with no heart-pounding hills to contend with. Starting and finishing point: the Marine Memorial. And in between, you'll get to see the sights of Washington.

The nine categories cover everybody who loves to run for the distance. 1) Open; 2) Age 19 and below; 3) 20 to 29; 4) 30 to 39; 5) 40 to 49 (Veterans); 6) 50 and over (Masters); 7) Military; 8) Women; 9) Teams. AAU Certification Pending.

For more information, mail coupon to:
Col. J.L. Fowler, USMCR, HQMC (Code
RES), Washington, D.C. 20380. Or
call (202) 694-2480.

Name _____
Address _____
City _____
State _____
Zip _____
Age _____



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
Creative Director: Mark Cowens
Marketing Director: Tim Davis
Advertising Manager: J. Madden Magruder
Advertising Sales Director: M. Kight Kirscht
Subscription Manager: Rhonda Swan
Circulation Director: Debbie Jenkins

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



COVER:

Jack Fultz and Kim Merritt joined thousands of others in a win at the Boston Marathon. A special report begins on page 37. (Jeff Johnson photos)

Runner's World is published monthly by World Publications, Editorial and Executive offices: P.O. Box 366, Mountain View, CA 94040; phone (415) 965-8777. European Office: Box 247, Croydon, Surrey CR98AQ, England.

Second class postage paid at Mountain View, CA 94040 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, 75 cents and back issues, \$1.00 each.

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

Volume Eleven, June 1976—Number Six

Contents

ARTICLES

Success at an Early Age	24	Hal Higdon
One Last Barrier to Cross	32	Ruth Laney
Joan Ulliyot	34	Nancy Ziegler
1976 Boston Marathon Supplement	37	Runner's World Staff
Introduction—Happiness of Pursuit	53	Runner's World Staff
Channeling Our Meanness	54	Robert Bahr
Sit Down and Relax	55	Michael Bonner
Is Running an Illness?	56	Dick Hessler
Repaying a Small Speed Debt	58	Joe Henderson
Runner Watching	60	Frances Fruit

DEPARTMENTS

Runner's Forum	6	Good News	70
Running Commentary	12	Highlights	72
Medical Advice	14	July Coming Events	75
Interview: Dr. Kenneth Cooper	18	The Best of Times	76
Looking at People	64	Fun-Run Update	78
Technical Tips	66	Club Notes	82
Montreal '76	69	Readers' Comments	84

From the Publisher

I was in Hawaii over Easter and was amazed at the number of people involved in running. I thought the weather was just too hot to attract so many people. There are literally thousands of people running regularly.

One thing they have started is the "Marathon Clinic." Each Sunday morning, a group of people gets together and runs a portion of a marathon, all having the goal of someday running a full marathon. More than 1000 runners have participated on a Sunday.

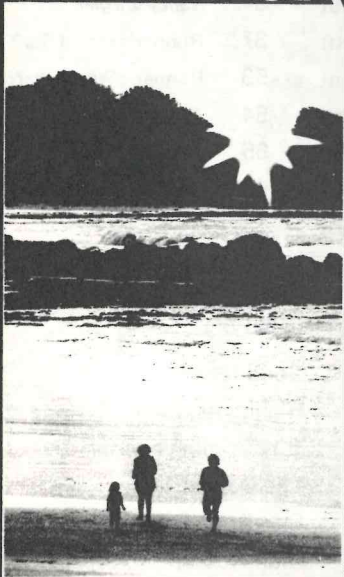
All the people I met there were so nice that I hope I will be seeing them all again. I urge them not to hesitate to drop in and see us when they are in the area. This goes for any of our subscribers anywhere.

Changing topics . . . I have gotten a few letters expressing dissatisfaction in our service. About 95% of all orders and subscriptions are taken care of free of problems. But we want to work harder on the other 5%. Do keep a couple of things in mind. An order will take 2-4 weeks to reach you, and a subscription will take 4-8 weeks to get started. A renewal will take four weeks. If any of these things are taking longer, I want to know about it.

World Publications is indeed growing, but we never want to get so big that we forget the people who got us there. Each of you is very important to us and you always will be.

Bob Anderson

The LONG RUN SOLUTION



by JOE HENDERSON

New From Joe Henderson

The physical benefits of running are well-known, but the often forgotten mental rewards can be much more startling. The potential of running as a tranquilizer, as a way of loosening up the mind and letting creative energy flow, even as a tool in psychotherapy, is just being realized.

It has taken Joe Henderson nearly 20 years of consistent running to isolate the specific mental benefits he has gained from the effort. In his new book, *The Long Run Solution*, Joe X-rays his running experiences to reveal depths never before explored.

He draws from the advice of several doctors in many different specialties, as well as from his own experiences, to formulate a new program maximizing the psychological benefits of running. A program designed to clear clogged-up thinking; brain washing in a positive sense.

The Long Run Solution is the ideal physical/mental prescription. Put it to work for you. If you can't find *The Long Run Solution* at your local bookstore, just use this coupon to purchase your copy. Or call 965-3240 to charge it to your BankAmericard or Master Charge.

The Long Run Solution, 182 pages, illustrated, \$5.95/HB. \$3.95/Ppb.

About the Author

Joe Henderson loves running and he loves writing about it—he's been doing both for years. He worked on the staff of *Track and Field News* and has served as editor of *Runner's World* magazine for the last five years, writing hundreds of running articles. *The Long Run Solution* is his eighth book. Others include such running classics as *Run Gently*, *Run Long* and *Long Slow Distance—The Humane Way to Train*.

The Long Run Solution can solve a lot of the problems plaguing you. Drop this coupon in the mail today and your copy of *The Long Run Solution* will be rushed back to you.

Please send _____copy(ies) of *The Long Run Solution*.

() Hardback, \$5.95 () Paperback, \$3.95

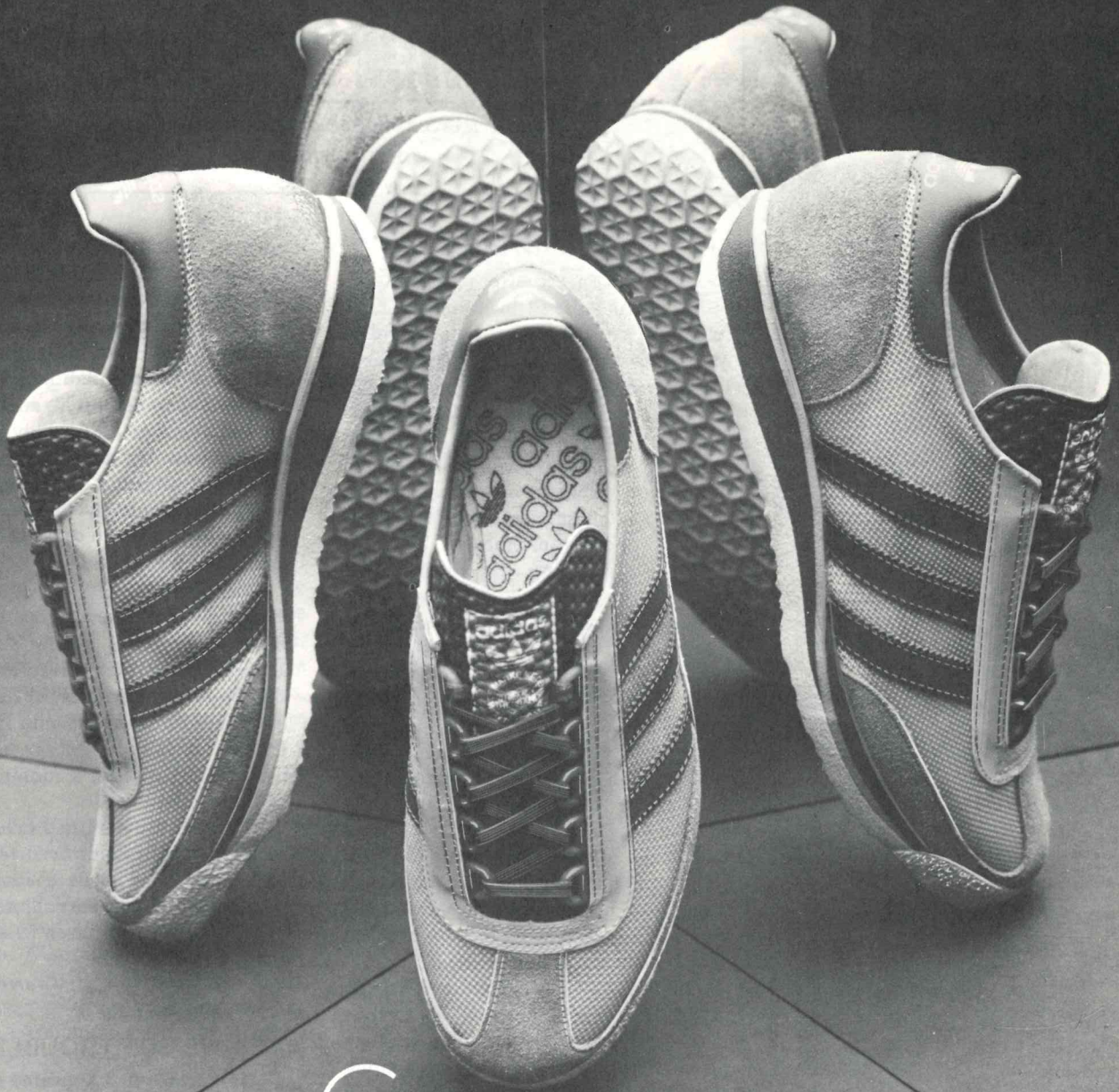
Enclosed is 40 cents postage and 6% tax (CA residents only).

Name _____

Address _____

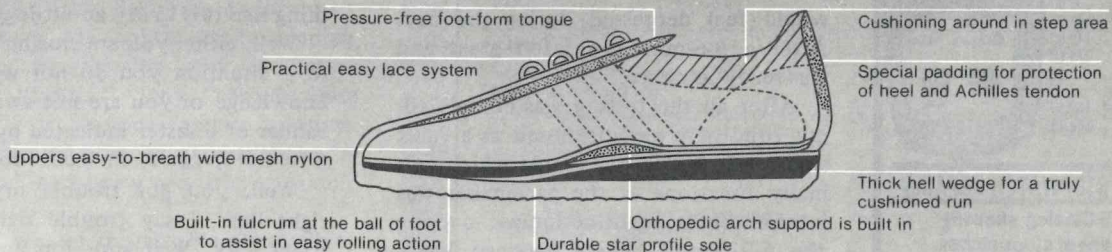
City/State/Zip _____

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



Great
from every
angle!

adidas offers the widest variety of training shoes to meet your specific needs. Comfort, lightness, styling, fit, performance and protection are built into every pair of adidas training shoes. Runner Special training shoe for longdistance runners.



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

Closco, Inc.
2200 Martin Avenue
P.O. Box 299
Santa Clara, Ca. 95050
(408) 246-8350

adidas® 

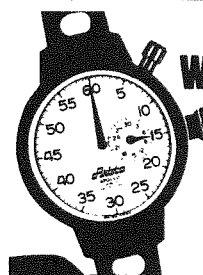
More information available at your nearby adidas dealer or write to:

Vanco
5133 W. Grand River Ave.
P.O. Box 870
Lansing, Michigan 48901
(517) 485-1726

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

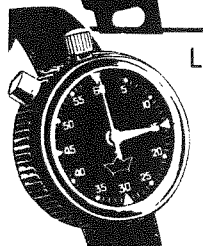
adidas (Canada) Ltd.
550 Oakdale Road
Downsview,
Ontario M3N 1W6
(416) 742-3872-6

**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.

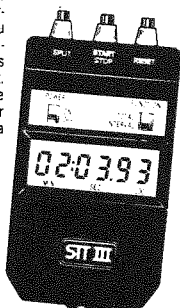
\$68.00
IN CALIF.
ADD TAX

IT'S THE LATEST!



STT III This pocket size timer has two modes. Total (cumulative) split or interval (Taylor) split. In the total mode you can time as many total splits as desired. You can also get finishing times of two contestants in the same event. When used as a split timer you are able to time interval splits (lap times or relay splits) without losing 1/100 of a second.

- Liquid quartz display
- Battery life of over 1500 hours — 1½ years normal use
- Large ½" high digits that can be read in direct sunlight!
- Solid-state electronics — no internal moving parts
- Accuracy of 99.999% — better than 4/100 of a second per hour
- Timing range of 59:59.99 minutes and restarts at zero
- Protective vinyl carrying case for the STT II & III available for \$10.00



\$99.50

Cronus 3 \$59.95

The CRONUS 3 comes in two models, each with a dual function capability (CRONUS 3S - Split) or (CRONUS 3T - Taylor Sequential). Times to 59:59.99 with super accuracy. Weighs only 5 ounces; runs 17 hours continuously, or more in intermittent operation, on 3 disposable penlite batteries. Complete with lanyard, batteries and instruction manual.

- CRONUS 1 (Rechargeable) \$185.00
- (With Base) 225.00
- CRONUS 2 125.00
- HEUER HL-420 109.90
- HEUER HL-430 79.95
- ACCUSPLIT III 149.50
- QUARTZ TIMING BOARD 175.00
- SILICONIX ET 100/ET 102 79.95
- SILICONIX 105 49.95
- SILICONIX 110 (Rechargeable) 169.50
- STT II 149.95



WE SPECIALIZE IN STOPWATCH REPAIRS

Write for **FREE Catalog** showing our complete line of stopwatches.

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.

SETTING A HEART PACE

It started on the afternoon of Sept. 19, 1974. As I was sitting in my office, I felt tired as usual and rested my head in my hands on top of the desk. I got up to get a drink of water, became dizzy and staggered. My secretary and another employee helped me to a chair. My secretary later drove me home, and I immediately went to bed. I had not run this day. I fell sound asleep for several hours, awoke and felt normal.

The next day, my wife convinced me to go to our family doctor. He always has been puzzled and skeptical of my pulse rate of 40 at rest. I am 48 years old and had never had an electrocardiogram (EKG). The EKG showed something unusual was taking place. About every third beat, a certain little mark would not show. Our doctor suggested we have a cardiologist read the EKG since it was not normal.

I began my distance running in high school and had continued for more than 35 years. I competed regularly until about 12 years ago, and have raced sporadically since then.

On Sept. 21 I was admitted to the cardiac ward at a hospital for evaluation. I spent 10 days there going through several tests. One was carrying a monitor for 24 hours and being allowed to leave the hospital to run. My cardiologist was not overlooking a thing after hearing about my history of running.

While the testing was in progress, my EKG showed a slow pulse of 30 at night while sleeping, with pauses of 6-9 seconds between beats. The day I went out to run, I ran for nine minutes with my pulse reaching a high of 144. I felt great. I told the cardiologist how I would feel depressed during the day. After a 3-6-mile run I felt great and was ready to dance.

After all the testing was completed, my condition was diagnosed as a "sick sinus node." The sinus node which normally functions as the pacemaker was intermittently malfunctioning, causing the 6-9-second pauses between beats.

After a number of visits with my cardiologist, it was recommended I have an implant pacemaker. The implant pace is set at 60 beats per minute. In the

discussion leading up to my acceptance of the implant, I was told I would be able to continue everything I had previously done with the restriction of contact sports.

If I hadn't accepted the pacemaker, I could have experienced another dizzy spell at any time or possibly never have another one. My main concern was the possibility of being on a long trip and being so completely relaxed that my pulse would drop to cause this blackout on the highway.

With my implant set at 60, which means my pulse never goes below that figure, I feel like a new person. The artificial pacemaker serves to stimulate the heart during times when the sinus node fails to fire at the appropriate rate. I have much more energy all day and have gotten back on a running program of three miles daily.

I wish at age 40 I had taken an EKG so when this incident occurred the doctors could have made a comparison. I recommend if you are running at an age of 40 or over and haven't had an EKG that you do so.

Warren Leddick

YES, WE GOT TROUBLE

This article first appeared in the Dolphin-South End Club newsletter.

Many so-called authorities would have us believe that running is bad for us. *Playboy*, for instance, published an article entitled "Jogging Can Kill You." At the very least running is un-American and anti-social, not like healthy pursuits such as golf, bowling or watching Monday night football. Professor Harold Hill, the Music Man, might have something like this to say about jogging:

Well, either you are closing your eyes to a situation you do not wish to acknowledge or you are not aware of the caliber of disaster indicated by the presence of *joggers* in your community.

Well, you got trouble my friends, right here, I say trouble right here in River City. Well sure I'm an exerciser and mighty proud, always mighty proud to say it. I consider the hours I spent with a bowling ball in my hand to be golden. They helped me cultivate

horse sense, a cool head and a keen eye.

Did you ever try to make a 7-10 split in the last frame when the Bud was on the line?

But just as I say that it takes judgment, brains and maturity to score in the 10-pin game, any fool can run five miles in a pair of foreign rubber shoes.

I call it un-American, the first big step on the road to the depths of degradation. I say first Gatorade from the grocer and then Body Punch by mail. And the next thing you know your son is runnin' on Sunday in a little short suit, and listening to some big out-of-town jasper here to tell about a Boston marathon. Not a wholesome sack race, mind you, but a race where they run half-clothed right out in the street. Like to see some stuck-up marathoner out on Main Street? Make your blood boil, well I should say.

Well friends, let me tell you what I mean. All day long your youth will be fritterin' away, I say your young people will be fritterin'. Fritterin' noontime, supptime, choretime, too. Just jog five miles, never mind about doing any grass, filling up with gas or going to the store till you're caught without booze on a Saturday night. You got lots and lots of trouble.

Now I know all you folks are the right kind of people. I'm going to be perfectly frank. Would you like to know what kind of things go on while they're loafing around those races? They'll be trying out Nikes, trying out Adidas, trying out LSD like running fiends, and bragging all about how they're going to cover up a telltale shin splint with Spencos. Friends, the runner's brain is the devil's playground. We got to figure out a way to keep the young ones from running after school.

Folks, heed that warning before it's too late. Watch for the telltale signs of corruption. The minute your son leaves the house, does he jog at a slow pace and break into a run when he thinks you can't see? Is there a Vaseline stain on his tennies—or a *Runner's World* hidden in his van? Is he starting to spout philosophy from Sheehan, Anderson or Henderson? Are certain words creeping into his conversation such as "intervals," "fartlek" and "carbohydrate loading"? Is he gone for two or three hours, coming home muttering about "a long one" and being too tired to watch Kojak?

Well, we got trouble. We got terrible, terrible trouble. That sport with the chalk lines on the road is the devil's tool.

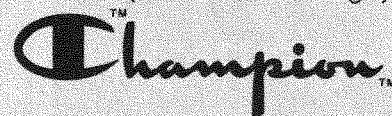
Tim Smith

(continued on page 8)

METER RUNNING?



Slide the scale on your Champion Trackometer and take your metric distance from easy-read calibrations. Or learn what your time would be for metric-counterpart events... how fast could you run 100 meters if you run 100 yards in 10.0 seconds? Fatigue factors are built-in from accuracy based on thousands of runs. Convert inches, feet, yards and miles to meters fast and accurately with these Champion Trackometers. Feet to meters, Field events (Discus, Shot Put, Pole Vault, etc.) Yards to meters, Sprinting (the 100 yard dash to the 440.) Miles to meters, Distance run (880 to the 6 mile range.)



Please send me the Champion Trackometers I've specified.

____ Field events ____ Sprinting ____ Distance run ____ Number of sets

Enclosed is my check or money order in full made out to: Champion Products Inc.

Name _____

Address _____ City _____

State _____ Zip _____

1 to 11, assorted, \$2.95 each, plus 25¢ per order for postage and handling.

1, 2 or 3 sets of 3 (one of each), \$6.95 per set, plus 25¢ per order for postage and handling.

New York State residents add 4% sales tax and appropriate local tax. Allow 4 weeks for delivery.

For 1 to 11 assorted orders and set orders, mail to: Champion Products Inc., Dept. PAT.

P.O. Box 850, Rochester, New York 14603.

12 to 35 assorted, \$2.25 each
36 or more, assorted, \$2.10 each
(We pay postage on pre-paid quantity orders)

New York State residents add 4% sales tax and appropriate local tax. Allow 4 weeks for delivery. For assorted orders of 12 or more, mail to: Champion Products Inc., Order Entry Dept., P.O. Box 87, Perry, N.Y. 14530.

RW-J-76

Write us for large quantity discount quotes for fund raising and Booster Clubs.

DEALERS: We need you. And we'll back you up with plenty of point-of-purchase material.

COMPUTERIZED TRAINING SCHEDULES

Daily Training Schedules Developed by Experts Personalized for *You* by Computer Analysis. Workouts Geared to *Your* Ability. All Running and Hurdling Events Available — Novice thru Championship Levels—Sprints thru Marathon. Feedback and Evaluation with Updated Schedules Every 4 Weeks.

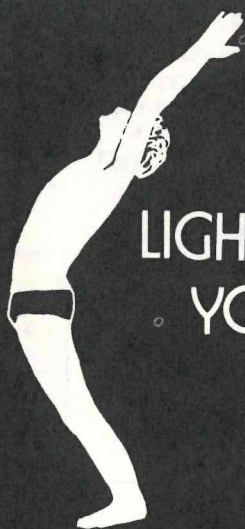
COACHES! Team Training Programs Available. Save Time and Work! Over 3000 Workout Schedules Stored on Our Computer.

Cost: About 15¢ a Day per Event.

Write for More Information:

Athletic Training Systems
P.O. Box 1381
Torrance, Calif. 90505

YOGA FROM THE MASTER



LIGHT ON YOGA

B.K.S. Iyengar—the world's foremost yoga practitioner and instructor—presents a 300 week course leading the student to the highest levels of yogic ability. A "must" book for anyone seriously interested in yoga! \$4.95 for 398 well-illustrated pages.

World Publications, P.O. Box 366
Mountain View, California 94040

First Annual CAP

Southern Illinois MARATHON

—Also 10,000 meter race—
7 a.m., Sat., Sept. 4, 1976
Flora, Ill.

Sponsored by the
Clay County Advocate-Press

Scenic, Rural, Sanctioned
Race

Aid Stations Every 2½ Miles

T-Shirts to all who register

Awards: Men, Women, Juniors,

Veteran

Entry Fee: \$3.00

Located in small town in south central Illinois, 100 miles east of St. Louis, Mo., and 100 miles southwest of Terre Haute, Ind.

For Entry Form and Additional Information Write: Clay County Advocate-Press, Box 160, Flora, Ill. 62839

THINK 42,195

When the US finally makes the switch to the metric system, we runners already will be one step ahead of our non-running fellow citizens. We have been exposed to metric measurements, and we have a good idea of how far 1500 meters is, or 10,000 meters, or even 42,195 meters (better known as the marathon).

The AAU no longer sponsors championship races over English distances, and this is good. But we have to go further. Most of the races run in this country are still measured in miles, though we are seeing more and more events held at 15 kilometers, 25 kilometers and so forth.

When race committees get together to decide on their upcoming events, they should make every effort to schedule races at traditional metric distances instead of traditional English distances. Since this is a change that can't be expected to occur overnight, each runner should make an individual effort to think metric.

One of my New Year's resolutions for 1976 was to record my weekly distance in kilometers instead of miles. To my delight, I discovered how easy it was to hit 100 every week—a mere 62 miles would do the trick.

I also began thinking in terms of my pace as so many minutes per kilometer instead of so many minutes per mile. It's confusing at first, but it doesn't take long getting used to it. Besides you are immediately confronted with a whole new set of goals, like breaking four minutes per kilometer for 25 kilometers or running 200 kilometers per week.

Metric experience also will help US runners internationally. Using the old system, we create a situation where a runner runs the mile throughout his high school and college career, yet when he runs internationally he competes over 1500 meters. The two races are not the same and this puts the American at an obvious disadvantage.

The sooner we go completely metric, the sooner we will join the rest of the running world in speaking the same language of measurement and pace.

Ron Somers

A RELAY GOOD IDEA

"Serpendipity" is a term used to describe accidental discoveries, and certainly the Sioux Valley Track Club's discovery of a new and exciting form of road relay was "serpenderitous."

A steaming summer day of 95

SAVE!

BUY FACTORY-DIRECT.....
from world's leading manufacturer

All Sport and Event Figures Available



Assembled—ready to present

Wholesale low, low prices

Artistic color combinations

Rush "PDQ" service

Distinctive designs

Satisfaction guaranteed

Highest Quality Sculptured and
Enamelled Medals for All Events

Beautiful Award Charms

Write for free catalog

Trophyland USA Inc.

DEPT. RW, 7001 W. 20 AVE., P.O. BOX 4606, HIALEAH, FLA. 33014
PHONE (305) 823-4830

degrees had held down the number of team entrants in a scheduled three-man, 15-kilometer road relay. To maintain a competitive atmosphere, we decided to go with two-man teams but still run three relay legs of a five-kilometer lap each.

Each team could choose which runner would run two legs but was not required to run the legs in any particular order. The stronger member of one team might choose to run his 10-kilometer consecutively while another team's strong man might sandwich two five-kilometer legs around his teammate. Even if two strong men ran their 10-kilometers together, one team might lead off with the weaker runner while the other team might run the weaker man on the anchor leg.

As an example, in a two-team (A and B) race, the stronger men on each team are Al and Bill. The weaker men are Arnie and Bruce.

If Team A elects to alternate the legs while B plans to run Bill, its strong man, in a leadoff 10-kilometer, should Bill try to go out with Al the first five kilometers or should he hope to make up lost ground on Arnie on the second lap? Will the effect of one previous lap reduce Al to the performance level of a fresh Bruce on the anchor lap? Can Al risk blasting the pace on his first lap if he has to return in 16 minutes to anchor against the fresh Bruce?

The possibilities are infinite, especially as more teams are added. The intrigue is enhanced if no team is required to commit its order prior to the starting gun. But from an administrative standpoint, the teams should be required to show their hand before the start.

This unique approach to road relays can readily be adapted to track events. The distance medley and two- or four-mile relays are especially good opportunities to give athletes a test of their conditioning and mental discipline under a competitive situation. The runner's tactical sense should also reap benefits from the manner in which he approaches dispersal of effort for his double leg.

John Samore

LAWS OF RUNNING

Contrary to scientific theory, there is a higher intelligence in the universe. Unfortunately, this intelligent force, which we will call here the Great Mentor, only controls the destinies of a select few. These chosen people, known
(continued on page 10)

We have the new adidas Runner

The perfect shoe for the long distance runner. An ideal shoe for the athlete training for the Olympics or the around-the-block jogger. Everybody is going to want a pair and the all-new Adidas Runner is pretty hard to find. But, we have them in stock.

Beautiful, gold easy-breathing mesh nylon uppers, with velour reinforcements at the crucial stress points, provide plenty of foot protection and they look stylish too. The blue Adidas stripes guarantee Adidas quality is built into every shoe.

The Runner's light weight enhances its performance as a training shoe. The built-in wedge and durable star profile sole makes the shoe long lasting, giving you lots of good, hard mileage. The easy lace system, similar to that of the SL 76, makes the Runner practical while you're out on the road.

The Runner is the perfect shoe for you, but its the perfect shoe for everyone else too, so order a pair today, while we have your size in stock. Only \$34.95. Available in sizes 7-12.



Order Form

Please send me ___ pair(s) of Adidas Runners, size ___. I have enclosed \$34.95, plus \$2.00 postage and 6% tax (Calif. residents only), per pair.

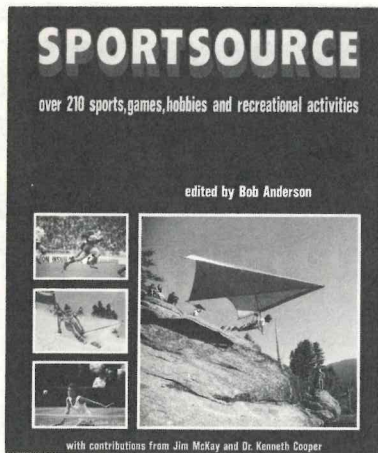
Enclose a foot tracing to insure a proper fit.

Name _____

Address _____

City/State/Zip _____

Starting Line Sports, Box 8, Mountain View, CA 94040



SportSource

Sport information at your fingertips. Not a catalog or directory, **SportSource** is an information-packed volume that will help you discover many fascinating new worlds of sport.

More than 210 sports are introduced with basic information, followed by an essay by a prominent participant in the sport. For instance, Galen Rowell, a well-known mountaineer, wrote the excellent essays on mountain and rock climbing.

"For More Information," at the end of each sport's section, provides all the book, periodical and equipment source information you will need to learn more about the sport.

The **SportSource** is beautifully illustrated with graphic drawings depicting each sport. It is a single oversize hardback volume, with 430 pages and 200 photographs, selling for \$9.95.

order form

Please send me ___ copy(ies) of **SportSource**. Enclosed is \$9.95, plus 50 cents postage. California residents add 6% tax.

Name _____

Address _____

City _____

State/Zip _____

World Publications
Box 366, Mountain View, CA 94040

collectively as the Inter-Galactic AC, are composed entirely of distance runners.

The Great Mentor regulates his people by a delicate system of checks and balances, disguised as freaks of nature and embarrassing coincidences. Although we, the Inter-Galactic AC, may not understand the Great Mentor's mysterious ways, we nevertheless realize all is for our own good.

We therefore record certain consistencies in the apparent chaos of our existence and take pleasure in the possibility that there is order. These few consistencies are known simply as "The Laws of Running."

1. Runners have certain natural enemies which act as checks, or predators, against the Inter-Galactic AC overpopulating the earth. These enemies are snowmobiles, automobiles driven by old ladies, suburban commuters and teenage hot-rodgers, dogs, children who yell "hup, two, three four!" and the AAU.

2. When, during a workout, a runner is forced to carry out a bodily function, it is at this time that he (or she) is apt to meet a bird watcher, a horseback rider or a peeping Tom.

3. No runner can escape the Law of Double Passing Whiffle Blat (that two cars passing each other from opposite directions on a narrow, lonely road will always intersect at a runner, resulting in angry screams, blowing horns and obscene gestures).

4. No runner can defy the Law of Gravity (that uphill are, invariably, at least four times as long as downhill).

5. A man named Albert Einstein discovered a natural law known as the Law of Relativity (that time during a workout passes twice as slowly as time during any other activity).

6. Shoestrings never come untied when a runner is tired and could use a breather. Instead, shoestrings only come loose during fast runs (usually races), or when a runner is sprinting through a narrow tunnel or over a railroad trestle while a train is bearing down on him (or her).

Several Laws of Running depend on natural phenomena.

1. Runners are accompanied by what is known as "the wayward wind," which is a wind that can blow from any direction at any time. This permits a runner to run against the wind at *all* times.

2. Hurricanes are severe storms designed to disrupt cross-country meets. These storms prevent young runners from being exposed to excessive high-powered competition.

3. Rain is a phenomenon that happens only while a runner is working

out. If not for runners, there would be no rain with which to grow our crops.

Several Laws of Running depend on supernatural phenomena.

1. High beams on cars were created by the Great Mentor in order to blind runners. In this way, runners are taught to have blind faith in the system that is torturing them and to have blinding speed while diving into snow banks to avoid cars that use high beams.

2. A pulled muscle is the Great Mentor's way of baptizing a sprinter into the Inter-Galactic AC. This supernatural phenomenon slows a sprinter down, thereby mystically transforming him (or her) into a distance runner.

3. Potholes are the Great Mentor's ways of telling a runner, "Don't run at night, dummy!"

4. Pain is the supernatural phenomenon which convinces runners to slow down and enjoy the beautiful scenery of the earth.

Several Laws of Running have been passed down to us by way of a written tradition known only as the Bible of the Sport.

1. After the serpent tempted Eve in the Garden of Eden (now called Eugene) and succeeded in convincing her to stop working out, the serpent was dispatched by the Great Mentor for all eternity to slither on the ground beside wooded paths and to frighten runners.

2. The Bear is another word for original sin. When the original runner fell in the Garden of Eden (Eugene), the Great Mentor placed a curse on him (or her) for all time. During the final 100 yards of any race, the Bear would leap out of the stands and jump on the runner's back.

3. The Tower of Babel was a tower which the Inter-Galactic AC built in an effort to reach heaven so that they could run a marathon there. The Great Mentor was so angered by this tower that he cursed runners forever with the language of Babel, which is baffling language composed entirely of running shoe vocabulary, including words like "heel cup," "waffle," "cushioned arch" and "immortal soles."

Charles Koltz

CONTRIBUTORS

Material of interest to our readers is always welcome. However, to avoid duplication of materials, we ask that potential contributors check with the editors before submitting material and check our writer's guidelines for answers to other questions. Write to *RW*, Box 366, Mountain View, Calif. ●

Everything you need to know about running shoes.

How Lydiards are different from ordinary running shoes.

The Lydiard sole has a single seam running down the center of the insole which molds the built-in cupped heel and arch support into the shoe. It cradles your heel and supports your arch, unlike other running shoes. The Lydiard toe is not pointed like the toes of ordinary running shoes. It is broad and rounded like feet so your toes have room to wiggle and air can circulate to keep your feet cool.

Built-in Heel Cup

helps position your foot in the shoe. Four layers of rubber under the heel distribute the road shock.



The difference in Lydiard

is due, in large part, to the men pictured here. Authur Lydiard and Eugen Brutting are craftsmen from the old school. Today Eugen Brutting runs the factory in West Germany where every

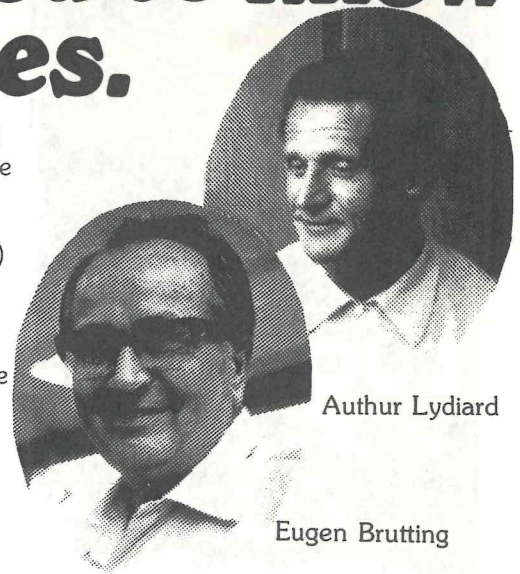
pair of Lydiards is made. So, in Lydiard you have more than a shoe made for the way you were born to run. You also have a beautifully made pair of shoes, visibly nicer (and a little more expensive) than the rest.

Why Lydiards cost more.

Even Brutting can't make a beautiful shoe from inferior stuff. So, Lydiards are made of the best of everything in the best way the old school knows how to make them. The soles are made of special rubber for the right combination of flex and durability. The "uppers" are made from the best top-grain suede. This suede is drum-dyed, a costly process which permeates the hide with rich, material color and doesn't clog the pores that let suede breathe. From first to last, Lydiards are made the best possible way.

The trouble with Lydiards.

The trouble is they are so terribly hard to find. Believe it or not, people worry



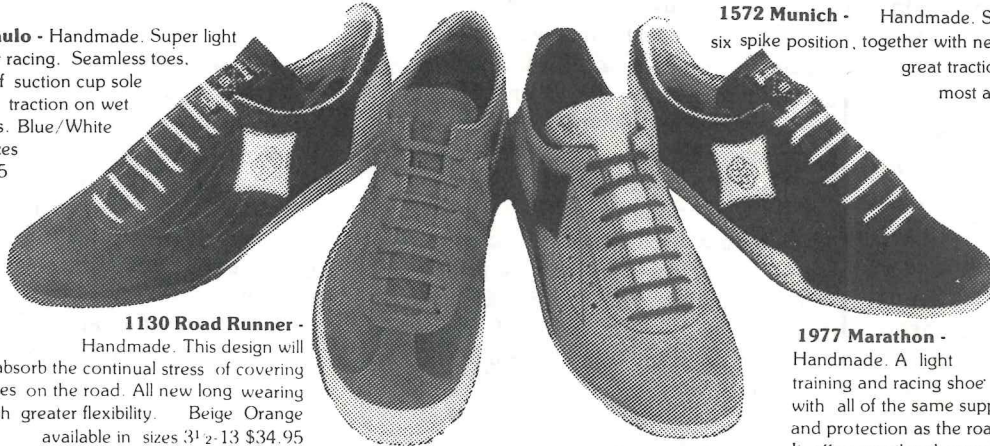
Authur Lydiard

Eugen Brutting

about that. Some people just like to worry. But there simply isn't anything to worry about. Just ask your local sporting goods store or write to us.



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 3 1/2-13 \$38.95 postpaid



1572 Munich - Handmade. 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 3 1/2-13 \$43.95 postpaid

1130 Road Runner - 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 3 1/2-13 \$34.95 postpaid

1977 Marathon - Handmade. A light training and racing 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 3 1/2-13 34.95 postpaid

Now Available at these fine stores in the East:

Athlete's Foot of Kings Plaza, 5322 Kings Plaza, Brooklyn, NY 11234. Telephone: (212) 253- 7555

Athlete's Foot, 151 Woodbridge Center Dr., Woodbridge, NJ 07095 Telephone: (201) 636- 2024

Long Island Track Equipment Inc., 1935 Wantagh Ave., Wantagh NY 11793. Telephone: (516) 781- 0203

The Athlete's Foot of Sunrise, Inc. 305 Sunrise Mall Massapequa, Long Island NY 11758. Telephone: (516) 795- 2030

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.

Name _____
Address _____
City _____
State, Zip _____

Master Charge: Acct. No. _____ Exp. Date _____
 BankAmericard: Acct. No. _____ Exp. Date _____

pairs	model	size	unit price	total price
Calif. residents add 6% sales tax				
TOTAL ENCLOSED				

While in Eugene...

Trying to pick a winner at the Olympic trials? There's one sure-fire bet for a first place finish—Joe Henderson's new book, *The Long Run Solution*. It's going to be the hit of the trials.

Pick up a copy while you're there at two different locations; The University of Oregon Bookstore, Inc., and Sugar Pine Ridge. Both stores carry a variety of other running books, including *Dr. Sheehan on Running*, *Always Young* and *The Van Aaken Method*, published by the running experts at World Publications.

Make your plans to drop by and meet Joe Henderson, editor of *Runner's World* and author of *The Long Run Solution*, Saturday, June 26, at Sugar Pine Ridge. He will be there between 11:00 a.m. and 1:00 p.m. to answer your questions and autograph copies of *The Long Run Solution*.

The University of Oregon
Bookstore, Inc.
895 E. 13th Ave.
Hours: 8:15-5:00,
Monday—Friday

Sugar Pine Ridge
877 E. 13th Ave.
Hours: 9:00-6:00,
Monday—Friday
9:00-5:00, Saturday

Running Commentary

by Joe Henderson

It is moving time, a time for deciding what to throw away at the old house and take to the new one.

To keep from being choked by papers in a garage which serves as an office-library, I'm getting rid of any old magazines at which I haven't looked since the last move.

This represents a symbolic break with my past, a break which I can't make easily and without a eulogy. It means throwing out my back issues of *Long-Distance Log*, the magazine which had a great deal to do with my becoming a long-distance runner.

The pages are yellow, but I seem to remember they looked aged when the magazines first came in the mail five and 10 and 15 years ago. There are holes in the issues. I've forgotten which articles were important enough then to be put someplace else for safe-keeping. They have long since disappeared.

The *Log* came in a variety of formats over the years. It began in 1956, I'm told, as loose-leaf, mimeographed sheets printed on the backs of old test papers. For a long time, it was on book-sized pages, and in its later years it was standard magazine size.

Never was much attention given to the conventions of editing. The editor sometimes used the same cover twice. The magazine came out by no detectable schedule. It occasionally was a month early, but more often was a month or more behind the date shown on the cover.

The copy inside was a pasted up mish-mash from various typewriters and from newspaper articles which were reproduced directly, usually without permission from the original source and without credit to it.

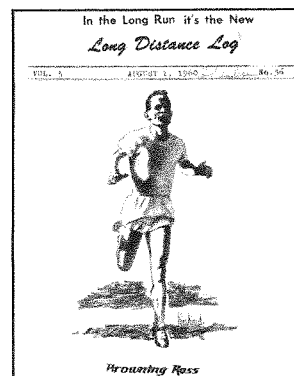
All of this type was reduced to microscopic size and seldom was relieved by a photo or headline. Enough material was jammed into a 28-page issue to fill a normal magazine four times that long.

The *Log* wasn't professional, and we didn't expect it to be. It was a magazine "for runners, by runners" a decade before *Runner's World* thought of using that concept. Part of the *Log's* beauty was its informality—which accurately reflected the state of the sport in the 1950s and '60s.

The *Long-Distance Log* isn't published any more. It died about a year

ago of age and neglect. Faced with competition from heavily promoted national magazines on the one hand and local publications on the other, the *Log* faded out after nearly 20 years of ground-breaking work which is too little appreciated.

It's ironic that the magazine which did so much to putting running where it is now in the United States is unknown to most of the people now in the sport.



This is because running is a "now" sport. A runner is only as good as his latest effort, a magazine only as good as its latest issue. We have little sense of history, of what and who came before to let us be what we are now.

For most of us, running history began when we began running. Since most current runners began around the turn of the decade, the late 1960s and early '70s, they perhaps date their history to their reading of Kenneth Cooper's *Aerobics*. Anything before that is B.C. (before Cooper), a murky and unrecorded pre-history so primitive it isn't worth thinking about.

My own history as a runner goes somewhat further into the past, so I date mine not by Cooper but by a man named Browning Ross. If you haven't heard of him, it isn't surprising. Few runners from the 1970s generation know who Ross is.

Yet to my thinking he is more responsible for the current health of competitive long-distance running than anyone else I could name. The list of his contributions is long.

He raced in the 1948 Olympics as a steeplechaser, won the 1951 Pan-American Games 1500 and qualified again for the Olympics the next year.

Instead of going the way of most

top runners of his day—out of the sport forever—Browning stayed active both as a runner and a promoter. He began organizing races in the Philadelphia area. And in 1957, he imported the Road Runners Club concept from England. (The RRC now is on the verge of becoming the dominant running organization in the US.)

In 1969, the AAU in Ross' area thanked him for his good work by declaring him a professional because he sold running shoes. He estimated at the time that he had spent \$30,000 of his own money to support the sport.

The ban later was lifted and Ross wasn't bitter. He agreed to serve as chairman of the National AAU long-distance running committee. This was more volunteer work piled onto what he still was doing with race directing, the RRC and, most importantly, editing and publishing *Long-Distance Log*.

Browning never made any money from the *Log*. It wasn't his job, the way *RW* is mine. Yet he put it out once a month for nearly 20 years.

Running on the roads was a neglected activity during most of those years, occurring only in isolated places around the country. Ross and his *Log* were their only link.

I lived in a place where the half-mile was thought of as a long distance and where road racing was unheard of. The *Log* was my monthly window to a world I couldn't have known otherwise.

The names Kelley and Costes and McKenzie and Green (if you remember them, you're due for your 50,000-mile checkup) were as magic to me as those of Musial, Mantle and Mays were to a young baseball fanatic.

You could read about the baseball players anywhere. But there was only one source for distance running news, Browning Ross' magazine.

One summer when I was about 20, I made a pilgrimage to Woodbury, N.J., just to meet the man. He took me in and offered me a job at his summer camp.

I think back on that now and wonder if I would do the same for a starry-eyed boy from the Midwest, or if I would do the same work Ross did for no pay. I probably wouldn't, nor would many others—not to the same extent, anyway.

Lots of people now do the work that he did by himself. And we don't hear much about Ross, a 52-year-old sports shop operator whose main running activity is Fun-Runs each weekend. But he has left a legacy which has outlived his old magazines. ●

adidas

SL76 Training Shoe

Sizes: 4-13

Colors: Yellow with blue stripe

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: Red with white stripe \$23.95

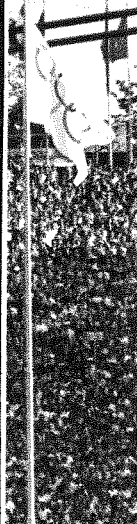
All orders received with certified cheque or money order shipped same day. Please enclose \$1.50 per order to cover postage + handling.

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.

Revisit Tokyo '64



The book, *Tokyo 1964, A Diary of the 18th Olympiad*, is a fascinating summary of the Tokyo Olympics—the Olympics of Billy Mills, Peter Snell and more outstanding athletes. Compiled immediately after the Olympics, the author provides a day by day description of events with an intimate insight into each athlete's world. Imported from England, this book is in limited supply. Order yours today. 1965 Hb., 124 pp., ill., \$5.95.

Order Form

Please send me _____ copy(ies) of *Tokyo 1964* at \$5.95 each, plus 40 cents postage and 6% tax (CA residents only) per copy.

Name _____

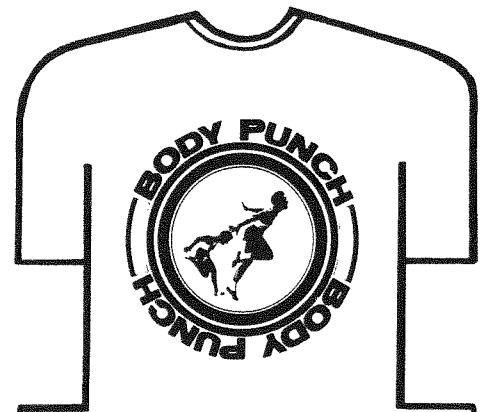
Address _____

City _____

State/Zip _____

Runner's World
Box 366

Mountain View, CA 94040



Put on Body Punch

There are two ways to put on Body Punch—the wrong way and the right way.

First, the wrong way. Drink Body Punch while you're working out. Odds are, you'll spill enough to make it obvious to any impartial observer that you have Body Punch on.

Now, the right way. Buy a brand new, all-cotton t-shirt with the black and flaming-orange Body Punch logo emblazoned on the front. It is a great buy for every fashion-conscious athlete. Only \$3.50, including postage.

Do things the right way from the start. Buy a Body Punch t-shirt and put it on BEFORE you spill Body Punch all over yourself. It's not half as messy.

Rush me _____ fantastic new Body Punch t-shirt(s). I can't wait to put one on. Only \$3.50. California residents add 6% tax.

Sizes: () Small () Medium
() Large () X-Large

Enclosed is \$ _____

Name _____

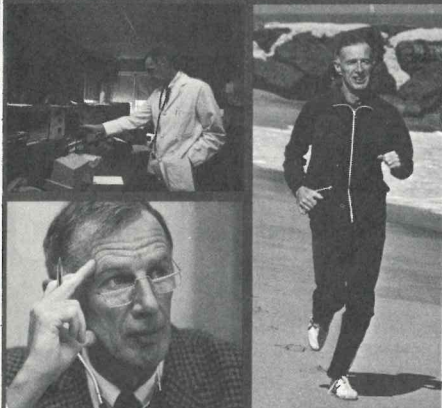
Address _____

City/State/Zip _____

Starting Line Sports
Box 8
Mountain View, CA 94040

Dr. SHEEHAN

on Running



by George A. Sheehan M.D.

Words from the wise.

Have you been considering running as a way to stay in shape for your sport? But, you've been completely turned off by the idea? What you need is inspiration. And that is exactly what you will get from **Dr. Sheehan on Running**. Dr. George Sheehan sifts his running experiences through his practical experience as a runner, doctor and writer, presenting running from a different angle.

Dr. Sheehan on Running will delight you, outrage you, make you laugh, make you cry and will give you plenty to think about.

Use the handy order form below to order Dr. Sheehan's words of wisdom on running, today!

order form

Please send me copy(ies) of *Dr. Sheehan on Running*. I am enclosing
() \$5.95 HB () \$3.50 Ppb
I have also included 40c postage per copy and 6% tax (CA only).

Name _____

Address _____

City _____

State/Zip _____

World Publications

Box 366, Mountain View, CA 94040

Medical Advice

George Sheehan, M.D.

EAT AND RUN

"At this late date in the history of sport," writes Paul Weiss in his *Sport, a Philosophic Inquiry*, "we still do not know much about what an athlete ought to eat before he engages in a grueling contest."

This ignorance, of course, extends further. At this late date in the history of mankind, we still do not know much about what any of us ought to eat before we engage in work or life, much less play. The human intestinal tract, its physiology and its diseases remain a mystery.

Fortunately, the experts are confessing their ignorance and thereby liberating us from relying on their diets and treatments. The cause of duodenal ulcer, states a recent editorial in the *Lancet*, a British medical journal, remains poorly understood and "the logical basis of treatment completely escapes us."

It also escapes the task forces on gastrointestinal research commissioned by the National Institute of Health. The reports of these groups, assigned to various parts of the digestive system, come to one general conclusion. Most of our firmly held ideas about digestion and digestive diseases are either untrue or unproven.

What are we to do while the experts suck their thumbs? The best answer is to go back to the three rules of digestion known since antiquity:

1. *Eat foods that agree with you.*
2. *Avoid foods that disagree with you.*
3. *Don't go to bed mad.*

One thing the investigators are discovering is that the foods we said agreed with us agree with us. And the foods we said disagreed with us disagree with us. Their high-powered, sophisticated technology is confirming what patients have told their doctors over the centuries: certain foods give them heartburn or indigestion or cramps or diarrhea, other foods do not. Now the people in the laboratory are finally finding out why.

Milk is a prime example of food that should be good for us but frequently isn't. Some people are allergic to milk, but many more cannot handle the milk sugar lactose because of an enzyme deficiency. It seems likely now that if you

never liked milk you shouldn't drink it. It may be the perfect food but not for you.

Each of us has a particular food or foods that we know are not for us. Each of us must find out what foods we can handle and what foods we can't. There is no sense appealing to the books or the experts. The body will not listen. Eventually, we will get a scientific explanation for what is happening. For the time being, we must accept the reality.

One such reality is that if we go to bed mad we are likely to wake up with a riled-up stomach. If I go to bed with fire in my eye, I will wake up with fire in my stomach. It is not only food but emotions that act on the intestinal tract.

As an athlete, emotion becomes even more important. Pre-game tension, pre-race apprehension, can stop the stomach from emptying. Food that would ordinarily get in and out in four hours may sit undigested for six or more. Then I add the effect of strenuous exercise which increases spasm and propulsion through the bowel. Emotion and exertion are why the athlete has one additional rule:

4. *Always compete on an empty stomach and an empty colon.*

Otherwise, the athlete and his food are soon parted. He will either throw up or have diarrhea or both.

Follow the rules, however, and you can come up with your own answer to your pre-event meal: liquid or semi-liquid with little fat and not too much protein so that it will be easily digested and quickly out of the stomach, and composed of foods you take every day and know you can handle.

Here as in all things related to health and to functioning at our maximum, we must listen to our bodies. Fortunately, the gastrointestinal tract speaks in a loud, clear and unmistakable voice. When we make a mistake we know it.

Even slow learners get the message if they lose their lunch or have to retire from the fray for a bowel movement.

George Sheehan

MORE ACHILLES

This is part of a continuing discussion concerning that scourge of runners, achilles tendinitis. The writer is the author of *The Van Aaken Method*

(World Publications, 1976). His article here is reprinted from *Spiridon* magazine and translated by George Beinhorn.

The achilles tendon has no blood vessels and is nourished through the tissues which surround it. The typical inflammation of the tendon that strikes beginners who do too much too soon also afflicts high-level performers who do speed work—always a form of destructive testing for the tendons. Un-even running terrain also can contribute to tendinitis. The sole effective method of treatment is to increase circulation to the surrounding tissue.

The runner crippled by tendinitis can follow this daily schedule during the recuperative period:

- After arising in the morning, fill a bathtub with water at 104 degrees Fahrenheit to mid-calf level while standing.

- Walk around in the water, gradually increasing the temperature to 122 degrees. (There should, however, be no blister formation or burning of the skin).

- Add to this bath either a pound of rock salt or about a half-pound of sulphur salts. The bath should not last longer than five minutes. The foot will be red and swollen, better irrigated with blood and oxygen than by any other method.

- Chill the inflamed area of the tendon briefly with a medical cold spray and then jog in place on a carpet about 1000 steps with a low knee-lift, or jog slowly around the room. The foot must not strike the ground in a stamping motion. The touch-down should be feather-light, and very little effort should be applied to lift off.

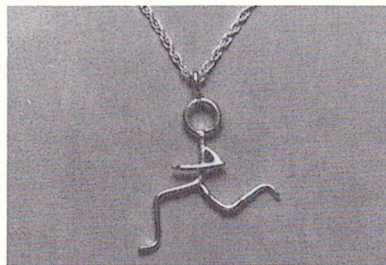
- After this "run," practice riding up on the toes and coming back down on the heels while extending the tendon. Without raising the heels, move the knees forward a little and then slowly return to the extreme extended position. Do this stretching exercise 50 times slowly.

- Finally, smear a layer of athletic liniment on a piece of muslin. Tie this on the damaged tendon. Wrap the foot, heel and achilles tendon fairly tightly with an elastic bandage.

Training is not discontinued but is severely reduced in intensity and distance. Fixed casts are to be rejected since the tendon loses strength and size when confined, and the ankle joint stiffens. Light jogging irrigates the tissue surrounding the tendon (and, therefore, the tendon itself) and continually

(continued on page 16)

"THE ROADRUNNER"
NOW IN YOUR CHOICE OF
14K GOLD OR STERLING SILVER!



Exclusively ours. "The Roadrunner" is a hand-crafted 1-inch stick runner that hangs from an interwoven 18 inch chain. Perfect gift for him or her. Excellent for awards presentations.

14K Gold \$50 • Solid Sterling Silver \$15
Detach and mail with your order.

Please send me:
 14K Gold "THE ROADRUNNER"
 necklaces @ \$50⁰⁰ each.
 Sterling Silver "THE ROADRUNNER"
 necklaces @ \$15⁰⁰ each.
 N.Y. residences add sales tax

NAME _____
 ADDRESS _____
 CITY _____
 STATE _____ ZIP _____

On orders of 10 or more deduct 20%
 Send a check or money order to:

SPORTING LIFE JEWELERS
 175 5TH AVENUE
 NEW YORK, N.Y. 10010

**PROTECT YOUR
FEET**

The feet protectors. Spenco Insoles, the insole with the soothing foam cushion, and Heel Cups, the hard plastic heel protector. Minimize your foot soreness. These long lasting products fit firmly in any shoe to provide you with the comfort and protection you've been looking for. Spenco Insoles, only \$3.95. Heel Cups, only \$1.25 each.

ORDER FORM

Please send me the following:
 Spenco Insoles, \$3.95
 Mens sizes—6-7, 8-9, 10-11, 12-13, 14-15
 Womens sizes—5-6, 7-8, 9-10
 Heel Cups, \$1.25 each
 Add 40c postage and 6% tax (CA res. only) per item.
 Name _____
 Address _____
 City _____
 State/Zip _____

Starting Line Sports, Box 8,
 Mountain View, CA 94040



**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.

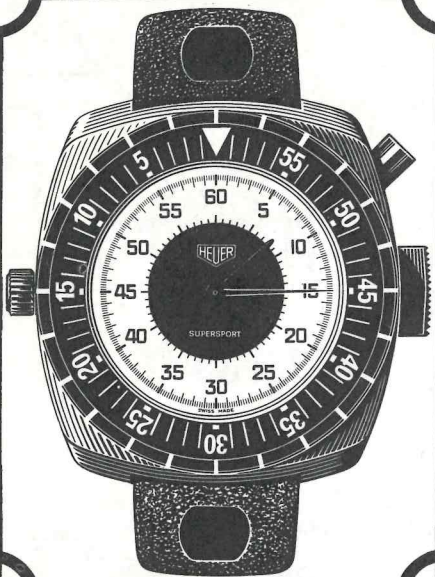
A binder full of Runner's World magazines is an excellent reference for any runner. Turn through the pages year after year and you'll find the articles on training, diet, technique, physiology and psychology never get out of date.

Back issues of Runner's World will prove invaluable to you many times over, as long as you maintain your soccer 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



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 94040

adapts the tendon to extension and flexion.

An afternoon workout might look something like this: On flat terrain, preferably on a track, and obviously wearing shoes with at least a third of an inch of rubber in the soles, jog 300 meters in 2½ minutes and then walk 100 meters, interspersing gymnastic exercises in the form of knee bends, squatting without raising the heels and rising onto the toes.

If possible, repeat the 300-meter jog 10 times with 10 walking breaks of 100 meters. Do this until you feel that you really could run 4000 meters without walking breaks. A hot full-body bath is desirable after the workout, followed by a hip bath at a temperature of about 100 degrees.

The achilles tendon region can be lightly massaged underwater with a brush. But this must not be painful. Before going to bed, cover the foot and the part of the leg below the knee with a thick, wet hand towel. Wrap this in plastic and bind it tightly (but not so tightly as to cut off circulation) with elastic bandages. This will increase metabolic processes in the leg, because of osmotic effects caused by the damp towel.

Active therapy of achilles tendinitis, as described, still is probably the most successful, most rational treatment possible.

Ernst van Aaken, M.D.

JARRING

Q: I have read and heard through various news media reports from notable sources that jogging produces too much of a "bang-bang" effect on the human body for it to be helpful exercise. The latest scuttlebutt suggests jogging speeds up degeneration of the back and that bicycling should be recommended as a much safer form of exercise. Are all runners doomed to extinction? (C.E., Minnesota)

A: That attack, which was provided by Dr. Donald Lannin, a St. Paul, Minn., orthopedic physician, and the statement about injuries to the hips and back from jogging has never been clinically substantiated.

What studies that have been done, in Scandinavia for instance, showed that runners had less arthritis of the hip than non-runners.

My own experience from seven years of writing a medical advice column for runners is that jogging and running do not injure the bones and joints. What it does cause is muscle imbalance. The

prime movers along the back of the leg and inside the spine become over-developed. The stomach muscles become weak. This interaction causes lordosis and can give sciatica and low back pain.

NEGATIVE HEELS

Q: Although I have not suffered from achilles tendinitis, I read with interest your comments suggesting daily stretching both before and after running to help shortened calf muscles. I have noticed progressive shortening of my calf muscles. I tried correcting this problem by wearing negative heel shoes (such as Earth Shoes) and within three weeks noticed a definite (more than a centimeter) lengthening. I suggest that a number of people prone to achilles tendinitis could try these shoes and let you know what results might develop. It may prove to be of great benefit to some persons. (C.H., California)

A: I think you are correct. Earth Shoes (and other negative heel shoes) do tend to lengthen the gastrocs. However, if a runner is already symptomatic with achilles tendinitis, the Earth Shoe will aggravate it, as the next letter indicates.

Arthur Newton, the father of long-distance running, advised taking your shoes off when you get into the house. This will also help.

Q: During the past three months that I have been wearing Earth Shoes, I have been running an average of 70 miles per week. My left heel and ankle cause me trouble when I run immediately after a full day of wearing the negative heels and the bumps on the back of my heels (Hagland's deformity) have enlarged to the size of chestnuts. How serious are the long-range effects of the deformity and what is the contribution of the negative heel to tendinitis in runners? Is it possible for a runner to fully adapt to the negative heel? (M.R., Virginia)

A: Why are you wearing the Earth Shoes anyway?

If they make you feel worse, get out of them. You can worsen tendinitis by wearing them, even though they are effective at stretching the calf muscle at times.

I suggest you use exercises for your muscle imbalance. Go back to regular shoes and use Scholl's "610" arch support to control your heel and foot.

However, attention to the "Magic Six" exercises (shown in the December '75 RW) before and after running will keep the runner in balance and out of trouble. ●

if your feet could talk...

they would ask for Tiger!



training shoes. Your feet like the lightweight, free-breathing nylon on the Pinto Racing Flats, and the heel wedge and terry cloth inner sole of the Nairobi long distance shoe. The Tiger Colosseum spike shoes feature an orthopedically-designed wrap-around sole with cushioning, and the Spartan B offers the most advanced spike plate for today's synthetic tracks. Both of these track and field spikes give your feet the traction and performance they want. You may like Tiger Shoes for their style, colors or long durable life, but your feet have the inside story. So, whatever your sport, Tiger has the shoe your feet should be in.

Because Tiger sport and athletic shoes do a lot more for your feet than you may be aware of. Your feet know your shoes from the inside out, so they can appreciate the comfort and support they get from Tiger's special features, like the super-cushioned mid-sole that absorbs leg shock and eliminates achilles tendon strain, and the molded heel collar of the Montreal and Corsair

Retailers! Ask your distributor for the new Tiger Catalog.

U.S. DISTRIBUTORS

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

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

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

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.



EXCLUSIVE CANADIAN DISTRIBUTOR

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

Canada

This book will
change
your condition



Total fitness is important to you, especially if you are a runner. But, is running enough to keep your entire body physically fit?

Easy-to-learn exercises, exercises you can do anywhere, anytime, can make and keep you fit. Get rid of the flab around your middle, tone up your arms, reduce that double chin. The new book, *Keeping Fit* (part of the Know The Game series), just arrived from England and is full of the right exercises for bettering your physical condition and health.

Keeping Fit is yours for only \$1.95. Forty illustrated pages with detailed explanations of every exercise. Buy your copy now!

Please send me _____ copy(ies) of *Keeping Fit* at \$1.95, plus 40 cents postage per copy. Calif. residents add 6% tax.

Enclosed is \$ _____

Name _____

Address _____

City _____

State/Zip _____

Runner's World, P.O. Box 366
Mountain View, CA 94040

Interview

by Dave Prokop

Dr. Kenneth Cooper

America is a land of latent athletes. Its people know the value of exercise and feel guilty when told how under-exercised they are. Exercise is something they should start doing more of—tomorrow.

So to get ready for a tomorrow which often remains a day away forever, Americans buy books on how to exercise. The drugstore paperback racks are full of them. The names and promises on the jackets change every few months as fads come and go, but the books continue to sell.

A trilogy of books on one theme sells better than all the others combined—and it has sold so well for so long that the system it offers has outlived the “fad” label. It’s perhaps the most widely accepted fitness program of them all. Fittingly, this system based on endurance training has endured.

Dr. Kenneth Cooper, then an Air Force medical officer, published his first book, *Aerobics*, in 1968. It did more than any other to change the exercising (or non-exercising) habits of Americans. Later, he added *New Aerobics* and *Aerobics for Women* to the series.

“Aerobic” means “with oxygen”—in this case, continuous exercise of moderate intensity which injects a steady flow of oxygen into the body.

Dr. Cooper says, “The main objective of the Aerobic exercise program is to increase the maximum amount of oxygen that the body can process within a given time. It is called ‘aerobic capacity.’”

This sounds a bit clinical, but it simply says true fitness begins in the heart and lungs. According to Cooper, “Unless you have good cardiovascular-pulmonary fitness, you’re not fit.”

Cooper explains that the Aerobics program gives three specific guidelines: (1) types of exercise; (2) how to compare exercise; and (3) how much is necessary.

Being a former miler and mara-

thoner, Cooper now runs for fitness and recommends it as one of several aerobic activities. He has retired from the Air Force and spends full time practicing and promoting Aerobics. He manages the Aerobics Center in Dallas, which carries out physical testing, training and research. And he is a spellbinding speaker (he was featured at National Running Week in January) who combines the knowledge of a scientist with the missionary fervor of a Baptist preacher.

This combination has made thousands of people realize they can’t wait another day to start exercising. And out of this new group of exercisers have grown new groups of athletes.

The following interview with Dr. Cooper was conducted in late 1975. A more extensive version appears in the book *SportSource* (World Publications, 1976).

RW: In trying to explain the surge of interest we’ve seen in running, it should be noted that before the jogging movement started the only people who ran were essentially serious competitors. And they were no doubt limited in their ability to influence others to get involved in running simply because they were so serious. But the moment the first jogger came on the scene he was immediately in a different relationship with non-runners because he could talk about running as something he did for fitness or enjoyment or to feel better. That’s when the whole jogging-running movement snowballed.

Cooper: That’s right. Even in the late ’50s, early ’60s—when I was running competitively in high school and college—the runner was a very strange person. You never saw a runner unless it was somebody who was training (for competition).

This concept of the guy going out and running strictly for the health aspect of it didn’t really come around until the late ’60s, probably in conjunc-

tion with two books—*Jogging* by Harris and Bowerman in '67 and then *Aerobics* in '68. I think that's what changed the concept, the concept of running per se, from a strictly competitive, high-energy-expenditure type activity to one the masses of men and women could participate in as a means of improving their health.

Something else that I think you have to consider very strongly is the desire of the people in this country to practice preventive medicine. The annual cost of medical care in the United States has risen from \$50 billion in 1950 to \$115 billion in 1975. Along with it, you look at the statistics and it's quite obvious that we haven't gained that much because our longevity has stayed the same while longevity in other nations of the world has risen.

A statement I use in my presentations frequently is one I borrow from the American Heart Foundation, in which they say that ours is a legacy of a medical system that provides too much care too late. And people are aware of that now, that you can do something to make yourself feel better.

Other statements, I think, have a bearing on this interest that we have in exercise at the present time—statements of Paul Dudley White when he says exercise will help you to add not only years to your life but life to your years. That's one I use frequently. Another statement of his is that it's fascinating to know that one can grow healthier as one grows older, and not necessarily the reverse.

All these things contribute to the interest in exercise and preventive medicine for better health that we're seeing in this country today.

RW: How did you develop the Aerobics program?

Cooper: It dates back to the early 1960s. I always had an interest in this area, having been a track man in high school and college and then getting out of shape, terribly so, after leaving school.

I loved water skiing. After I'd gone through my internship, served my first year in the military, was way up in weight and down in fitness, I tried to water ski for the first time in a couple of years. I could only hold on for a few seconds before I was really exhausted to the point where I got nauseated.

That really scared me. I thought, "Boy, I've really deteriorated terribly." I also had a lot of somatic and psychosomatic complaints, including difficulty

(continued on page 20)

adidas Marathon

Manufactured in accordance with the adidas tradition for superb quality, the Marathon racing shoe is exactly what you've been needing to give your running a new boost. Featuring a soft, ultra-light goatskin upper that molds to your foot like a sock, the Marathon gives you a better fit and extra protection against blisters. You'll value the shock-absorbing midsole, the padded achilles tendon protector, the perforations for ventilation and the gripping, hard rubber sole. And if you're a race walker, the rounded heel makes it the ideal choice. Treat yourself to a pair of these bright blue-and-white striped trend-setters. Order them today, before your competition does. Sizes 6-12, \$36.95.



Come by our store at 246 Castro St. in Mtn. View!

ORDER FORM

Please send me _____ pairs of adidas Marathons, size _____. I have enclosed a tracing of my foot to insure exact size, \$36.95 per pair, \$2.00 per pair postage, and 6% tax (California residents only).

Name _____

Address _____

City/State/Zip _____

STARTING LINE SPORTS
Box 8, Mtn. View, CA 94040

Improve your game The Complete Weight Training Book gives you the edge

Whatever your sport, your sex or your age, you can benefit from a good program of progressive resistance exercises, better known as weight training.

How can it work for you? Through a special program of weight training exercises you can develop and refine your body to consistently maintain a winning edge over weaker opponents.

But, you've probably heard bad things about weight training. It will make you muscle bound, slow, tight, too heavy or your muscle will turn to fat whenever you stop training. The *Complete Weight Training Book*, the most authoritative

work yet published on men's and women's weight training, dispels that myth convincingly.

Bill Reynolds, the author, says, "In actuality, research has shown that the majority of these accusations are completely unfounded." Then, he presents

the research in the *Complete Weight Training Book* to back him up.

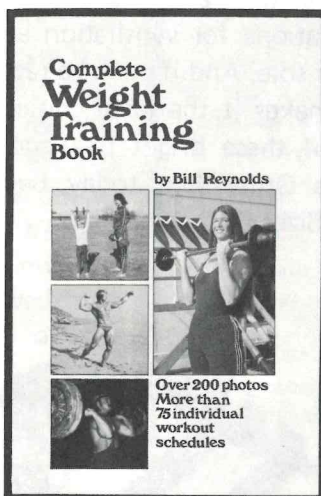
What are the advantages of weight training over another system? First, the selectivity factor. Specific exercises can be chosen to isolate and strengthen particular muscles.

Second, the same factor is extremely valuable in rehabilitating injured muscles into usable muscles.

Third, the range of resistance exercises covers an entire spectrum. You can work out with one pound or five hundred pounds, depending on your training goals.

The *Complete Weight Training Book* has more than 70 training programs

in different sports that can be adapted to meet your individual needs. Each exercise is explained thoroughly in clear, concise language. More than 200 photographs cover all techniques. So, gain the advantage, put weight training to work for you today!



Order it here

Yes. I'm interested in weight training because I know it will help me in my sport. So, rush me _____ copy(ies) of the *Complete Weight Training Book*. Enclosed is \$6.95, plus \$.40 postage and 6% tax (CA residents only) per copy.

Name _____

Address _____

City/State/Zip _____

World Publications, Box 366, Mountain View, CA 94040

passing my flight physicals because my blood pressure was way up.

Once I got myself back in shape, I noticed these things returned to normal. So I started applying those principles to my patients while I was still in the service and got comparable results. Then I became more interested in this total concept of exercise and the practice of preventive medicine, and I requested permission to spend two years at Harvard working on my Masters in public health, working on my boards (exams) in aerospace medicine but also working on my boards in preventive medicine and on my second doctorate in exercise physiology.

In 1964, I was given the responsibility of working with the Air Force astronaut's program. That was the manned orbiting laboratory (MOL) program. They wanted us to develop two things. One was the best conditioning program the astronauts could use to build up their cardiovascular reserves prior to going into space. And the other was an in-flight anti-deconditioning device that they could use to keep from deteriorating while they were in space.

The MOL program only lasted for about a year and a half. But during that time I had pretty much of a free hand to develop and work on the programs, and this is where the Aerobics program came from.

It so happened that in 1965 Kevin Brown of *Popular Mechanics* came down to do a story on our bed-rest studies that simulated weightlessness. He was interested in the space medicine aspect of the program, but I told him the big breakthrough was the exercise program we had worked out—quantifying exercise, giving it point values and adjusting it to different age groups.

That intrigued him, too, to the extent that he wrote an article that was titled, "Exercise the Astronauts' Way." It was published in January 1966 in *Family Weekly*. The feedback from the article was just unbelievable. Based on that, the publishers of *Family Weekly* asked me to do a book and have it out in about six weeks. We sat down to work and it took us almost 2½ years to complete the first book.

RW: What are the dangers of being cardiovascularly unfit?

Cooper: There are all sorts of dangers. Of course, the big thing that we're trying to do is in building up the cardiovascular-pulmonary fitness is to reverse the diseases and problems of those three systems—the lungs, the vascular system

and the heart. It's our major health problem, without question, with 55% of all deaths occurring from heart and blood vessel disease.

So if a person just ignores his current state of health, ignores the warning signs, you can anticipate that he's going to become one of the millions of people who succumb from one of the degenerative diseases. To the contrary, if he keeps himself in shape, he may be able to delay the onset of or, hopefully, prevent some of these degenerative diseases. That's our total objective with the Aerobics program.

RW: You're a proponent of aerobic exercise—primarily jogging and swimming . . .

Cooper: Now this is a misconception, because you know my first book didn't even mention (the word) jogging. Jogging was not mentioned once in *Aerobics*. In *The New Aerobics* it was, of course. Jogging was a coined term in the Harris-Bowerman book.

No, Aerobics is a multitude of exercises. Aerobics is a quantification and qualification of exercise. Aerobics is answering the question, what type, how much, how do you compare? That's what we're doing with Aerobics. Aerobics means aerobic-type sports—of which jogging is only one—that can be used to improve your total health picture.

I would, in fact, prefer walking as far as a recommended exercise program for the majority of people. It's safer. It can be equally beneficial. But I know for a fact that people aren't going to do enough of it to do them any good because when walking you have to increase the distance by at least three-fold to get the same benefit that you'd get from jogging.

That's the problem. Unlike in Germany, Holland or Russia, people here don't have the time necessary to walk to get fit, so we're almost obligated to use jogging or swimming—something to get more benefit in a shorter period of time.

RW: How should a person get started in a fitness program?

Cooper: Slowly and progressively. This is the concept that we had in mind in the second book (*The New Aerobics*) when we introduced the six-week starter program which we feel is mandatory. Let me give you some background on this.

In an article I published in 1970 in the *Journal of the American Medical Association*, I asked physicians to send me documented cases of deaths or problems that occurred as a result of

jogging or vigorous activity. Over the years, I've probably had about 30 that have come in. I was looking for common denominators in these, and this is what I found.

They were men in the first six weeks of their conditioning program. They were over 40 years of age. They were jogging. And they had no medical clearance. I haven't listed all the factors, but those were the basic common denominators.

Ideally, we'd like to make this recommendation: If you're getting started in a fitness program, you should have a physical examination if you're under 30 years of age—a history and physical within the preceding year is the normal requirement. You should have a history and physical, and a resting electrocardiogram (EKG) within the previous six months if you're 30-40 years of age. And if you are over 40 years of age, a history, a physical, a resting and stress EKG within the previous three months. That would be ideal, but it's also totally impractical because you're not going to have enough treadmills, enough physicians and not all the people have enough money to be able to do this.

Of the six million joggers in this country, probably 250,000 have had some kind of examination. The majority of people have had nothing. Yet they're getting along pretty well. How?

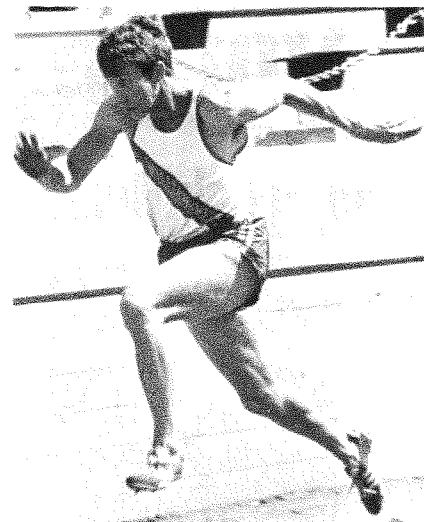
The answer is the starter program, which is so slowly progressive that it's not going to hurt them even if they have heart disease. Of course, if they develop any symptoms during the starter program—chest pain, discomfort, whatever it may be—then they must seek medical consultation before they go on and really hurt themselves.

RW: You have a number of detractors. One of them is Dr. Meyer Friedman (co-author of *Type A Behavior and the Heart*) who says that there's no evidence that jogging and other strenuous exercises protect a person from heart disease. Is it true that there is no such evidence?

Cooper: I think that the best evidence to date is going to be our coronary risk factor data versus levels of fitness. That's going to be the first and best quantifiable data anyone has put together. But as far as preventing or delaying the onset of heart disease, there are very strong implications that exercise does have an effect.

And a very good prospective study that came from California was published
(continued on page 22)

HOLD IT!



Before you take another step, you'd better read *The Complete Runner*. It's about your favorite pastime, running, and it's for you, whether you're a beginner or a vet of 20 years.

Between the covers of *The Complete Runner* is all kinds of practical information you can use every step of your next workout or race.

The Complete Runner answers all your running questions—questions about running medicine, physiology, diet, footwear, technique, training, competition and almost anything else you can think of.

Get your copy today and catch up with the thousands of others who already own *The Complete Runner*. 1974 Hardback, 387 pages, illustrated, \$10.95.

USE THIS COUPON

Please send me _____ copy(ies) of *The Complete Runner* at \$10.95, plus 40c postage and 6% tax (CA residents only) per copy.

Name _____

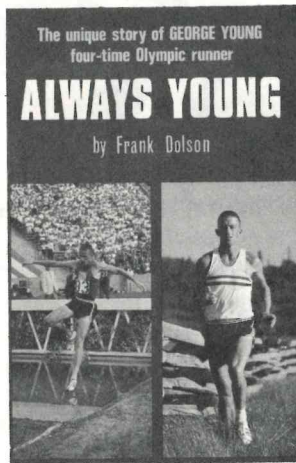
Address _____

City/State/Zip _____

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

ALWAYS YOUNG

by Frank Dolson



George Young's story is one of an amateur athlete in America struggling to overcome the competition, the officials and himself. He struggled toward a goal—the Olympic gold medal—though he never quite attained it. Four times he tried, in events ranging from the steeplechase to the marathon, but the gold was not to be his.

Always Young is inspiring reading for runners of every age and ability. 1975, 206 pp., ill., Hb—\$4.95, Pb.—\$2.95. Use the order form below to purchase your copy, today!

order form

Please send me _____ copy(ies) of *Always Young*. I am enclosing
() \$4.95 Hb () \$2.95 Ppb
I have also included 40c postage per copy and 6% tax (CA only).

Name _____

Address _____

City _____

State/Zip _____

World Publications
Box 366, Mountain View, CA 94040

in March 1975 in the *New England Journal of Medicine*. This study was done on longshoremen. These men were divided into three activity categories—those engaged in high-, medium- and low-level activity. The study which followed these men for 22 years showed the instance of heart disease was two times greater in those working in the low-level activity versus those working the high-level activity.

So there are a lot of studies of this type showing that vigorous physical activity does have a protective effect as far as heart disease is concerned, contrary to what Friedman says.

RW: On the other side of the coin from Dr. Friedman, who is anti-exercise, there's Dr. Tom Bassler. He says you don't call for enough exercise.

Cooper: Based on what? Why does he make that statement? You see, it's strictly a theory. I don't deal with theories. I deal with facts. I'm saying that 30–35 (Aerobic) points a week will show a statistically significant lowering in five of the 10 coronary risk factors. Now that's about as factual as you can get. Bassler can't show you a thing. He's followed a small group for five years. You can't make a statistical study based on that.

I know Tom Bassler quite well. At one time he said that among people who have run 10 miles there's never been anyone die of a heart attack. Well, when that was proven wrong, he moved it on up to the marathon. But you can't make that statement, either. As I told him, don't make the mistake of saying "never" about anything, particularly running.

Another area in which I disagree with Bassler is in his statement that you have to run six miles six times per week (not 30 points per week but 140 points). No one would exercise! You've got to be reasonable and practical in this approach, and that's what we've tried to do. We've tried to find the minimum level, the threshold level, to show some protection from a coronary risk standpoint—and that level ends up being about 30-35 points per week.

RW: You're not saying you're against people getting 140 points a week?

Cooper: No, I'm not saying that at all. We have people doing that, getting 150-200 points a week all the time. But for someone to make a statement that everyone has to get that amount of exercise to get any protection from coronary disease, I'll say, "based on what?" No, I'm not against people

getting well over 30 points. But I'm trying to work with the level that's reasonable.

RW: On what are you basing the 30 points as being sufficient?

Cooper: Eighty-five percent of the people who work up to 30 points per week have an oxygen consumption of 42 milliliters per kilogram per minute if they're less than 30 years of age. For those over 50 years of age, the oxygen consumption is age-adjusted to 36. I've made this statement for years and I can document it.

RW: Would 40 points per week be superior to 30?

Cooper: There is no particular benefit in getting more than 30-35 points a week because as you look at these coronary risk factors, you can see a significant statistical difference in fitness categories when you compare the "very poor," the "poor," the "fair" with the "excellent," but in many cases you can't show any significant difference when you compare the "good" with the "excellent." In other words, there isn't any particular advantage to getting 40-50 points a week as compared to 30 points.

RW: Therefore, Olympic marathon champion Frank Shorter doesn't necessarily have more protection against a heart attack than a person who gets 30 points a week?

Cooper: We don't know yet. I've been talking about 30 points versus 40-50 points. Frank Shorter probably averages 600 points a week.

RW: Okay, what about the comparison between 30 points and 600 points?

Cooper: No one has any data on that. My intuitive feeling would be that it's probably offering Frank a greater protection—not complete protection as Bassler would make you think, but it's probably offering him much greater protection.

RW: Is it or is it not true that for exercise to be worthwhile, to have real conditioning value, you have to make it strenuous enough so it hurts?

Cooper: No, you do not. You can train and not strain. The type of exercise depends upon the level of fitness you are trying to achieve. If you just want to get a training effect, get some benefit from exercise, this can be accomplished without strain.

RW: You can make it totally painless, is that what you are saying?

Cooper: Yes, I think you could say

that it's painless. If you cover three miles in less than 43½ minutes, five days a week, you get 30 points. You get some protection from coronary disease, and there's no pain associated with that level of effort.

RW: You said in an interview with *Runner's World* in September 1970 that you don't find running particularly enjoyable. That's an interesting statement coming from a man who's literally started millions of people jogging.

Cooper: I've run more than 15,000 miles since 1960, and each month I add another 100 miles to that. But I don't run for the enjoyment of running. I run because of the tremendous benefits that I get from running. All I have to do is lay off for a few days and I can feel the deterioration, both mental and physical.

I ran this evening. It's a tremendous way for me to relax after a very hard six-hour session like the one I had today, where I'm constantly on my feet and talking for six hours with only two breaks during the day. That's awfully hard.

I came back here (to the hotel), I got my running stuff on, ran for at least three miles up in the hills and thoroughly enjoyed it. That I enjoyed. That's relaxing. That's taking the pressure off, and that's what I use it for. But I can't say that I personally enjoy just going out day to day for the exhilarating feeling of running. I don't really enjoy that.

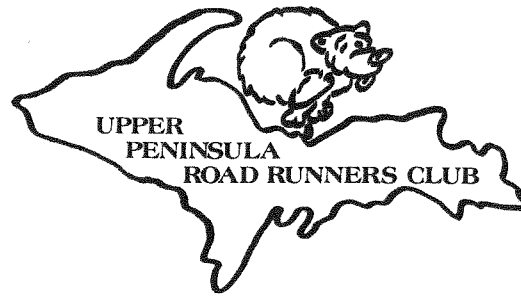
I ask patients all the time, people who have been with us for years and have been exercising regularly, running four and five days a week, "Why do you run? What motivates you to continue running?" And most of them say the same thing.

"Well, when I got started a few years ago, what motivated me was, well, the death of a loved one of a heart attack, the death of a near friend, an attack of chest pain that (my doctor) really couldn't diagnose and which really got me thinking about this (running and getting into physical condition)."

Lots of people start running on the basis of that. But what motivates them to continue? The fear aspect wears off in a hurry. I ask these people the same question all the time, and they nearly always give me the same answer.

"I've found that it makes me feel so much better."

That's the reason I run. I run because of the great benefits that I get personally. I can't say I thoroughly enjoy running. I passed that stage a few years ago. ●



Bicentennial Celebration

17.76 KILOMETERS PICTURED ROCKS ROAD RACE JUNE 27, 1976

Munising, Michigan

In Michigan's beautiful Upper Peninsula along the shores of Lake Superior

3 trophies in each division

Divisions for boys, girls, men and women

including Masters divisions

★ Awards to all competitors ★

Co-sponsored by the Alger Chamber of Commerce and the

North Country Track Club

R1, Box 284E, Munising, Mi., 49862

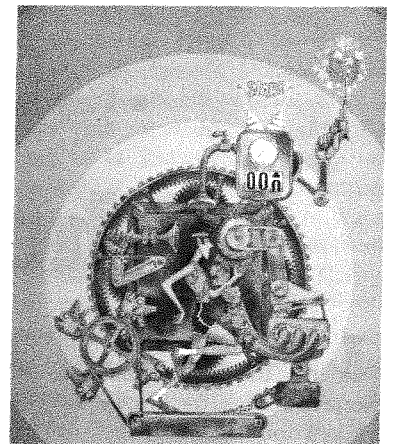
For further information send self-addressed, stamped envelope.

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 our hotline number (415) 965-3240 and charging it to your BankAmericard or Master Charge.



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 94040

SUCCESS

at an early age

by Hal Higdon

Now we have high school seniors Eric Hulst, Rudy Chapa and Thom Hunt.

Three years ago, it was Craig Virgin; four years before him, Steve Prefontaine; before that, Jim Ryun; earlier, Bruce Kidd.

High school superstar runners appear each spring, and more often than not they disappear a year or two later when they can't handle the realities of racing after school.

We remember the names in the

second paragraph because they were the exceptions to the rule, but have forgotten dozens of other young runners who once were nearly as good.

No one can predict what will happen to this year's stars next year, or can condemn them if they don't reach their promise. This isn't important. They have been on top once, which is one more time than most runners ever get to look down from that position.

Rudy Chapa, a high school senior, is there now—a national record holder

in two events and one of the youngest Olympic Trials qualifiers.

Craig Virgin set a high school record four years ago (his two-mile mark still stood in early May), had an early college career which can only be termed rocky but has recovered to run better than ever. He, too, is in the Trials.

Hal Higdon writes first of Chapa, who still sees running with a high schooler's innocence, and then of Virgin, whose views are tempered by hard experience.

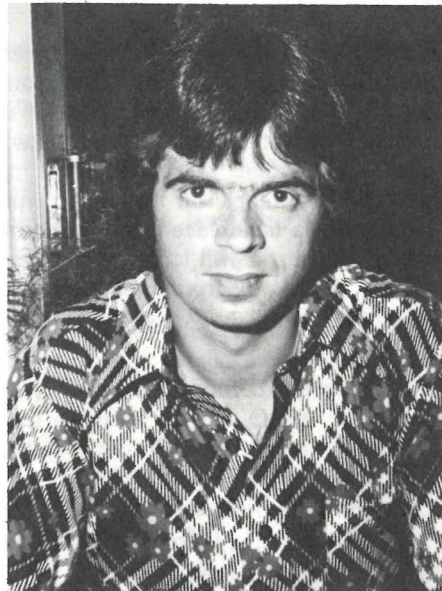
CHAPA

& The Neanderthal Man

It is afternoon and Rudy Chapa and the other members of the Hammond High track team are running in Maywood Park.

Chapa, perhaps the best high school distance runner in the country, wears red, waffle-bottomed shoes, emerald green warmup pants and a purple shirt, its back wet with sweat. He flows effortlessly along the path paralleling the street: up Highland Avenue, across Columbia Avenue, down Lyons Street and past the police station parking lot, a lap of approximately three-quarters of a mile that Rudy probably has circled more than 10,000 times.

His coach, Dan Candiano, a dark young man of 28, watches intently. As Rudy swings past on the far side of the park, Candiano shouts encouragement,



then turns his attention to a group of quarter-milers doing wind sprints.

When great runners run, their feet do not seem to touch the ground. It is that way with Rudy Chapa.

Gliding around an evergreen tree, he charges down the last long straightaway to where his coach waits, holding a stopwatch. Chapa's nearly passive expression only hints at pain, even though he is nearing the end of a flat-out seven-mile run that he will cover in approximately 35 minutes. Rudy sprints past his coach, slows, walks and only then betrays that he may be human. He bends over, hands

Rudy Chapa's coach, Dan Candiano, inherited the title "Neanderthal Man" from an RW letter.

on knees, head down, momentarily motionless.

Coach Candiano stares impassively at his star athlete for what seems like an eternity. A long-distance runner himself and a former 4:09 miler, he knows that Rudy deserves a brief rest after an effort in training that 99.9% of the runners in America would find themselves incapable of running. Approximately five seconds pass. Candiano's humanitarian instincts are overwhelmed by his sense of purpose. Positions on the Olympic team are not won with sympathy.

"Keep jogging," he tells Rudy, who begins moving down the path even before his teammates have finished behind him.

* * * *

They call Dan Candiano the Neanderthal Man. Last September an article ("Coaching Indiana's Super Kids") appeared in *Runner's World* describing the training methods which had resulted in three runners from Hammond High (graduated Cary Pinkowski and Tim Keough, in addition to Chapa) breaking nine minutes for two miles. Such success comes only after hard work. Coach Candiano's training regimen includes twice-a-day workouts resulting in 110 miles per week, 50 weeks of the year. (He gives his charges a week's vacation after cross-country season and another week after outdoor track.)

This prompted one irate California track coach to write *Runner's World* nominating Dan Candiano as "Neanderthal of the Year." The California coach, who bragged about training a miler to run 4:16 on only 30 miles a week, said, "I like to win meets, but not to the extent that an athlete's potential—physical and mental—is sacrificed for the elusive 'today.'"

Outraged at first, the Hammond team and the coach now regard that letter with amusement, its writer with pity. Candiano's eyes glint impishly when reminded of it.

"Yeah," he admits. "The kids call me the Neanderthal Man now."

Gordon Bonham, Hammond's number two runner, pesters his coach to cut workouts to 30 miles per week, so he can run 4:16, too. Candiano accuses Bonham and his teammates of having written that letter under a disguised name so they could sleep mornings.

* * * *

Despite having won three Indiana state titles his sophomore and junior years, Rudy Chapa had little fame nationally until last summer when he entered the National Junior Championships (for runners 19 and under) in

Knoxville, Tenn. Candiano rarely permits his charges to compete outside of school meets.

"I like to bring them on slowly," he says. "We never race during the summer or winter. Many coaches in high school and college make the mistake of letting their kids race all year. The human body is only capable of certain stress, and I think the racing sessions should be short and the preparations for those sessions long. When our kids get on the track, they're ready to go."

Candiano permitted Chapa to race in Knoxville, despite reservations, because, "Gosh darn, he was just too good to hold back any longer."

In that meet, Chapa faced Eric Hulst, a Californian who had placed first in the dual meet with the Russian junior team the previous season. They raced at 10,000 meters, a distance Candiano feels more in line with Rudy's abilities than the two-miles he usually runs in high school meets.

"That was the first time I've ever really been pressed," Rudy says of that race. "The pace felt pretty good. I was very comfortable the first 5½ miles. I run harder than that in the park on Fridays when we go seven miles."

Hulst led Chapa past six miles in 28:22, then they sprinted shoulder to shoulder the remaining 373 yards to the metric finish. Rudy won by half a stride in 29:11, breaking Gerry Lindgren's national high school record.

"We closed the last half in 2:05," Rudy says. "The final lap was at a speed equivalent to a 55-second quarter."

Chapa, along with Hulst, qualified for the junior team that would meet the Russians in Lincoln, Neb., later that summer. Rudy approached his first international competition with calm confidence.

"I knew I could kick with Eric," he recalls. "In Lincoln, I talked with the two Russians through an interpreter. One had barely broken 30 minutes and the other was really slow, so I wasn't worried much about them. The day was bad—96 or 97 degrees. I just sat back and kicked the last quarter. The time was like 31:06."

Rudy is quiet, polite and shakes hands when you leave his company. He smiles easily. At age 17 he has just begun to overcome his boyhood shyness. He considers his victory at Knoxville as his greatest achievement to date, although it took some time before even that impressed him.

"I hadn't thought much about it until I saw it in print," he confides. "At the end of the year *Track & Field News*

published all the high school national records. That made me feel good."

* * * *

Many coaches would consider that one achievement justification for the "Neanderthalic" training schedule, but Dan Candiano can point to others. Chapa's graduated teammate, Cary Pinkowski, won two state mile championships, two state cross-country championships (tying with Rudy once), then beat the nation's top seniors at two miles in the International High School Invitational meet. He ran 4:12 for the mile and 8:52 for two miles and now attends Villanova University on a scholarship. Tim Keough, a mediocre pole vaulter, converted to distance running his junior year and ran 8:52 for two miles as a senior. He now attends Arizona State University on a scholarship.

Candiano says, "I haven't been able to pinpoint it yet, but I know we're doing something right with our program. I'm not fool enough to think I'm going to be able to pick these kids out of a school of 1000 and get them to reach nine minutes on luck alone."

He responds to critics who accuse him of pushing his charges too hard at too early an age, "Look, this is an inner-city school. The families of most of these kids do not have the means to send them to college without scholarships. Rudy's father works in the steel mills. Tim came from a family of 10 kids. The mother of Dennis Cordell, who attends Southwestern Michigan College now, worked midnights. Dave Kontel is at Indiana University. Dan Chumbley is at Jackson Community College. John Roper goes to Wabash University on an academic scholarship, but he got it through athletics. Cary's at Villanova. I don't think many college coaches would have looked at them if they hadn't run as fast as they did."

Candiano's runners rise early each morning, wind or rain, snow or sleet, to run at 6:30 before attending classes. Their coach runs with them, at least the last half-hour of their workouts.

"Our training is all long, but not LSD (long slow distance)," he explains. "It's fartlek-oriented, with interval two-miles, three-miles, more like marathon training, with a little Cerutti built in. We use Igloi terms like 'fresh' and 'good.' Everything is sustained, nothing with a complete stop for rest. (We do) double workouts six days a week with a single long run on Sundays. All our work is on grass except Sunday and Wednesday road runs. We stay away

(continued on page 26)

from interval training except near the end of the season when we'll cut mileage and come in on the track at the end of a workout a couple of times a week. Rudy will do four quarters in around 55 seconds, or maybe a pair of halves in 2:00."

Rudy Chapa adds, "Ninety-five percent of our training is done without the watch. You run as hard as you can, then when it comes down to the nitty gritty, he brings out the watch to start seeing how well you're doing."

Chapa explains his success by saying, "It's not so much talent as hard work. A lot of runners in high school aren't as fortunate as I am, and Cary and Tim were, in having a coach as knowledgeable."

* * * *

Rudy Chapa comes from a closely-knit Mexican-American family. He has four sisters. His mother was born in East Chicago. His father migrated to the United States in 1953 from Sabinas Hidalgo, a small town in northern Mexico. Rudy once spoke Spanish at home, but says his knowledge of that language is fading. He has not been back to Mexico on the family's annual vacation for two years, because vacations interfere with his training.

Even as a boy he enjoyed running long distances. "When I was eight years old, I wasn't quick enough to sprint with my cousins," Rudy admits, "so I always made up races like twice around the block, because I knew I could win."

Rudy also played baseball, usually either catcher or center field. "I haven't grown much in the last three years," he says (Chapa stands 5'8", weighs 135 pounds). "But back then I was one of the biggest on our team." Named twice to the All-Star Game team in Pony League, he started in center field at age 12.

He achieved success in wrestling as an eighth grader, going undefeated in nine matches and winning the city championship in the 108-pound class. In the city track meet that same year, he ran 2:21 in the half-mile, placing fourth.

Rudy received a telephone call from Candiano that summer suggesting he join the cross-country team which started practice in June. Rudy was too busy playing baseball, but he joined the team in mid-August, mostly to get in shape for wrestling. A friend named Ron Burton joined with him.

Both Rudy and his coach shudder when they recall how close Chapa came to quitting. According to state high school association regulations, athletes need physical examinations before com-



Hal Higdon

peting. Before the first meet of the season Candiano instructed Rudy and Ron to report to the school doctor. Candiano claims he told them to bring the signed exam papers to him that afternoon, but Rudy thought he told them to bring the papers the next day.

"Where's your physical?" grumbled Candiano when they appeared to leave for the meet. Rudy started to hand him the paper, but Candiano told him he was late. The coach drove away, leaving Chapa and Burton standing in the rain.

"I'm quitting!" said an angry Ron Burton.

"Yeah, me too," Rudy agreed.

Tempers cooled and both boys appeared for practice the following day. Chapa and his coach still can't agree over who was right that day.

"I thought it was his fault," says Rudy. "He says it was my fault. We still argue about it sometimes."

As a freshman, Rudy ran 13:18 for 2½ miles, the standard Indiana high school cross-country distance, becoming fourth or fifth man on the Hammond team.

Rudy Chapa: It's not so much talent as hard work and a knowledgeable coach, Dan Candiano (right).

"Think how good you could become if you trained all year," Coach Candiano told him, so Rudy abandoned his wrestling ambitions and joined the runners that winter in Maywood Park. He hit 9:45 for two miles in the spring, excellent time for a 14-year-old, but only a hint of what would come.

Rudy achieved that level while running only in the afternoon. He wanted to join the team's morning workout sessions, but his coach refused to let him.

"His freshman year he could have run 9:10 or 9:15," Candiano says, "but why bother that early? Our freshmen never run twice daily. Let them get hooked on running first. Later they come to you and ask, 'Coach, what will happen if I run twice a day?' It's better to let that come from them."

Chapa began double workouts the summer of 1973, abandoning his base-

ball career. That fall he placed third in the state cross-country meet, then startled everybody by running 8:59 for two miles in March. In the spring of 1974, sophomore Chapa won the state two-mile, a feat he would duplicate in 1975.

Rudy's faithfulness at morning practices recently has lagged.

"That bed feels nice sometimes," he confesses. "It's easier to stay in it this year. In 1974 I missed only three mornings, and that was because I was sick. In 1975 I missed like 20 mornings, and I'm missing more in 1976. I used to think I had to get up before Cary (Pinkowski) does too many more miles. This year, now that he's gone, it's more difficult. But I'm putting in more mileage in the afternoon, so it doesn't hurt too much."

He admits that he sometimes modifies his training pattern without Coach Candiano's knowledge.

"Sometimes when we're really tired," Rudy says, glancing over his shoulder to make certain he is not overheard, "when he really kills us—he's not supposed to know this—we go out for about three miles and do a little walking. Putting in 130 miles a week gets a little tough on the shins, so sometimes we change workouts a bit, or don't get out as early as he wants us to. But I'm still putting in 100-110 miles per week."

Despite his constant success, despite not having lost a race in his regular events in two years, Rudy Chapa sometimes betrays momentary lapses in confidence. Last spring because of weather conditions, he ran the mile in 4:28, 4:20 and 4:25 in successive meets.

"I didn't know what was happening," Rudy recalls, "because usually I go through on the way to two miles in 4:20. I was shocked. I thought I had lost everything. I couldn't sleep that night, so I went out early Sunday and ran a half to see if I could break two minutes. I went 2:01 feeling pretty good, so I regained my confidence."

The next weekend, Rudy ran 4:11 for the mile, his fastest open race (he has run 4:09 on a relay leg). Candiano feels that Chapa can run 4:05 this season and may enter him in the mile and mile relay in the state championship as part of a team effort, although he believes Rudy's best events to be the 10,000 meters and the marathon.

"If I ran him in a marathon tomorrow, people would be stunned by how fast he went," says Candiano.

Nevertheless, Rudy Chapa will bypass the marathon this year and attempt to make the American Olympic team at 10,000 meters. The Indiana State High

School Association gave permission for him to compete this spring in the Florida Relays and the Drake Relays. He needed to run 28:40 to qualify for the Olympic Trials, missed it at Florida but qualified at Drake with a national high school record of 28:36.

"I hate to get my goals mixed up with Rudy's," says Candiano. "Rudy is very cautious when he talks to you, but everyone has an ultimate goal, and back in Rudy's mind he wants to make the Olympic team."

Rudy says, "I want to run around 8:40 for two miles and break the high school record (held by Craig Virgin, now at the University of Illinois). I want to be on a state championship team, because we've got a good shot at it.

"I've got a lot of pressure on me right now because of the Olympics. There are groups of people in Hammond raising money. A lot don't know what's going on. They think that if they raise enough money I'm going to be on the Olympic team. A lot of people are depending on me. I just hope that I can do it. As far as making the team, it's hard to see myself running as fast as some of those other guys. I'm going to try, but . . ."

* * * *

College coaches already are standing in line hoping to attract Rudy Chapa to their campus. Bill Dellinger, coach of the University of Oregon, visited Rudy at his home and later flew Rudy to the West Coast for a weekend visit.

"He calls every week to see how I'm doing," admits Rudy, who is leaning toward that school. Cary Pinkowski called recently from Villanova University to see if he could talk his former teammate into joining him on the East Coast.

Most of Rudy's high school races, however, have been outings for the Chapa family, his father, his mother, his four sisters. His father once drove four hours to Mansfield, Ohio, arriving just in time to see the last five minutes of a cross-country race.

Rudy smiles when describing how his family indulges him in his athletic career. "My mother would do just about anything for me if I stayed near home." If he does, he may enroll at the University of Wisconsin.

He expects no special favors, just an education. He plans to major in business.

"Two things I'm going to concentrate on," he says, "running and school."

Partly because of the enormous demands on his time made by his athletic

career, he has earned only C-plus grades in high school, but he hints that he may reverse priorities in college.

"I'd rather run mediocre than come back without an education. I'm going to dedicate myself to getting educated for the next four or five years."

He seems uncertain as to what the future holds beyond that. He says, "I've always thought that I would stop competing right after college, but all these people tell me, 'You can't take it out of you that easily.' I've never been hurt, so I don't know what it feels like to stop running. A few guys on the team have told me that they start climbing the walls if they can't get out and run. I've always said, 'I wouldn't mind it.' But I've got the feeling that I would miss running a lot. I just hope I can continue improving. Nobody can tell. I'll just take life year by year."

* * * *

The running dynasty at Hammond High may end with Rudy Chapa's graduation, because Dan Candiano will be leaving as well.

"I don't want to go on chasing another 8:51 the rest of my life," Candiano explained. Bloom Township High School in Chicago Heights, 6000 students this year, will divide in two by next fall. Candiano has accepted a job as athletic director for the newly constructed Bloom Trails High School. He will also work on a doctorate in administration at Purdue.

"This will be my first summer free of commitments in five years," he sighs. "And I'm looking forward to that. I'll probably go to the Olympic Trials, hit a couple of meets, see them and enjoy them without the pressures. The longer I've been here, the more the pressure has grown. There is no pressure to win, because track and cross-country are considered minor sports at Hammond High, but you build pressures within yourself."

The last of his runners has jogged toward the locker room to dress. The sun lays low on the horizon, casting long shadows across Maywood Park. Dan Candiano thrusts his stopwatch in his pocket and looks up.

He smiled. "I'm just run-down and tired. I feel I probably put more time in during the last five years than some people put into 20."

What will the Neanderthal Man do in his new assignment? Will he forget running entirely.

He replies, "Well, I may run with the distance runners in the morning, but otherwise I'll just sit back and relax."

The Comeback of CRAIG VIRGIN

When Craig Virgin escorts visitors around the University of Illinois campus he moves on foot, at a fast pace, with landmarks receding quickly behind him: the football field, the student union, the library—which Craig explains was built underground so as not to disturb the oldest experimental cornplot in the United States.

"I'm a farm boy at heart," he confesses while running through a parking lot in downtown Champaign en route to the countryside on a long Sunday workout. "I don't know if I ever could be comfortable living in the big city." He dodges around a parking meter. "Back where I grew up, we didn't need windowshades." He cuts diagonally across the street. "Nobody lived close enough to look in."

Craig grew up on a farm near Lebanon, Ill., a small (population 3564) town a half-hour east of St. Louis. Lebanon High School had no track, or even a track team, before he enrolled. The year he graduated, it had the best known high school runner in the nation. Craig Virgin ran 8:40.9 for two miles in 1973, his senior year, beating the national scholastic record set by Steve Prefontaine.

Craig's workout today, a 15-mile run, takes him past an estate surrounded by evergreen trees.

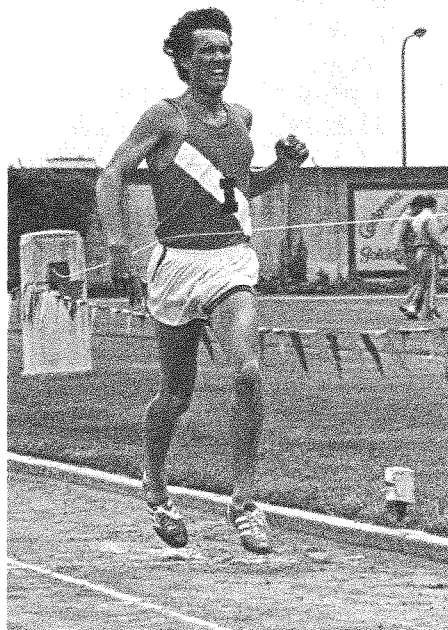
"If I ever get rich," he says, "that's the kind of place I want to own. If you look fast you can see the house between the trees. There!"

Craig runs with his teammate, Jim Eicken, and a high school distance runner named Kevin. They move smoothly, swiftly, economically over the flat Illinois roads. Both Craig and Jim wear shirts that announce "Run for Fun."

"I don't train like a maniac," insists Craig. "I've never run 100 miles a week in my life."

He has medium-length, brown, page-boy hair and the rugged good looks of an actor promoting radial tires on a television commercial. He majors in radio and TV at Illinois, with a minor in business, but thinks he might sell shoes after graduation.

It seems strange that Craig Virgin



Dennis O'Rourke

A significant step in the "comeback" was this six-mile at Berkeley.

is only 20 years old, because he has been around a long time. He set his first national record (an age-group mark for two-milers) six years ago.

Despite the promise exhibited as a multi-age-group record holder, Virgin had suffered one disaster after another his first two years in college—everything from heat exhaustion to misreading lap cards to pericarditis. But last fall at the NCAA Cross-Country Championship he finally fulfilled that promise.

For the first two miles of the six-mile race over a hilly course, nearly 20 runners ran in the front group. Then defending champion Nick Rose, an Englishman attending Western Kentucky University, tried to break the pack by storming uphill. Only Craig Virgin stayed with him.

Craig recalled, "For the last half of the race it was just him and I. And we went head on, elbows on, knees on. A photographer got a couple of pictures of colliding in midair. We both tried to go the the same spot at the same time. He cut me off at a flag and

I shoved him over. Going across a railroad track, I tried to squeeze him into the ditch, or anything. It was just brutal for the last four miles, just two guys beating each other's heads."

During the fourth mile Virgin and Rose raised the pace to 4:24.

"I almost gave up so many times," Craig admits. "But I hung on."

In the final 880 Virgin, who had a recent history of embarrassing himself near finish lines, burst away from Rose to win with a course record 28:24 and an impressive 15-second victory margin over the Englishman.

Several months later, Nick and Craig battled again at two miles indoors with Rose winning in 8:31.6, Virgin setting a personal best of 8:32.4 behind him.

"I've learned more running against Nick Rose these last few races than probably against anybody I've run against in my life," says Craig. "I've had more tactics shown me, and I'm beginning to apply them to my own racing. I don't want to be anybody's patsy any more.

"I ran against the Russians my junior year in high school and got boxed and pushed and beaten. If you're going to be the best in the world, that means you have to hold your own ground and be ready for all tactics: boxes, physical abuse, elbows stuck in you side, people riding your shoulder until you feel they're in your jock. I plan to become a complete runner and that means using the same tactics on others that they apply to me."

Craig leads his small workout group on a loop that eventually would come back toward the University of Illinois campus. With the wind now at their backs, the pace imperceptibly began to improve.

Virgin's standard distance for long workouts is 10 miles, but lately he has begun to add 15-milers to his regimen. He completed three such workouts last fall, usually on Sunday, the day after a Saturday race. After starting slowly he covered the distance in around an hour and a half. He never has attempted more than 16 miles at one time, either in a race or a workouts, although he says some day he might race a marathon.

He says it without conviction, however.

Farmland extends for miles in all directions.

"This is just like around home," explains Craig, "except Lebanon has more hills. The 'experts' seemed surprised I could beat Nick Rose over such a hilly course at the nationals, but back home I do all my training on hills."

As a boy Craig Virgin showed most interest in baseball and basketball than running. His eighth grade basketball coach made the team run on the same field where the cross-country team practiced, and he noticed Craig's times compared favorably with those of the cross-country runners.

"He told my dad I could be the best distance runner in quite a while at Lebanon," says Craig, "but he never told me, so I played baseball all summer."

Two days after his 14th birthday, Craig appeared for the first day of cross-country practice.

"We ran five miles and the first day of cross-country practice.

"We ran five miles and I lapped the entire field, including all the varsity runners. I couldn't walk for the next four days. I was so stiff I couldn't get out of bed in the morning, so I thought this was ridiculous and quit."

Lebanon, like many rural schools, played fall baseball rather than football. Craig appeared at baseball practice the next week, but counted two upperclassmen ahead of him at his position and decided to try cross-country again.

"'What the heck,' I thought, 'I'll give the season a try.' I figured I could always go back out for baseball later."

He won his first cross-country race and later qualified for sectionals, placing 10th. Thus the St. Louis Cardinals lost a promising third baseman.

That spring Lebanon High reinstated its track and field program, though it was still without a track. Lebanon utilized the tracks of other schools by scheduling two or three meets a week. Days between, the team trained on a grassy field.

"I began running fast times in the two-mile," Craig recalls. "At the district track meet I qualified for state, and the next day got a phone call from California saying I had broken the 14-year-old age record. I think I ran something like 9:45. I said, 'National record! How can this be?' Then at the state meet I placed seventh in 9:31.9, which really put the record under.

"I began to realize I might be able to get a college scholarship. That was im-

portant, because when I was a little kid I used to read all those sports novels about Joe Jock getting the big athletic scholarship to play for the State team. I had dreams, so I got hooked and decided to drop basketball and baseball and concentrate on my running, and I started getting better and better."

He trained five miles every other day during the summer between his freshman and sophomore years.

"It doesn't seem like much now,

milers in 1975, attended that meet and still recalls Craig's race that day as "the greatest performance by a high school athlete I have ever seen!"

"It was 96 degrees," Craig himself remembers. His dark eyes flash at the memory. "The track was black asphalt and about 110 degrees, but I had my mind made up. I had come so close to the national record at the state meet two weeks before and I wanted it. I hadn't said anything, but meet direc-



Steven E. Sutton/Duomo

Virgin thinks back over his biggest victory to date. He won the NCAA Cross-Country race from defending champion Nick Rose.

but I was working on the farm and often had to crawl off the tractor at eight at night to go for my run. Sometimes I didn't feel like running, but I made a commitment and it paid off. As every year went by, I worked a bit harder and by my senior year, instead of age-group records, began thinking of national records. My biggest driving force was wanting to win the state championship, but I also had all the age-group records listed on my wall so I could see them every morning and think about writing my name into the record books."

As a senior in 1973, Craig ran two miles slower than nine minutes on only one occasion (during a windstorm). He won the state two-mile in 8:42.6, only one second off Steve Prefontaine's national scholastic record.

Two weeks later, Virgin raced at the International High School Invitational meet. Dan Candiano, Hammond High coach of three sub-nine-minute two-

tor Joe Newton put in the papers I was going for the record.

"The people came out there to see that specifically. They were cheering before the race even started and began clapping with every step I took from lap one. It really got me jacked up. I had good concentration that day, was hitting 65s and 66s, then was able to close with a good half-mile, and that did it!"

Craig Virgin's national high school record, established on June 9, 1973, appears in the record books as 8:41.0, but he insists he ran a tenth of a second faster: "Track & Field News rounded it off to 41.0, but 40.9 sounds a lot faster to me."

* * * *

Craig Virgin's academic record qualified him to attend any college, and his athletic record caused track coaches from both coasts to shower his doorstep with scholarship offers. "Joe Jock," however, decided to play for the state team, the University of Illinois.

"This may sound corny," Craig confesses while running between cornfields in the rural area around Champaign, "but I've always had a lot of state loyalty. A lot of high school athletes

(continued on page 30)

left the state and in most cases never did anything. But I was proud that I came up through the Illinois High School Association cross-country program, the track program. I was proud that I was from Illinois, because there were a lot of good runners here, and I had beaten them. And there were fantastic times in Illinois. We're always ranked at the top with Texas and California. I had a lot of support from people in the state. Plus I wanted to have my parents see me run. That was important to me. Also, Illinois offered the academic opportunities I desired. Running is not my entire life."

As a college freshman in the fall of 1973, he won the Big Ten cross-country race, placed 10th in the NCAA, then traveled to Gainesville, Fla., for the National AAU. It was late November, but the temperature was 87 degrees, the humidity 97%. Virgin seems to succeed less on native talent than through an ability to extract every ounce of potential from his body, a dangerous attribute in extreme weather conditions. With 300 yards to go, while running sixth, he blacked out because of dehydration.

"When I woke up, the race already was two or three minutes over," he recalls. "That was just the beginning of the nightmare. My ankle already was weak from being sprained several times during the regular season. When I fell and people ran over me, I tore some ligaments, too."

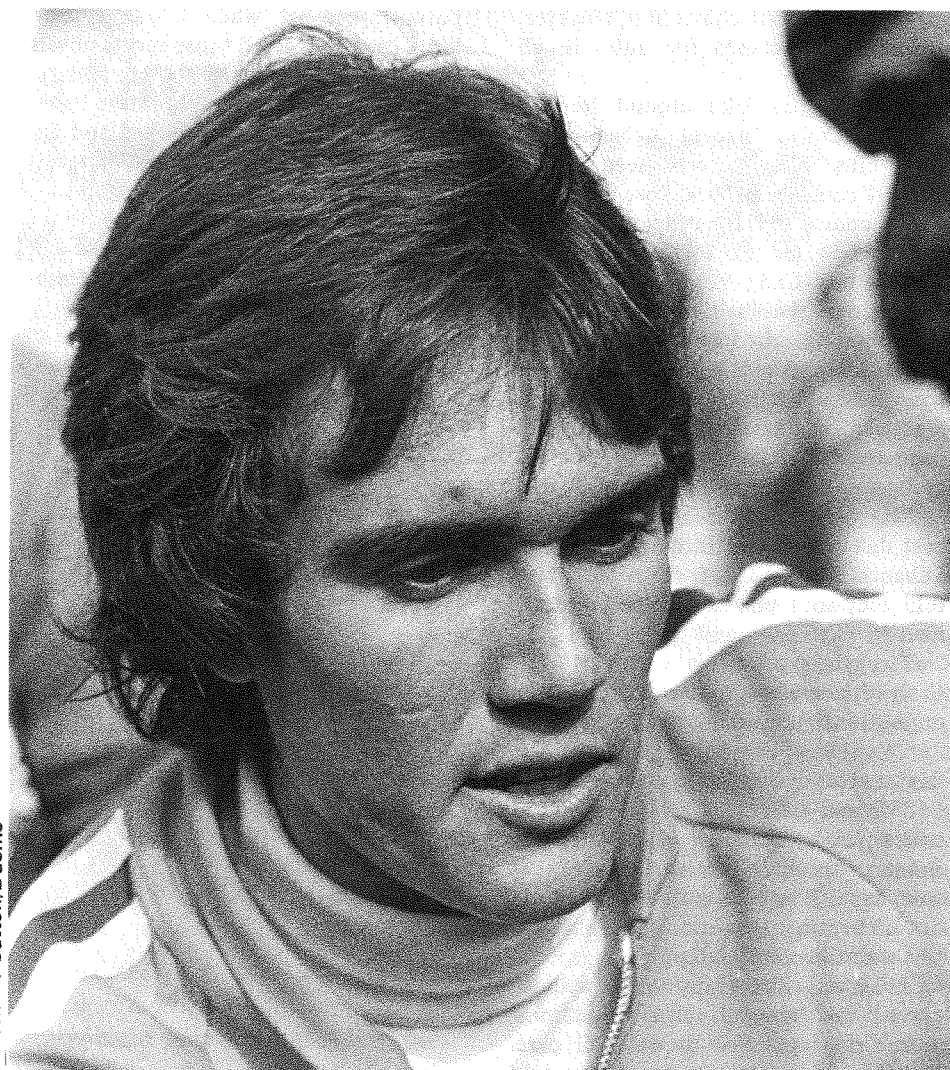
He rested one month to allow the ligaments to heal.

"Then I started again and ran a couple of races with minimum conditioning, but my foot structure had flattened out because of the injury. I started getting sharp foot pains. Everything was changed. My style was awkward. I couldn't run smooth. I was really frustrated. It took the doctors a couple of months to diagnose what was wrong. By the end of the track season the pain was at least tolerable, so I came back and ran 28:10 for six miles, second place in the Big Ten behind Pat Mandera."

That qualified him for the NCAA meet held, alas, in Austin, Tex., another hot climate site. Even at nine in the evening, the time scheduled for the six-mile, temperatures hovered in the 90s. Craig tells the story.

"I was very poorly conditioned and was running everything on guts. It seemed like one thing happened after another."

With two laps to go, an official showed Virgin a lap card saying he had



Steven E. Sutton/Duomo

"I thought I was going to be another one of those high school blue-chippers who faded away."

one lap to go, so he sprinted the "final quarter" in 61 seconds.

"I passed a bunch of people, but only lapped them. I collapsed and it took me four or five minutes to realize what they were talking about over my head. I couldn't believe it, but I hadn't finished. I hadn't gotten fourth.

"It was like a nightmare again. It was the ultimate in bad things that happened my freshman year. It was discouraging for a guy who had run a super high school senior year to have so many setbacks happen. I thought the whole world was collapsing. I thought I was going to become another one of those statistics, one of those high school blue-chippers who faded away."

Things got better—then worse—his sophomore season. Craig went undefeated in dual meets, the Big Ten race and the district championship, then suffered still another humiliation in the NCAA Cross-Country Championship, fading from fourth to 12th place in the

last quarter-mile. Champion runners dislike getting beaten; it particularly distresses them to get whipped in sight of the finish line.

"Pride is involved," says Craig. He seemed haunted by an inability to finish well what he had started.

During the 1975 indoor track season, he ran several fast early times, then saw the quality of his performances deteriorate. In the two-mile at the Big Ten indoor championships, he led through the mile in 4:17, but practically crawled the last 440 in 78 seconds, dropping to fifth place.

"I couldn't seem to go," he remembers. "I thought I had lost my desire, my determination. I thought I was washed up."

Illinois Coach Gary Wieneke suggested that Craig stop by the hospital on Monday for an examination to determine whether he had any unsuspected physical problems. Within a half-hour after reporting, the hospital physicians confined him to bed. He had pericarditis, an inflammation of the sac around his heart, apparently caused by a virus.



Dennis O'Rourke

Craig's breakthrough at six miles against Ted Castaneda (right). Virgin ran 27:48.

After a month of total rest he resumed training again, one mile a day coupled with regular electrocardiograph tests. By spring he began to show flashes of his old form, winning the Big Ten three-mile in 13:31 (on a hot day), going 13:21 at the USTFF meet the following weekend, placing third in the NCAA six-mile in 28:50 (at high altitude in Provo, Utah), and finally running 27:48.7 for six and winning at the meet of champions in Berkeley.

"That beat Shorter's stadium record by two seconds," recalls Craig. "My last two miles was 8:57. It was my first

national caliber meet victory and gave me confidence for the National AAU meet the following weekend."

In that meet he ran 13:35.2 for 5000 meters (passing three miles in 13:08.6), a national age group record for 19-year-olds—"My first in two years."

Craig Virgin betrays a trace of irritation when someone suggests he is "back" after a two-year hiatus.

"There was a lot of success during that two-year period," he insists. "It was scattered success, but there was success."

Having qualified for the Olympic Trials at 5000 meters because of his time last June, he expected to post a qualifying time at 10,000 meters during the spring, then choose which

of those two events—or both—to run in the Trials. Yet he claims not to be looking that far down the road.

He says "The Olympics are over-emphasized. I wish they had a world championships every year instead."

He plans to keep running at least through 1980, when he still will be only 24. "I feel I'm too young now to compete against the very best in the world."

He shakes his head at some of the letters he receives, particularly one from a high school champion covering 120 miles a week who could not understand why he had trouble with his knees, his shins, his feet.

Craig states, "My first reaction was, 'What are you as a high school kid doing running 120 miles a week?' I don't even run that much! These high school kids read about Frank Shorter's training schedule, but that's just not right for most people."

This is not to say that Virgin does not train hard. He runs twice a day, even during periods of relative rest. During the regular season he runs 4-6 miles each morning, starting slowly ("above 6:00 pace, but I probably run the last mile close to 5:20"). He puts more effort into the afternoon practice ("the heart and guts of my training program is hard 10-mile runs and good interval workouts").

In the closing stages of this 15-mile workout, he continues to force the pace. The sun has dropped toward the horizon and chill settles over the land. Craig Virgin and his companions are back in town now.

They end the run at his apartment on the edge of campus, a typical runner's apartment with racing posters on the wall, trophies on the bookcase and a weightlifting set on the living room floor. He mixed a strawberry drink to offer his guests, then drives them back to where they had left their clothes.

At the Illinois Armory, he finds an indoor track meet that had begun at nine that morning is continuing at 6:30 in the evening. More than 1100 athletes, most of them high schoolers, are competing. Craig Virgin pauses a moment in the infield and recalls another moment from his past.

"When I was a sophomore in high school, I remember coming to this same meet. It was my first big open race and I was in awe at competing with such great runners."

He smiles, then changed the subject, not willing, like some former blue-chippers, to dwell only in the past. For Craig Virgin, it would seem that the future holds the most promise. ●

They won't give an award for most courageous athlete at the Olympic Trials in Eugene this month. But if they did, hurdler Willie Davenport might well sweep the votes. Davenport, who just celebrated his 33rd birthday, hopes to make it to Montreal for his fourth consecutive Olympic competition. But Davenport's path to Olympic glory has been filled with obstacles, not all of them wooden.

In 1964, Davenport lost a chance for a medal when he pulled a muscle in the semifinals.

He says now, "If I'd known it, I would've made that extra effort to win. Hell, I hadn't even expected to make the team. I had this spirit of not really caring."

Such a spirit is usually foreign to Davenport, whose career is a chiaroscuro study of light and dark seasons. The latest bleak patch was added at the AAU Championships at Eugene last June. Flying over the last hurdle in the semifinals, Willie ruptured a tendon in his left knee.

Davenport reluctantly underwent

ONE LAST BARRIER

by Ruth Laney

An initially disastrous 1968 season featured a distraught Davenport apologizing on the Baton Rouge (La.) TV for losing to Tennessee's Richmond Flowers at the Pelican State Relays which Willie's school, Southern University, hosted.

But later that year, Davenport blew everyone off the track at the Lake Tahoe Trials, running the 110-meter high hurdles in 13.4 seconds. He went on to strike gold in Mexico City, tying the Olympic record of 13.3 and missing a new world mark by a tenth of a second.

In newspaper interviews, Davenport declared that his Olympic career was over, since he planned to try pro football. The New Orleans Saints drafted him in the fourth round but offered a paltry \$15,000 and "a contract with 90,000 if-clauses," so Willie eschewed huddles for hurdles and kept on running.

At Munich in 1972—10 pounds over his normal weight and suffering from a groin pull—Davenport finished fourth, two-hundredths of a second behind bronze medalist Tom Hill. Running in the inside lane, with a poor view of the competition, Willie was unaware he held the lead up to the sixth hurdle.

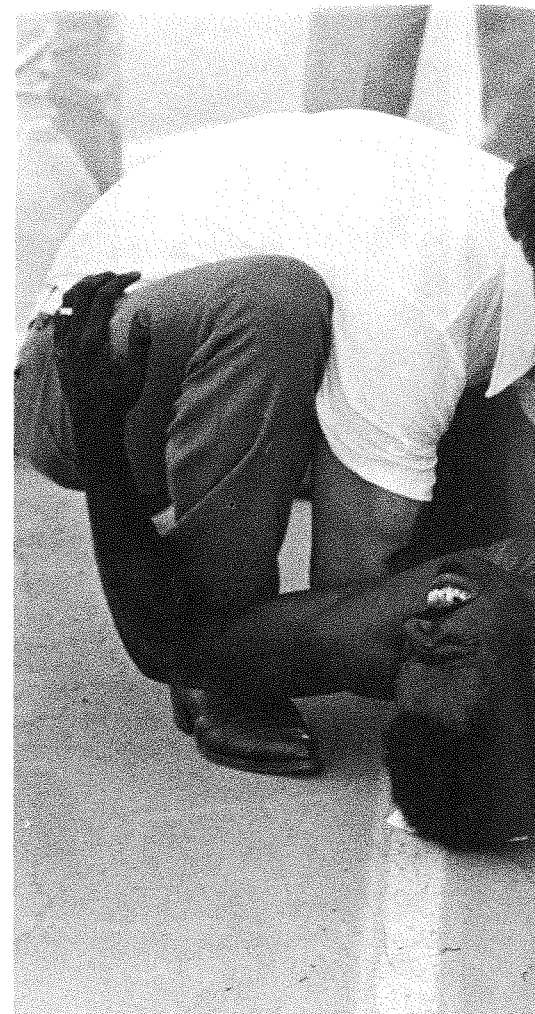
surgery and remained hospitalized for three weeks, during which his doctor, Stan James, discovered a blood clot in Willie's right lung.

But he has recovered well enough to insist, "I think my chances for Montreal are even greater now."

Discounting his age, his knee injury (the clot has responded to medication and his doctor says there's no further problem) and the daily pack of Marlboros he smokes, there is his full-time job as executive director of the Mayor's Council on Youth Opportunity in Baton Rouge. The Council provides summer employment and year-round recreation for deprived Baton Rouge kids.

The job is important to Willie, who says, "If it weren't for track and field and the Army, I'd probably be in jail right now. In high school, there was nothing I wouldn't do or try to do. I was a troublemaker, a hothead. Track really turned me around."

In his spare time, Davenport coaches the women's track team at Southern University and is secretary of Athletic Foundation, USA, which scrapes up money to send local athletes to meets. He belongs to the AAU board of directors,

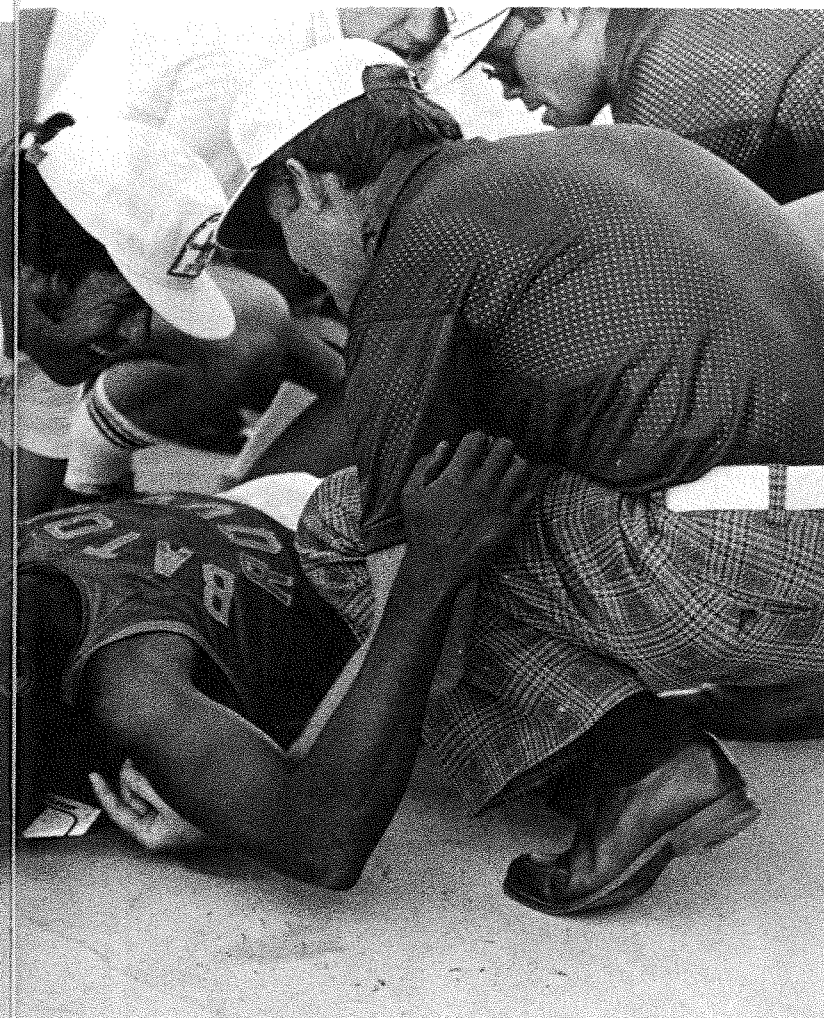


ectors, is track and field chairman of the Southern AAU and is a voting member of the Executive Committee of the US Olympic Committee. Not visibly troubled by the weight of these responsibilities, he calmly assesses his chance for one final blowout.

"Psychologically, I know I'm going to have to work even harder. I feel that with the strong will power I have, I can overcome my disadvantages."

That will power has been developed over many years, in a variety of situations. There was the time in 1964, he says, "when this kid got a quick start and was going over the first hurdle when I looked up. So I put on a burst of speed and caught him, and I pulled a hamstring muscle. I beat him, even with the pull. My coach said that he saw something in me as a hurdler that other people don't have—that killer instinct, I guess."

At a Boston meet in 1967, Davenport ran in the three-hurdle, 45-yard event which is no longer run. "My top competitor at the time, Leon Coleman, was in the lane next to me. When I looked up, Leon was going over the first hurdle, and when I came off the first



Steven E. Sutton/Duomo

Willie Davenport, down but not out. Davenport suffered a serious knee injury in last year's AAU Championships. But now he's hoping to challenge Guy Drut (below, standing) at Montreal.



Steven E. Sutton/Duomo

hurdle, my heel caught and my shoe came off. I went on to beat him with one shoe on. I not only beat him, I set a world record."

At one time or another, Willie has written his name on every high hurdles record in existence. This year, he has a new one in mind. He wants to be the first short-distance man to attend four consecutive Olympic Games.

"The only other runner who's done it is George Young," Davenport notes, "and he was a distance runner."

Among Willie's athletic eccentricities is his disregard for training schedules. According to a 1969 article, he had worked out exactly twice during the previous indoor season—once on his start and once on his hurdling technique—a habit which eventually led to his break with Southern Coach Dick Hill. Has Davenport altered this approach in recent years?

"Basically, no. I almost always take off completely for a week before a race and let my body rest. The body is like a machine. If you continue to grind it, it'll wear out. I think this is one reason I've been able to run for so long—my crazy training schedule. I

don't push myself hard *in training*. If you limit your amount of training, the lifespan of your athletic career is longer."

Yet Willie's main task since last summer has been to get his damaged leg back in shape.

"I was in a cast for six weeks, when everyone else was competing," he says. "When the cast came off, I almost cried. My leg was so weak, I didn't think I'd ever do it. The doctor told me to continue using crutches for a month after the cast was removed, but I started walking without them that night.

"I did isometric exercises at first, just tightening up the muscles. Then I worked out on a Nautilus knee machine. I started doing a little light jogging—at first my knee muscles would really tighten up and feel sore. I could only jog about 220 yards, then I'd have to walk. Next day, I could do about 300 yards. I gradually built up to a quarter-mile, then a mile. One day I got up enough nerve to start running. Another day, I built up the nerve to go over a hurdle. But I was hurdling improperly and it hurt. So I did it properly and it didn't hurt."

During the indoor season, Davenport was hurdling well, although he says he has only regained 80% flexibility in his knee. At the Millrose Games, he was beaten by Tom Hill, but edged France's Guy Drut, 1972 Olympic silver medalist and holder of the world 110-meter hurdles record, whom Willie has singled out as the man to beat at Montreal.

The three hurdlers met again in February at the National AAU Championships. In a photo finish, Drut was the winner, with Hill second and Davenport third.

Right now, Davenport lists his leading competitors for a spot on the US Olympic team as Hill, Charlie Foster and Larry Shipp.

"It's really gonna be tough," Willie says. "Any of the four of us could make the team. We'll be divided by one-tenth of a second. I'm competing with guys much younger than I am. They all call me the 'old man of track and field.' If I can hang in there and beat those youngsters, I'll feel pretty good."

Shipp, who also lives in Baton Rouge, says, "Davenport's gonna be ready, no doubt about it." ●

Ironically, Dr. Joan Ullyot, now one of the world's premier women marathoners, once bought the old husband's tale that women were incapable of running long distances. But then she, like many of the best women runners, never ran a mile before the age of 30.

"Somebody once said that the hardest step for a woman who wants to run is the first one out the door because that's where she has to lay aside all her old ways of thinking, like mine," she explained.

In the last five years, Ullyot has run countless miles in countless races, has studied and trained many other runners, and has written and theorized about women's ability to run long distances. Her life revolves around running—in training and racing, through her work as an exercise physiologist and as the author of the first practical guide to long-distance running for women (*Women's Running*, World Publications, 1976).

Joan lives in San Francisco near Golden Gate Park and the ocean. She is a statuesque and radiant woman, obviously in superb physical condition. The morning we met, she was dressed in a bright orange T-shirt, faded jeans and rumpled warmup jacket, ready for a run.



Lorraine Rorke

JOAN ULLYOT

by Nancy Ziegler

She told me, "I always say that if I could become an athlete, anybody could do it. I was your typical woman of 30—the ultimate creampuff. I was a tomboy until about 11, and then I was told that that was not feminine and that I shouldn't wrestle with the boys in the neighborhood and jump in the sawdust pit. I should wear high heels and stockings and lipstick and behave myself.

"Sports were never emphasized much at school. You tried to excel either in dates or academically. I did do some competitive swimming because it was considered a good idea to do something. But nothing was ever emphasized to us about conditioning the body and practice and what it was for. I thought you went out wholly-made with your talents or lack of talents. I obviously never did much, so didn't have talent and never tried."

The only physical activity Joan had during her early adult years was compulsory gym in college where she dabbled in crew and life-saving and suffered through a Lamaze-type relaxation class on the gym floor that put two-thirds of the class to sleep. A boyfriend got her to bicycle with him to their med school classes, but her interest in cycling waned with her interest in him. After the age of 22, she did virtually nothing except occasionally struggle after her husband on a hike.

She said, "I guess my body, like all of ours after about age 12, started going downhill because I wasn't keeping fit. I lost my endurance if I'd ever had any. If you looked at my list of physical complaints—not just absence of good health, but actual complaints—I had insomnia, constipation, migraine headaches twice a month like clockwork that would last a couple of days. I was rather ill-tempered and tense. Looking back, I

think I never was really alive. I didn't have the same sensual enjoyment of the world that I do now."

So what made her step out the door that first day and run?

"I wanted, frankly, to lose my middle-age spread. I was sitting out on the grass at Golden Gate Park one day while my husband and a male friend were tossing a football back and forth, running around the grass, leaping in the air. The other guy's wife and I, both of us doctors, were just sitting on the grass.

"I said, 'Look at those guys running around getting exercise while we're sitting here getting old and fat and there's nothing we can do about it because we can't throw or catch a ball.' I was almost 30."

Then Joan remembered the mile route her husband jogged through the park.

"I thought, 'Maybe we can do that.' It was a revolutionary idea. I'd never

seen a women running. The whole concept was foreign to me.”

It was early in 1970 that Ullyot bundled up in long pants and a turtle-neck so no one would recognize her and jogged a slow mile.

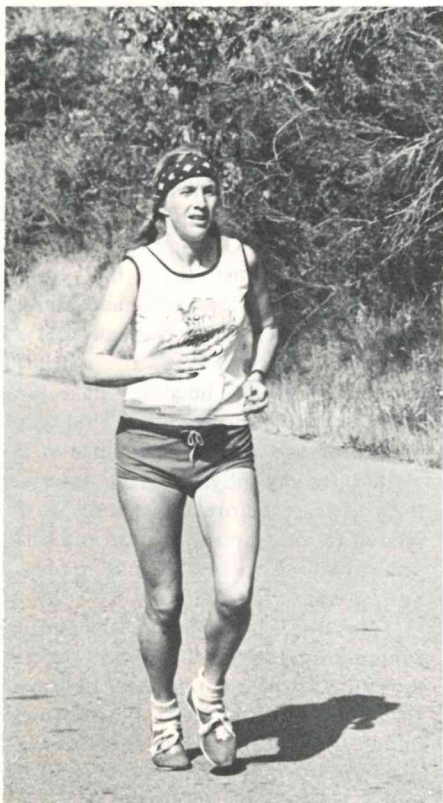
She told me, “I was elated and found out after I’d come out a few times that I actually enjoyed it, especially being out in the park at dusk with the birds singing and the flowers smelling. Running was painful at first. I made a lot of mistakes when I started—sprained my ankles and didn’t wear the proper shoes. But I’d never enjoyed any other exercise before.

“After I’d been running about six weeks, I got dragged along on a three-mile run by being told it was two miles. I finished and felt like a superwoman.”

She ran the huge Bay-to-Breakers race in San Francisco that spring, charging the first three miles, walking the Hayes Street hill, and agonizing the rest of the way because she hadn’t known how to pace herself. Still, finishing the 7.8-mile run gave her the impetus to begin running three miles every day.

“I had no concept of what I was doing,” she said. “The first year I was trying to go as fast as I could. I think it’s when I started reading *Runner’s World* that I got the concept that you can train at a slow pace and still race

Twice, Dr. Ullyot has broken three hours for the marathon. Five years earlier, she was a beginner.



Lorraine Rorke

well. I was trying to push myself faster before I was in condition to go far. My comprehension of what was happening lagged far behind the changes in my body.”

But even so, Joan progressed to longer and longer distances until she was averaging 50-60 miles each week. Finally, after two years of running and more than 30 races, she tried a marathon and finished in a creditable 3:17. Since then, she has run two sub-3:00 marathons (her best is 2:58:09), has run four times at Boston and set the women’s round-trip record on the Pike’s Peak Marathon.

And, in the process, she switched jobs.

“Now I have the fantastic advantage of having my hobby and my work coincide,” she said. “I was a pathologist, doing research full-time in electron microscopy. It was very interesting work, but I’d gotten into running and I was always trying to leave work early to get my run in before it got dark—so you can see the handwriting on the wall. The women I worked with work almost 24 hours a day. I wasn’t willing to make the commitment.

“What I really wanted to do was run and find out about the changes taking place in my body and in other people’s bodies. I felt a little guilty because I’d had all those years of training in cellular pathology. But I’m glad I made the transition. I think I’ve been actually much more useful in exercise physiology than I would have been in cellular pathology.”

Until recently, Dr. Ullyot worked at the Institute of Health Research in San Francisco, where she did research on the effects of exercise and conducted training programs for general health. A number of her proteges ran in the Boston Marathon this year.

Joan explained, “Our whole program was geared to beginners. We insisted on proper shoes first—that eliminated a lot of pain and injuries. We would try to minimize the hurt by gradual workouts, not pushing beyond the aerobic level. After they could run 3-7 miles comfortably through the woods, we’d introduce our runners to racing. That’s where you get most people hooked.

“Suddenly, all their friends are runners and they don’t have much to talk about with others. That’s not really true, but runners seem more energetic and alive. You see the contrast at parties, where the non-runners poop out at 10 or 11 while the runners are vivacious until the early hours of the morning.

“All of my physical problems have disappeared now that I run. I’ve gone from a size 14 to a size 10 dress. My pulse is down to 45-50 from 70-75. I haven’t had one migraine in five years, and I’d resigned myself to having them four days out of every month. I have no problem with constipation; the reverse if anything. And no insomnia; I sleep like a log the minute my head hits the pillow.”

Now Joan consults part-time at the Institute so that she can spend more time with running.

“I really doubt that my role will ever be to actually work in the laboratory doing measurements,” she said. “There are many very competent people around the country doing that. I see my role more as one to stimulate—to stimulate the research by making controversial statements perhaps. I plan to do some writing, possibly more theorizing, and a lot more running.”

It wasn’t until Joan met Dr. Ernst van Aaken, considered the father of women’s distance running, in 1974 that she understood the theory behind what she herself had felt and observed in other women runners: that women excel in endurance activity because of their fat metabolism. Or as van Aaken puts it, “They run off their fat.”

Taking van Aaken’s theory and reviewing all the available literature on the subject, Joan wrote a controversial article (“Women’s Secret Weapon”) in the December 1974 issue of *RW*.

Her basic point was, “Well-trained women usually have about 10% more fat than similarly trained men. They not only contain more fat (fuel) but they know how to use it more efficiently. Since women may burn a higher percentage of fat, their available glycogen last longer and they feel better. The more aerobically anyone runs, the higher the percentage of fat used.

“Dr. van Aaken defines the ideal long-distance runner as having a strong engine (heart) inside a light frame. The average woman will have a lighter frame than a man of the same height and an equally strong engine, since male and female hearts are equally responsive to training. But women may illustrate a third desirable characteristic: “the ability to use ‘high-octane’ fuel in the form of fat.”

Neither Joan nor any of the other leading women marathoners she knows has ever “hit the wall” late in a race. In the face of this rather startling fact, it seems odd that no research has been done on women runners’ ability to

(continued on page 36)

utilize their fat. The only research on fat metabolism in exercise was done in the 1930s on male runners and male rats. But now, in part due to Joan's article, some exercise physiologists are starting to do the necessary research on women.

It's revolutionary to find out that the amount of practice in running fast really isn't very important. The important thing is endurance."

Ullyot also stresses consistency—running every day—and the need to stretch and warm up before each run,

us to run a half-hour later to make sure that all the men finish before the women.

"I'm hoping that if the Russians get interested in distance running we'll automatically see it (the marathon) introduced, because the host country can introduce the events they want. Unfortunately, our contacts with the East Europeans in road running are not very good yet. If the Russians just took an event that women are suited for like the marathon, and put that talent search on it, you'd see some fantastic talent. Look at how well they're doing in the 1500 and 3000 meters.

"What we have in the US is very haphazard. A lot of women who are very fast runners haven't thought of long-distance running. Francie Larrieu could run a fantastic marathon. She hasn't done it because she's afraid that it would ruin her speed in the 1500 meters."

Joan observes that other fast young women are now turning to marathons, most notably Kim Merritt, winner of this year's Boston Marathon.

"My only worry about Kim is that the two marathons she's run have been so painful for her that she'll say to hell with marathoning. She practically killed herself at Boston by running as fast as she could. I was very surprised. I thought she'd either collapse or use more sense and go more slowly. But when I heard her time, that she'd actually done it, I was amazed that she hadn't died. She was taken to the hospital afterwards. This is the problem with young marathoners. They burn themselves out."

Ullyot predicted that some of the more mature runners, like Jacki Hansen, now in her late 20s, will get even better over the next five years. And others like Miki Gorman, 40, and Nina Kuscisk, 37, insist that they started running better after they had children.

"Women marathoners peak in their mid-30s" Joan said. "It's the nature of the marathon—the need for pace judgment, maturity and stamina. That whole matter of age and performance is not related to any physiological deterioration, at least before the age of 50. It's related to the amount of time and effort you're willing to invest in it. I plan to peak in about five years.

"My main principle is to keep my running enjoyable. I always describe myself as being a runner like Ferdinand the Bull. He just liked to sit quietly under the trees smelling the flowers. I just like to run quietly through the woods smelling the flowers." ●



Jeff Johnson

Joan Ulliyot at Boston, 1976.

Joan's book is the first thorough guide to distance running for women. And in keeping with her philosophy that there isn't a whole lot of difference in the way people run, most of the advice on everything from training and racing techniques to care for injuries applies to men, too.

She said, "The concept introduced by (Arthur) Lydiard, (Bill) Bowerman and van Aaken, is that you can add speed to endurance, but you need the endurance base first. After that, the speed comes very quickly. Once you grasp this, then it doesn't matter how you train—whether you do hill work or none or run on the beach or up in the mountains.

"I've had a lot of inquiries from women who are trying to train for the marathon by running 50-100-yard dashes—just complete ignorance. I was totally ignorant, too. In fact, I had no idea that there was a training effect.

something she consistently forgets to do, as she demonstrated by her inability to touch her toes. Her hands reached about mid-shin.

For all her success, Joan and women distance runners like her still don't get the recognition they deserve. She and others fought in vain to have a women's exhibition marathon in the Montreal Olympics this summer. For now, their only realistic hope is to push for a longer distance race, possibly the 3000 meters, in the 1980 Games at Moscow.

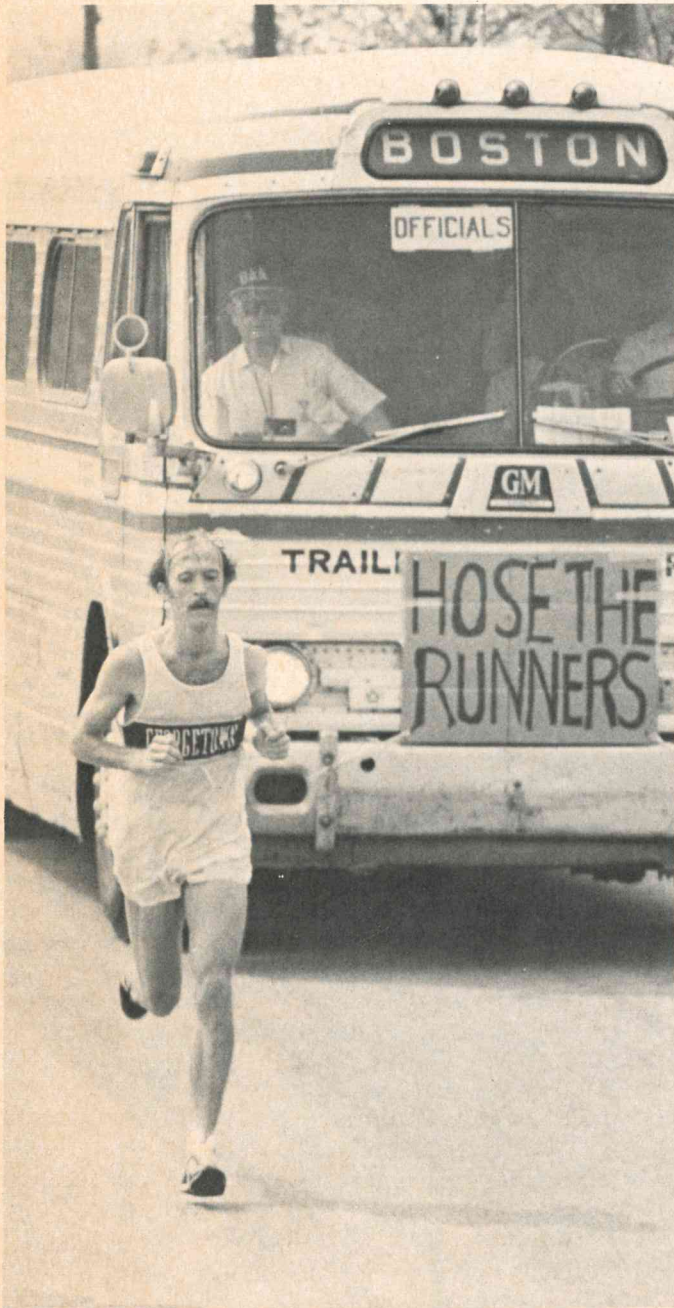
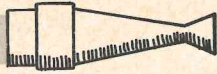
Joan said, "For someone like me that's much too short. I think it's more logical to introduce the marathon. It could be done very easily by using the same facilities as the men. The women could start 15 minutes after the men. But then maybe some of the women would pass the men, so they might want

1976 Boston Marathon



Jeff Johnson

The Run for the HOSES



Jeff Johnson

Two main stories of the 1976 Boston Marathon: Jack Fultz and the plea for help which was answered.

Monday morning, April 19—a holiday morning in Massachusetts.

The proprietor of a tiny walkdown restaurant in what had once been a basement apartment was opening for the day. He worked over the coffee pot as a man in an “Earth Day Marathon” T-shirt sat down at the counter and pulled the sports section from his *Boston Globe*.

In an expressionless voice, more as a statement than a question, the man at the pot said to the one at the counter, “How many of them are going to die today?”

He was talking about the marathoners. Everyone in Boston talks about the marathoners each Patriots’ Day. And he wasn’t asking *whether* there would be trouble but *how much*.

Later in the day, in mid-afternoon, the runners would pass near here on Hereford Street, approaching the finishing ramp at the Prudential Tower a block away.

The street was nearly empty now. But by two o’clock more than 100,000 people would be lining the last mile of the Boston Marathon course.

The prospects of many runners getting this far didn’t appear to be bright. And the ones who did make it promised to offer a grisly spectacle to the crowds.

The problem was the heat. Boston was in the fourth day of a record heat wave. The Sunday temperature had gone to 94, with something even higher predicted for race day.

Runners had been gathering at the Sheraton and surrounding hotels since late the preceding week. At first they were angry and disappointed at the trick nature had played on them. Here they’d come all this way expecting the kind of cheap PRs that everyone had taken away the last two years, and now they would have to work harder for times 10-20 minutes slower.

One runner from California said, “When I came here I was depressed as hell that I’d done all of this work and wasn’t going to cash in on it. The only thing I was thinking about was that I’d lost my chance for a good time. Then suddenly I realized, ‘Hey, what’s a time? I could be losing a lot more out there—like my life!’ I started getting scared and wondered, ‘Should I even run at all?’ ”

Dr. George Sheehan had put a healthy fear into this man and many others on Sunday morning when he’d told a roomful of marathoners, “Everyone thinks we’re talking about someone else when we tell of the dangers of heat stroke. But I can almost guarantee that one of you is going to have serious trouble tomorrow.”

Sheehan paused to let that message soak in. Then he added, “We had a man die of a heat stroke here three years ago, and more than 20 were hospitalized. And it was 20 degrees cooler then than it will be tomorrow.”

Normally, when cardiologist Sheehan speaks he has to pretend he is a foot doctor. Runners are most concerned with their foot and leg injuries. But here, all the doctors had to become instant heat experts because they were getting so many worried questions on this subject.

Dr. John Pagliano, a podiatrist, told a reporter the "danger level" is 82 degrees and 65% humidity. "On a day like this, you should not run a marathon," he said.

Another foot specialist, Dr. Steve Subotnick, said during a lecture on Sunday, "I hope none of you are taking the Boston Marathon seriously. I know I'm not. I feel a lot better knowing I don't have to do anything tomorrow."

Pagliano and Subotnick expressed the growing sentiment among the runners: resignation. A few decided not to run at all. Most threw out their carefully-laid plans in favor of surviving the best way they knew how—by listening to their inner voices which said, "Slow down, dress wisely and drink."

Meanwhile, the Boston newspapers, radio and TV were warning spectators of the danger runners would face. The Sunday *Globe* printed two articles. One, compiled by Boston State track coach Bill Squires, listed the symptoms and treatment of heat stroke. The other article said, "Spectators along the way will play an important role with hoses and sprinklers, bringing some relief to the runners."

Monday morning, a car with a loudspeaker traveled the route. An official asked residents along the way to help in any way they could.

The *Globe* carried an article that morning with an ominous warning from an attending physician, former marathoner Dr. Warren Guild. He said, "It would not surprise me if we're extremely busy. They're going to have a rough time. The most important thing is that they'll have to be taking water. On a day like this, they shouldn't pass one of those relief stations."

* * * * *

The sentimental favorites, if not the competitive ones, were Jack Foster and Miki Gorman. If they won, they would be the oldest man and woman ever to do so. Foster of New Zealand would be 44 in May. Gorman, who was born in China of Japanese parents, was 40.

Age alone made them popular in a race that has an older than usual flavor. No one under 19 can enter. And because of the 3½-hour qualifying mark for veterans, the special division for doctors and the expense of getting here—all of which favor aging runners—the average age of the field probably is in the 30s.

Age aside, though, Foster and Gorman were among the best runners here. Jack won his Olympic Trial marathon on an 80-degree day in February with 2:16.

Miki had won at Boston two years ago, and Boston hadn't forgotten. She sat in the Sheraton coffee shop the day before the race, eating clam chowder and talking in animated Japanese with a reporter-photographer.

The hostess broke in to say, "I remember you. You won here last year . . . no, year before last. I just wanted to wish you good luck."

Miki smiled and said thank you. Moments later, the waitress with an Irish accent stared Miki in the face and said, "Aren't you the one we watched on television before? Why, you're such a little thing!"

Though Miki is 40, she has the unlined face of a 25-year-old and the figure—less than five feet tall, 90 pounds—of a little girl.



Jeff Johnson

Miki Gorman (No. F2) thought her 12 miles a day in training weren't enough. The 40-year-old finished second among women.

A runner came to the table and asked, "How do you think you'll do tomorrow?"

"I'm not in shape," she said. "I will just run it for the experience." We moved into a new home three weeks ago, and I have had my mind more on the home than on running. I wanted to do 15 miles a day, with interval. But I could only do 12 a day—no interval. I am worried."

* * * * *

They all look smaller in street clothes, up close. Jack Foster looked almost frail as he stood in front of the revolving door at the Sheraton, watching the taxis come and go.

He calmly watched businessmen in suits too hot for the unseasonable weather, the Minnesota Twins arriving for a weekend series with the Red Sox, shirtless runners heading off into the warm evening, Star Trekkies gathering for their convention.

A freaked-out Trekkie was being led away by two Boston cops. The young boy pointed and yelled at each of the people lining the sidewalk, "You're dead! You're dead! You're dead!"

A friend approached Foster and asked what was happening. Jack said, "I don't know. It's not my affair."

He had been here since early in the week, and the friend said, "Are you getting bored yet?"

"Bored? How could anyone be bored in a place like this?"

The American Medical Joggers Association, with encouragement from Las Vegas attorney Bill Freedman, had raised the money to bring Foster here.

"Being over 40," Jack said, "I guess I'm a curiosity item."

He laughed to himself. "It's ridiculous, really. A man gets paid to travel halfway around the world just because he can run faster than someone else."

The newspapers had been calling him the favorite. One quoted him as saying, "I think I've got a chance to win or I wouldn't be here. I didn't travel 10,000 miles to come in fourth or fifth."

The quote had sprung from the reporter's imagination, because this is not something Jack Foster would say—even if he felt it.

What he really said was, "I'll be happy with a place among the first six. I can't see myself as the favorite."

Later, Foster was at an autograph party which became a question-and-answer session. Runners overflowed the room.

Q: "You have a reputation for running well in the heat. Is this your kind of weather?"

A: "I guess it might be. I used to be better in the cold and wet. Now it's the other way. I ran a race in Czechoslovakia (in 1974) and it was a disaster. But my races in the heat have been pretty good."

Q: "How do you plan to run tomorrow?"

A: "I'll just play it by ear. I plan to go out pretty solid—five-minute miles for a while—and see what happens."

Q: "What and how often do you drink when you run a marathon?"

A: "I never drink in a race."

Q: "Why don't you drink?"

A: "I never have time."

After the laughter had died down, George Sheehan said, "We have to remember that Jack Foster is a physiological freak. Those of us with normal physiology can't follow what he does."

* * * * *

Jack Foster is no more a freak than anyone else who runs marathons. Because he runs faster than most of us, he approaches his race differently. But it would be a mistake to think that we could go as fast by running his way.

If Foster and the few others who can keep pace with him have a lesson for the rest of us, it is *not* that we should follow them blindly. They have evolved approaches which suit their style of racing, and we should do the same. That is their lesson.

Boston, like all marathons, is an event of Racers and Pacers. The Racers run mainly for position, the Pacers for time. Few runners can place well. The competitors are too many and the prized positions too few. But anyone can go for a good time because the number available is unlimited.

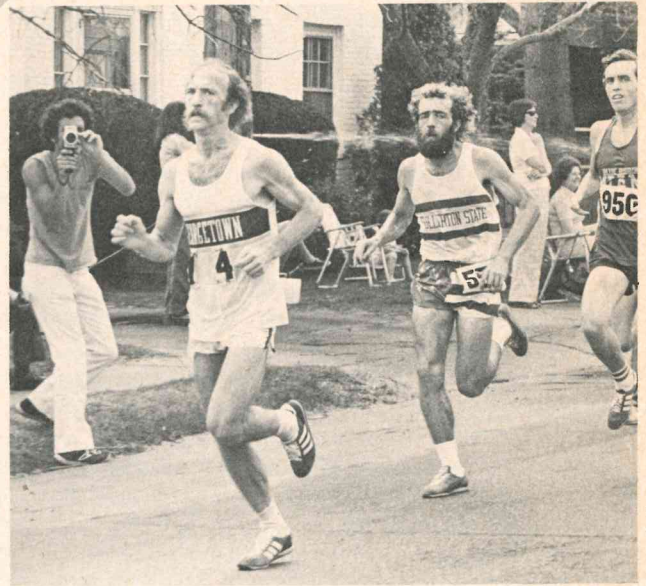
The Racers have to worry about other people—who enters, the kind of shape they're in and the tactics they will use. The Pacers only have to be concerned with weather reports and pacing tables. It doesn't matter to them how they place, so long as the time is right.

For a change, this year the gods who rule running handed an advantage to the Racers while taking opportunity away from the Pacers.

It was a down year at the top, for one thing. The Americans, the Canadians and the British all were having their Olympic Trials within the next five weeks. Ron Wayne was the only US sub-2:20 man to risk a fast race here, so close to the Trials. He may have figured he had more of a chance to win here,

with nearly everyone of his ability missing, than to make the team in Eugene with everyone there.

The coming of the heat didn't do much to change that kind of thinking because all the Racers would feel the same temperature. Some saw it as a benefit. Richard Mabuza of Swaziland and various Latin Americans no doubt smiled through the weekend as the weather stayed like that of their homelands. Mabuza said he had frozen in the 50-degree cold here last year.



Jeff Johnson



Harrison Funk

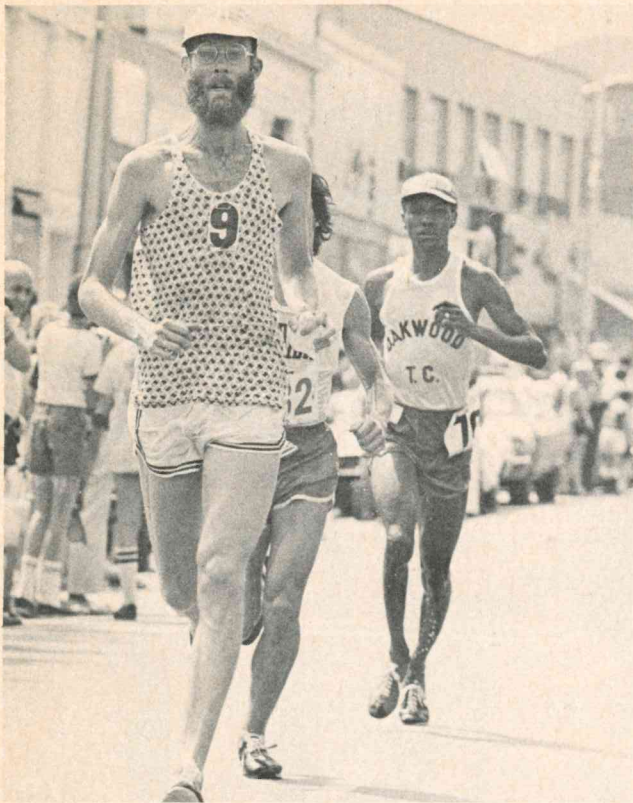
Several others had mixed feelings about the heat. Mark Covert of Southern California is not among the fastest of marathoners (his best time is 2:22), but he is among the toughest of competitors. He finished seventh in the last Olympic Trials after running third for much of the distance. (It was hot there, incidentally.)

Mark was almost unnoticed in Boston, where he wore number 555—a fact which disturbed him more than the heat did. As they sweated in a hotel which hadn't anticipated the weather and hadn't turned on its air conditioning, Covert's roommate (a Pacer) moaned, "Isn't this the pits?"

"Not at all," Mark said, smiling through his curly beard. "I love it. This is just what I was hoping and planning for."

"How do you mean?" the roommate said.

Page 40: Above, Mark Covert (center). Below, Jack Foster. Page 41: Above, Amby Burfoot (No. 9). Below, Dr. George Sheehan.



Harrison Funk



Harrison Funk

"It's been good weather here the last two years, right? Well, there was no way it was going to be that good again. So since February I've been getting ready for this. I've worn full sweats most days. And I've worn at least a long-sleeved thermal shirt even on 75-degree days in LA."

Covert trained in long pants in Boston, even on the steamy 80-degree mornings. He still hadn't qualified for the Olympic Trial. But at first, his view seemed to be that if he ran the competitive race he wanted, time would take care of itself. Then as the temperature kept going up day by day, he began to doubt his choice of Boston as a place to break 2:20 or 2:23.

Amby Burfoot may have had similarly mixed feelings. He is a proven hot-weather runner. He won at Boston in 1968, another Olympic year and another of the hottest days in race

history. Amby had broken 2:23, but he didn't feel he could pay his own way to Eugene. He was using Boston as a chance to earn full expenses with 2:20 or better.

Jack Fultz had the same idea, though no one except his family and friends knew it until Monday afternoon.

* * * * *

A thermometer in the sun outside of Hopkinton High School read 116 degrees. Yet runners were jogging around the grass field behind the school and up and down the village streets an hour before the race. Many were wearing full sweats.

Before 11 o'clock, some were standing or sitting in the hot sun, holding good positions at the starting line. The toll already promised to be high enough without inviting a higher one this way.

A man who had flown here from Germany may have been one of those who thought he needed a thorough warmup or a spot near the front row.

The race was less than a half-hour old when an ambulance shoved its way through the wave of runners to pick up Gunter Rothjamm. Anyone who didn't already have respect for the heat learned it in a hurry by looking at the unconscious figure in the back of the ambulance.

Fortunately, this was the worst part of the race and the worst accident that happened. The temperature was highest about three miles into the marathon. Then help, some natural but mostly man-made, began to come. The air cooled slightly (it would chill dramatically in the last few miles), but the big difference was the hoses. From Ashland on, runners could get a spray or a drink almost continuously.

The attending doctors thought it was something of a miracle. They were prepared for the worst, yet Gunter Rothjamm was the only runner admitted to the hospital in serious condition. Fifteen others were treated, but Dr. Warren Guild put that number in perspective.

"It was a tough day to run," he said. "But we sent fewer people to the hospital this year than we did last year when, supposedly, it was an ideal day for running."

Competence and caution on the part of the runners, and cooperation from the spectators who became participants, turned this potential tragedy into a relatively satisfying experience.

That was how Jack Foster talked of it later in his hotel, after he had finished fourth. "It was an experience," he said, implying that the experience was a good one.

Miki Gorman placed second and looked as happy and bouncy as she had been the day before.

Women's winner Kim Merritt was on TV. Reporters had grabbed her as soon as she crossed the finish line, and she didn't have the strength to resist them. She pleaded, "I can't think straight. My feet hurt so bad." She had an ugly collection of blisters but had come within a minute of her best time.

Mark Covert had dropped out. He said his legs had gone dead at 15 miles. Ron Wayne hadn't finished, either. Both of them had been near Jack Fultz when they pulled out. Amby Burfoot had run with Fultz, too, after it had been the other way around for a while.

"I was following Amby," Fultz said, "figuring he was going to run a good race. Then he started following me."

Burfoot said, "My sock slipped down inside my shoe while I was running with Fultz. I stopped in Natick (about 11 miles), sat down and yelled to my brother-in-law to take it off. The shoestrings were wet and he had to pull them loose with his teeth. I lost several minutes there . . ."

In a few cases, the water took something away. But it would have been a grim day without it. ●

KIM MERRITT: NO PLACE TO BE ALONE



by Dennis McBride

Jeff Johnson

Kim Merritt is not nasty, conceited or masochistic. She is shy and exceedingly complex. She is also extremely hard to beat, opponents have discovered time and again.

Perhaps every introverted distance runner finds bewildering the attention success attracts, and especially so the talented woman marathoner. Because people find women runners fascinating, Kim has been the subject of many stories.

"I'm so sick of reading articles about me I could die," she groaned, and no wonder. The 20 year-old University of Wisconsin-Parkside junior has had no hiding place since she beat the heat and dozens of women runners (and hundreds of men) to win her division of the 1976 Boston Marathon.

Her time of 2:47:10 was only a bit slower than her winning

2:46:14 at the Women's National AAU Marathon Championship in New York last September (December '75 *RW*), an amazing performance in the 90-degree hell that was this year's Boston. Characteristically, the intense Kim was not satisfied.

"I wish I could have run faster," she said. "I wasn't pleased with my time. I don't know how fast I could have run without the heat. But I went out at 2:38 (world-record) pace, which wasn't too unrealistic."

Her first five miles were run in 29:12; her first 10 in 61:00.

"I didn't do anything differently for the heat. But I wish I would have run more slowly in the beginning," she lamented. "Before the race, though, I just decided I'd run as hard as I could."

Sore-footed Kim Merritt looks anything but thrilled by the crowd celebrating her victory. In spite of the heat, she came within a minute of her best time.

Kim knows no other way. To her, a race to be run is a race to be run hard. She is amazed—and more than a little disgruntled—at how reporters viewed her performance. Story after story stressed her triumph over pain. “Parkside Star Never Quit: Kim Ran and Ran, Despite Pain;” “Sickening Experience for Runner,” and so on. Vic Godfrey, her coach and Parkside’s men’s cross-country and assistant track coach, explained.

“She really took off on some of the reporters when they came around,” he said. “She thinks they overplayed it, but it’s true—three weeks before Boston it was doubtful she was going to run. Her ankle was really bothering her. All she was able to do after that was run straight ahead and slow, although she never really runs slow. She’s always moving at a pretty good pace.

“Boston almost became an obsession with her. She said, ‘If I can’t run Boston, I’m going to give up running any more races this season.’ The whole thing almost blew her mind. She even told a local reporter that on the Friday before the race, and his paper printed a story saying that she wasn’t going to run. The last three weeks were really an ordeal for her. It wasn’t until that Friday she made up her mind to run.”

Her feet were also badly blistered by her Boston effort, but Kim does not consider her “triumph over pain” unusual. She ran not less than 100 miles a week all year in preparation, pushing it up to 125 miles the month before.

“I had trained hard for so long that I just couldn’t say I wasn’t going to run,” she said. It’s the kind of statement one would expect from any runner who had worked so hard for one race.

She did do well in the heat, however, displaying a sturdiness in the warm air that would make Frank Shorter envious.

“I never felt hot because the spectators kept spraying me with water,” she said. “I also drank a lot of water, but I didn’t eat oranges or anything like that. If I wanted a sideache, I would have.”

A cold front came through late in the race to drop the temperature by 20 degrees, but too late to help her.

She admitted, “If you’ve run 18 miles in 90-degree heat, it’s already done its damage.”

Stories of her stoicism notwithstanding, she did entertain the typical occasional doubts about finishing. She ran without socks, not uncommon but something unknowing reporters blew out of proportion when they saw her feet being treated after the race.

Godfrey said, “The thing about the socks really blew her mind. She really got mad about everyone writing about her as if she were a masochist or something.” It was the kind of episode that creates problems for well-intentioned reporters who must follow.

It took Kim a week to sufficiently recover from the race, a new experience for her. In her two previous marathons she had no such trouble, but then this year’s race was more demanding for everyone.

“I don’t know if I want you to write that it took me so long to recover,” she said. “People will probably say that women can’t take marathons then, and that isn’t right.” Quick assurances that most men took longer to recover were still not enough to ease her doubts that she should have been so tired.

In a track meet two weeks later, she ran an 880 trial and won the two-mile (11:06.9) one day, and won an exhibition three-mile and the mile (5:06.3) the next before dropping out of the 880 from weariness. She had run much faster previously in all of these events.

How does she do all of this racing?

“I’m used to it by now,” she said. “Last year the coach had me tripling every weekend, but this year I’m only doubling. I feel funny if I go to a track meet and only run one race.” So much for the myth of the weak female.

Surprisingly enough, Kim doesn’t like running on the track, but she has good reason for staying with it.

“I don’t care for track at all,” she claimed. “One reason I’m running this semester is that they offered me tuition and said they’d train me for Boston. I thought I could endure a meet every weekend for that.”

Considering her success (dating from her Wisconsin state high school mile championship days as Kim Piper) it is also surprising that she professes little love for *any* competition. She will always run, she says, but how much longer she’ll compete she cannot predict. She prefers to train endlessly, without restraints. If she doesn’t pour it on, she feels restless.

Godfrey said, “The biggest thing I tried to do for her this year is to get her to run less. The more she runs, though, the more confident she feels.”

Her protests aside, Kim does race.

“You really can’t train hard for long without finding out what kind of condition you’re in,” she explained. “Races now are getting to be like rewards for me, a way of finding out.”

Ideally, she would race about once every three weeks, but the college season makes more severe demands upon her. She would prefer to concentrate on her workouts: eight miles in the morning (often rising with husband Keith at 4:30 a.m. to see him off to work) and 8-14 in the afternoon. Twice a week she runs intervals with the Parkside men, including marathoners Lucian Rosa (2:14) and Ray Fredericksen (2:23). Parkside’s great disappointment was that Rosa injured an Achilles tendon two weeks before Boston and couldn’t run. With his talent and ability to withstand heat, he may have given his alma mater a double win.

At present, Kim has no Olympic plans. The 1500-meter run is too short for her, so she awaits the enlightenment of the International Olympic Committee as to the long-distance running abilities of women. For now, she’ll continue training and studying for a psychology degree, with a possible double major in life sciences. She may go to graduate school.

Most of all, she would like to train horses.

“I had a horse for three years,” she recalled. “I used to ride all the time, but I didn’t have enough time to do that and run. That’s what happened to me in high school, or I would have run better. I had to decide on one or the other, so I sold my horse.” Olympic equestriennes may now sigh in relief and hope she sticks with running.

Godfrey predicts a future 2:35 or 2:36 marathon for Kim. She has the confidence for it but won’t say so. The “Greta Garbo of distance running” does want to be alone.

Her coach said, “She’s always been like this—bashful, shy, retiring or whatever. She couldn’t stand it in the last two marathons when she’s had people swarming all over her. She’s like any other girl, though, when you get her going. She’s real talkative with friends.”

As the final question was asked, Kim simply said, “I’m so glad this is almost all over with.” But she’s wrong. She’s only beginning to have the times of her life. ●

The race goes to

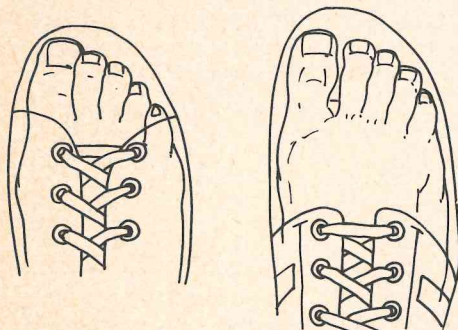
We believe that at New Balance; it's the corollary to our basic theory of width sizing for athletes ("Show me a runner whose shoes don't fit, and I'll show you a loser"). More and more athletes seem to be agreeing with us too. In the past year, runners wearing New Balance shoes placed third in the Boston 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.



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.



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.



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*.

New Balance Shoes are available at these fine stores:

Arizona: Pinney & Robinson, Phoenix. **Arkansas:** Cullem & Boren, Little Rock. **California:** Alameda Sporting Goods, Alameda / Jim Davis Sporting Goods, Berkeley / Loeschhorn's New Balance Athletic Shoes, Costa Mesa / All Pro Sporting Goods, Encino / Stub's Five, Escondido / Acme Trophy, Haywood / Sports Inc., Oakland / McIntosh's, Sacramento / Sargent's, Sacramento / Valley Athletic, San Jose / Olympic Sporting Goods, San Francisco / Athlete's Foot, Torrance / All Pro Sporting Goods, Ventura / Athlete's Foot, Westminster / And all 18 Oshman's stores in California. **Colorado:** Athlete's Foot, Aurora / Front Runner, Denver / Metro Sporting Goods, Denver. **Connecticut:** Bensen Athletic Supply, North Haven / Clapp & Treat, West Hartford. **Florida:** Birmingham's Running Shop, Jacksonville / Phidippides, Tallahassee. **Georgia:** Phidippides, Atlanta / Reeder & McGaughey, Atlanta. **Idaho:** Idaho Sporting Goods, Boise. **Illinois:** Front Runner, Chicago / Morrie Mages Sporting Goods, Chicago / Front Runner, Evanston. **Louisiana:** Cullum & Boren, New Orleans. **Maryland:** Varsity Sport Shop, College Park / Athlete's Foot, Lutherville. **Massachusetts:** Gob Shops, Attleboro / Bob Smith, Boston

the fit.



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.



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.

Please send me:

_____ pair 320 at \$26.95

_____ pair 305 at \$24.95

_____ pair 220 at \$23.95

_____ pair Trackster III at \$29.95

_____ pair Competition at \$18.50

length

width

Size: _____

Size: _____

Size: _____

Size: _____

Size: _____

_____ Spare Pair resoling service information

_____ free New Balance catalog

_____ I will include \$1.75 per pair for postage and handling.

I enclose a total of \$ _____. I am also enclosing a foot tracing taken while standing, in sox (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 _____

**new balance
athletic
shoes
usa** 

38-42 Everett St.
Boston, MA 02135

Clark's, Greenfield / Muzinsky's, Lynn / The Runner's Shop, North Hampton. **Minnesota:** Steichen's, Minneapolis / Gopher, St. Paul. **New Jersey:** Effinger's, Bound Brook / Athlete's Foot, Paramus / Marcel's, Ramsey / Rutherford Sports, Rutherford / Levy's, West New York. **New York:** Laux, Buffalo / Paragon, New York City / Wolf's, Rockville Center. **Ohio:** Dave's Running Shop, Delta / All Pro Sporting Goods, Kent. **Oregon:** Bay Area Athletic Supplies, Coos Bay / Cascade Athletic Supplies, Medford / Oregon Athletics, Portland / Sport Shoes Unlimited, Portland / Bill Beard, Salem. **Pennsylvania:** Sportsman, Newtown / I. Goldberg, Philadelphia. **Rhode Island:** Alpine Ski Shop, Providence. **Texas:** Aerobics Activity Center, Dallas / Athlete's Foot, Dallas / Oshman's, Houston / And all Cullum & Boren stores in Texas. **Virginia:** Power Athletics, Falls Church / Irving's Sport Shop, Tyson's Corner. **Washington:** Washington Athletics, Seattle. **Wisconsin:** Badger, Madison / Milwaukee Sporting Goods, Milwaukee. **District of Columbia:** Arena Sport Shop / Irving's Sport Shop / Mitchell's Sport Shop.

Jack Fultz - "Who is that guy?"



David Corn

by Michael Hill

The leader of the Boston Marathon is awash in a sea of technology. This one man, performing the most natural act of running, is surrounded by a multitude of the complexities of machinery—diesel buses with press and officials, motorcycles and cars with police, cameras clicking from the back of a truck, bicycles whirring along behind.

I stuck my head out of the press bus window and watched Jack Fultz maintain his steady pace down Beacon Street, now in downtown Boston, a victory assured. The crowds were getting larger, the cheers louder, the people pressed in on the sides. A police car had to turn on its siren to clear the way.

It came in a rush, but for an instant, the crowds cheering, the siren blasting, the runner running, I clicked on what it must feel like to lead the Boston Marathon. It gave me a chill. I smiled and sat back down in the bus. An illness that cut out the heart of my training had relegated me to riding status,

but I knew I would never have understood this from any other vantage. It seemed worth it.

We sped ahead pulled up near the finish line and heard the cries of the crowd as the leader approached. Fultz rounded that last corner and came down those beautiful 200 yards in front of the Prudential Center. Across the line, he was swept away and handed to the mayor and the governor, the politicians and press. The smile stayed on his face as he walked into the center. The cheers were deafening in the enclosed hallway.

It didn't matter what his name was. He had just won the Boston Marathon and thus he was the most important, most revered person in that city for Patriots' Day, 1976. As he walked past, the people clapped and yelled and then turned to each other and asked, "Who is he?"

It was a question that had been asked all afternoon. Bicyclists were asking reporters, photographers were asking officials, reporters were asking other reporters, "Who is he?"

A week later, the heat of Boston has gone. The high is 47 in the Beantown that day. It is windy and in the 50s as Jack

Fultz runs through Washington's Rock Creek Park and answers the question so many had been asking seven days before. He tells a story of trying to reach that top level of runners, a goal that had always been elusive until Boston, when he had relaxed and stopped striving so hard.

It started with a decision that took him from his small hometown of Franklin, Pa., north of Pittsburgh, in 1966. He had gotten down around two minutes in the half-mile and kind of liked this running. So, instead of taking the expected post-high school route to a technical school, he headed off for the University of Arizona, a semester late.

"I was just a walk-on," he says of that first year. "I was just one of those kids that showed up in his high-top Converse and says, 'I want to run track.' I ran all of those workouts with them that spring in those Converse. They didn't pay any attention to me."

That fall he decided he was going to get a letter jacket to wear around campus, and when everything was added up at the end of the cross-country season he was seventh on the team and got his 'A.' He ran a 4:18 mile in the spring, but then was cut down by an injury.

The next fall he was running about fourth on the cross-country team, ahead of many scholarship runners. But the school refused to do anything for him. So he quit and headed back for Pennsylvania, determined that his running ability would take the financial burden of college off of his parents. Uncle Sam followed him home with a draft notice and Jack opted to join the Coast Guard.

He was stationed in Alexandria, Va., just outside of Washington. He ran in a few military meets, finally going to Africa for an international contest in 1972. But mainly, he got an introduction to road racing with the local Road Runners Club. His success convinced him that top level was within reach. His training went above 100 miles a week.

In February 1971, Fultz entered and won his first marathon, breaking 2:30 by two seconds at the Washington's Birthday race at Beltsville, Md. That year he finished 12th at Boston, in 2:27, just behind Jeff Galloway. A year later, just out of the Coast Guard, he was in the 50s at Boston with about a 2:35. That summer, he dropped out of the Olympic Trial marathon. Galloway made the team in the 10,000 and could have had a marathon spot.

"I kept looking at those people who were good on that level and I knew I wanted to be there. I figured what I had to do was just work harder," Fultz says.

Fultz's training stayed at the high level he felt necessary as he entered Georgetown in the fall with a full track scholarship. He was working out twice a day, mostly road work, but with some tough intervals thrown in.

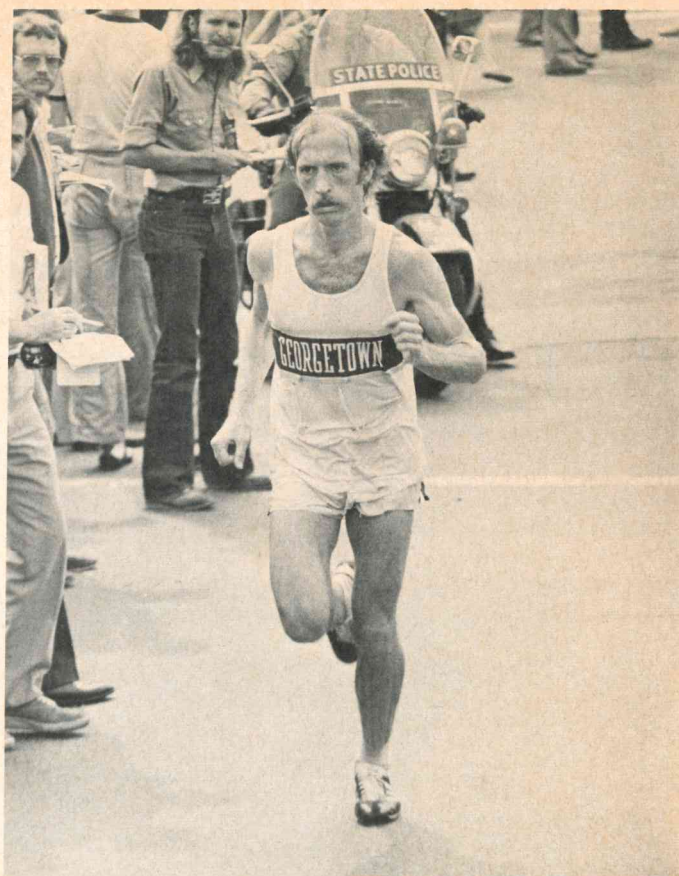
That first year at Georgetown, he ran a 13:34 three-mile and thought things were finally about to happen. But for the next two years of his collegiate eligibility, it was a series of disappointments—not shattering failures, but a nagging inability to transcend from the level of a good collegiate runner to the world-class competitor he felt he was capable of becoming. He never topped that 13:34 for three miles.

Fultz says now, "I've always trained hard, probably too hard. I've left a lot of my best races out on those training runs. In track, there was so much tension I would run, and lose, races before I even stepped on the track."

Just over a year ago, a friend at a collegiate track meet talked to Jack about the importance of resting.

"I had taken time off before, but I had never really incorporated rest into my training program." Jack says.

Fultz's training evolved into something resembling the Bill Bowerman hard-easy program. He was doing about three hard



Jeff Johnson

Fultz said after the race, "Everyone in the crowd deserves a medal."

workouts a week—intervals, hills, a fast 20-miler—and getting in about 15 miles on his "off" days in two easy runs. At 27, with college graduation approaching, Fultz set his sights on the Olympic Trial marathon.

In February, he ran in a marathon set up by the North Carolina Track Club for people trying to make the qualifying standard. But he turned out to be the only runner of that caliber to show up, and he won it in 2:25. There hadn't been that much progress since Boston five years earlier.

High winds cut short another shot at qualifying in late March as Jack dropped out of the Earth Day marathon in New York when he saw the weather would keep him from having a shot at the 2:23 standard. He got in a good 19-mile workout and started thinking about Boston.

There was no sense in worrying about it when Jack Fultz lined up in Hopkinton. This was it as far as qualifying was concerned. He just had to give it his best shot, which he thought would put him in the top 10 and under the 2:23 standard, maybe even under the expense-paid 2:20.

The idea of Fultz's winning hadn't really entered his or anyone else's mind. With the top Americans passing the race up for the Trials, five weeks away, the attention was focused on the reinvasion of the foreigners in this bicentennial year. New Zealand's Jack Foster was a favorite, of course, and with the heat the African and Latin runners became the ones to watch.

It wasn't just a hot day for marathoning. It was a hot day for doing *anything*. There was a feeling of impending doom. Runners' faces were lacking that pre-race excitement. Instead they wore worried expressions. Death had been predicted and seemed expected.

The press bus beat the runners to the first checkpoint with a police-escorted race along back roads. We sat in Framingham at the 6.7-mile mark and waited. The hot-weather runners were out front. Richard Mabuza of Swaziland led with Radamos Vega of Puerto Rico close behind.

It was at least 30 seconds before the big group showed up, starting to string out. Some of the sports reporters were already lamenting a post-race interview through an interpreter. But the runners on board, including last year's winner Bill Rodgers who was writing for the *Globe*, knew there was a long way to go.

Fultz was running somewhere between 20th and 30th. He recalls, "I was following Amby Burfoot, then I noticed that he seemed to be following me, so I started moving up. The heat wasn't really bothering me."

Jack had planned to move up slowly to an eventual finish in the top 10, but 10 miles into the race he was already in that position.

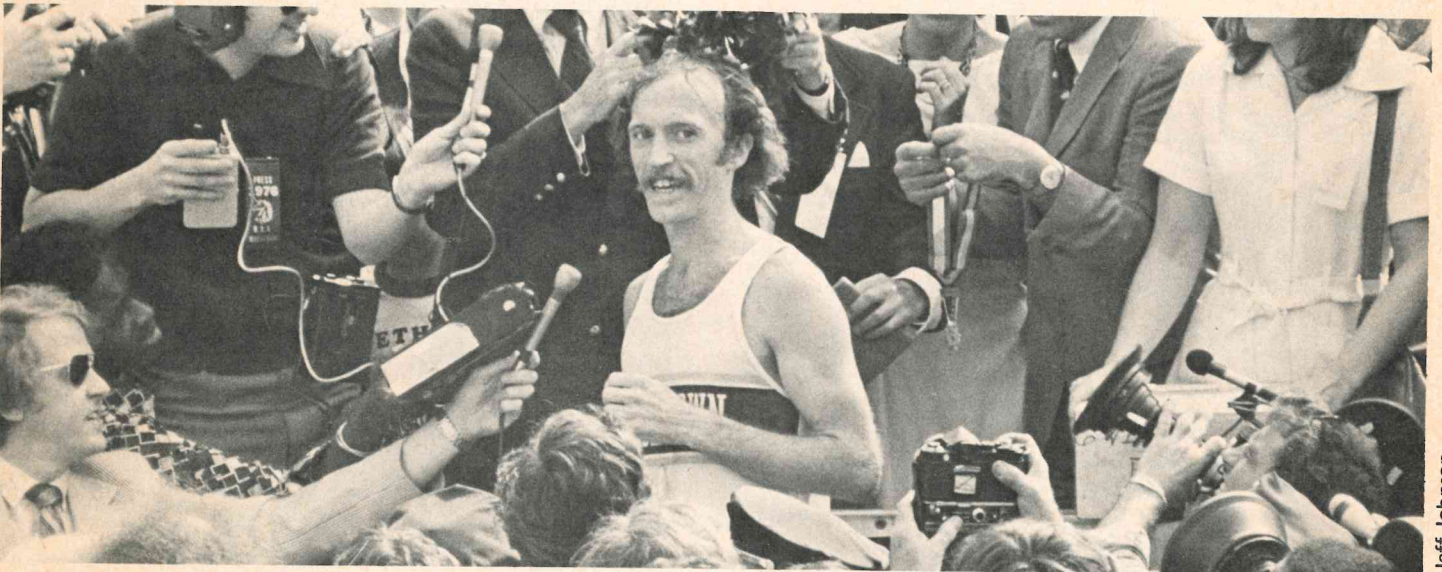
"I couldn't believe it. I could look ahead and see most

anybody," Fultz says. "I was hoping no one would run by me, but I wasn't even worried about that. Even if I finished second, as long as I qualified, I would have done better than I thought I was going to do."

"I was just running along trying to soak up everything that was going on. I was trying to be aware of it as it was happening. Sometimes the idea of leading the Boston Marathon, the crowds cheering and everything, would just get to me and I'd break out in a grin. Then I'd remember and get back to the work I had to do."

Fultz ran a remarkably steady race, almost every mile right at 5:20. The first half was 1:10:02 and the second 1:10:17. He hadn't really spurted when he made his move through the top 10. He had just maintained his pace up the hills and let the others come back to him, as he'd hoped they would.

He sat in a barber's chair in the Prudential Center, answering the same questions again and again. The features of his bony face were sharply etched by his recent effort, his blue



Jeff Johnson

everyone ahead of me, the way they were grouped. I was just trying to keep from getting too excited. I wanted to maintain a steady pace. Eamon O'Reilly, 1970 Boston runner-up, told me to start running at Wellesley (halfway), so that's where I started to move up."

Vega was the first of the leaders to crack. He took the lead briefly around the halfway point, at Wellesley, and then began to fade. He had looked tight from the beginning. But Mabuza still looked loose and in control. Fultz was up to seventh when they went through Wellesley.

The window at the back of the bus was dirty. But with a pair of binoculars, we could make out the white Georgetown jersey as Fultz moved up through the top 10, picking off runners one at a time. We were alongside Mabuza, but the excitement was a few hundred yards behind.

Fultz says, "I was just keeping my pace, trying not to go after them, to let them come back to me."

One by one, they were. Jack admits that once he got Mabuza in his sights, at the beginning of the series of hills that leads to Heartbreak, he probably sped up to take the lead.

"What a beautiful race this guy's running. I wouldn't be out there in that heat," Rodgers said. We thought Fultz was really putting on a charge to get past Mabuza, not realizing at the time how badly the African was falling apart. He finished 36th.

"Once I got into the lead, I figured I had as good a shot as

Fultz's late-race concern was how he would react.

eyes contrasting with his complexion, a pale white. But he kept smiling and answering questions.

"I kept thinking over those last few miles what I was going to say to the press, how I was going to handle this," he said.

Outside of the barber shop, few of the runners paused to look through the plate glass at the media scene surrounding the winner. The remarkable cooperation of those that live along the route, in the form of thousands of gallons of water sprayed from hoses and handed out in paper cups, combined with a cooling coastal breeze that lowered the temperature in the last few miles down to below 70, had averted the tragedy.

The fear was no longer in the runners' eyes, but the heat had taken its toll. The faces looked even more relieved and more exhausted than after most marathons. I had felt guilty riding with the leaders, abandoning these people, my peers—the ones who had come to Boston hoping for a 2:35 or a 2:45 and had struggled to stay near three hours, or the ones who had barely qualified and had hoped for that personal best but with the heat were just glad to finish. It was good to see them.

Jack Fultz might have been the king of Boston, but these people were the ruling class. ●

What a Difference the Day Makes

by John Graham

If you were one of the survivors of the 1976 inferno called the Boston Marathon, it was satisfying to reach the Prudential at all after the 90-degree-plus temperatures at Hopkinton. Yet in retrospect you may be like other finishers, forgetting the heat that made you think seriously of stopping before reaching the ladies at Wellesley and regretting instead the all-too-long finishing time in your running records.

Of course you expected the time to increase. Most of the pre-race estimates heard at Hopkinton gymnasium suggested that 30 extra minutes wouldn't be too bad—if you managed to reach the finish line, of course.

Just what sort of effect did the heat have on the results? How well might you have done in a more benevolent environment? The accompanying graph shows the number of runners who completed the marathon before a given time for both the 1975 and 1976 BAA Marathons. (Note that in 1975 nearly 900 runners beat 3:00 whereas in 1976 only about 400 made it.) The difference between the two curves (1975 and 1976-A) is because of two effects.

- The environment—50-55 degrees in 1975 and a high in the mid-90s in 1976.
- The absence of a number of top-flight runners in 1976 due to the proximity of the Olympic Trials.

The broken curve for 1976 (B) accommodates for this second effect by assuming arbitrarily that 30 top-flight US and foreign runners were missing, and that if they had run they would have finished in times less than 2:35. So the differences between curves for 1975 and 1976 (B) are now due to only to the temperature effect.

One clearly cannot compare times for finishers with times below 2:35 in 1976 since the numbers are few and one would be effectively comparing individual runners rather than statistically significant numbers of runners. However, for runners finishing later than 2:35, the effect of heat is measurable and meaningful.

For a runner finishing in 3:00 in 1976, the effect of heat is 14.5 minutes using curve A 13.5 minutes using curve B (to allow for the full entry if it had not been the year of the Olympics). This means that the runner finishing in three hours would have done 2:46 in 1975 temperatures, which were almost ideal. Similarly, a 1976 finisher with 3:15 would have returned a 2:59 in 1975 conditions.

Now how does your 1976 finishing time look to you?

Note that these figures also infer that the organizers should accept entries for 1977 from all finishers up to 3:16 as if they had finished in the regulation three hours. Will Cloney, please note for consideration!

Assuming that the die is cast in the first half of the race, 1975 was effectively run at 50 degrees while 1976 averaged 90 degrees for the first 15 miles. Thus, for better runners the effect of temperature was an increase of 0.2 minutes per degree while for runners finishing after 3:10 the effect was an

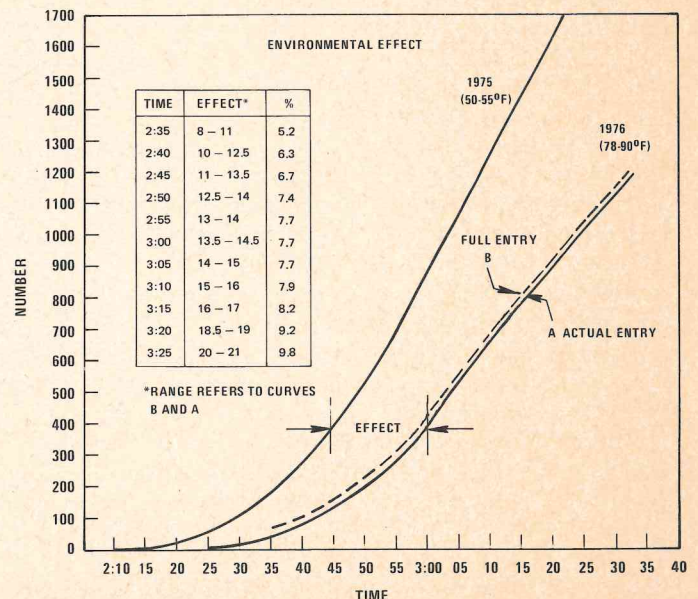


Jeff Johnson

Writer Dennis McBride says, "Runners' faces were lacking in pre-race excitement."

increase of twice this, 0.4 minutes per degree. (This compares with 0.37 minutes per degree reported by Carl Foster and Jack Daniels in the July 1975 *Runners' World* for a study based on only eight runners.)

You should interpret these figures with some care because they simply compare the statistical runner who finishes in the same statistical position in the field. Nevertheless, when I tested the results with predictions for a number of Pittsburgh runners based on the pre-Boston training mileages and previous times, the differences from predictions matched the environmental effects within a minute or so. •



RESULTS OF THE 80th BOSTON MARATHON

MEN

1. Jack Fultz (Va)	2:20:19	66. Laman Palma (Mex)	2:37:47	131. William Harvey (Eng)	2:44:36
2. Mario Cuevas (Mex)	2:21:13	67. T. S. Berger (CO)	2:38:05	132. Timothy G. Rollings (IN)	2:44:37
3. Jose DeJesus (PR)	2:22:10	68. Cletus S. Griffin (OH)	2:38:08	133. Fay Bradley (NY)	2:44:42
4. Jack Foster (NZ)	2:22:30	69. Thomas Clarke (FL)	2:38:12	134. Gary R. Ranalli (Can)	2:44:55
5. James E. Berka (MN)	2:24:32	70. Peter M. Jeffers (NY)	2:38:14	135. Lawrence Jones (MD)	2:45:00
6. Eduardo V. Pacheco (PR)	2:25:11	71. Richard Todd (MO)	2:38:16	136. Daniel Larson (NY)	2:45:09
7. Michael Burke(MA)	2:26:11	72. Peter B. Elliott (IL)	2:38:16	137. Gary Muhrcke (NY)	2:45:10
8. Ron Kurlle (CA)	2:26:21	73. Jeffrey A. Foster (PA)	2:38:22	138. David A. Coyne (NY)	2:45:21
9. Donald J. Slusser (PA)	2:26:38	74. David Aaby (IL)	2:38:26	139. Terrence Gallagher (MA)	2:45:27
10. David Fiskin (NZ)	2:26:43	75. John P. Balsler (NY)	2:38:31	140. Michael J. Cryans (NH)	2:45:28
11. Paul D. Talkington (OH)	2:27:26	76. Gregory D. Carter (TN)	2:38:50	141. Herbert Parsons (MA)	2:45:31
12. Ambrose J. Burfoot (CO)	2:27:56	77. Kazuyoshi Nakada (Japan)	2:38:55	142. Rafael Rivas (PR)	2:45:31
13. Rafael A. Perez (CR)	2:28:15	78. Emilio Rotondi (MA)	2:39:00	143. Timothy J. Pritchard (MA)	2:45:36
14. Norb Sander(NY)	2:28:19	79. William Kraus (OH)	2:39:04	144. Pekka Nurminen (Fin)	2:45:37
15. Tony Wilcox (MA)	2:29:27	80. Leonard Hall (NH)	2:39:06	145. Arlen C. Sunn (MN)	2:45:42
16. Paul D. Thompson (MA)	2:29:38	81. Mark S. Williams (CT)	2:39:10	146. Raymond Swan (Bermuda)	2:45:47
17. Larry A. Frederick (NY)	2:29:40	82. Philip Ryan (CA)	2:39:15	147. William Kone (MA)	2:45:55
18. Hideo Seki (Japan)	2:30:31	83. Thomas J. Kuczynski (NJ)	2:39:27	148. Michael C. McGlynn (Can)	2:45:57
19. Arthur Hall (NY)	2:30:46	84. Stephen Lubar (NY)	2:39:33	149. Kenneth L. Rolston (NY)	2:46:03
20. Duane C. Spitz (MI)	2:30:47	85. David D. Wise (Can)	2:39:37	150. Paul G.W. Fetscher (NY)	2:46:06
21. Kerry W. Mayer (WI)	2:30:56	86. Ralph Thomas (ME)	2:39:46	151. Loren Kambestad (SD)	2:46:29
22. Bruce J. Fraser (WI)	2:30:57	87. Jean F. Ellis (OH)	2:40:07	152. Mitsunobu Fukuda (Japan)	2:46:31
23. Yoshiaki Unetani (Japan)	2:31:08	88. Michael W. Markley (OH)	2:40:12	153. William Hine (MA)	2:46:35
24. Bruce S. Robinson (MD)	2:31:10	89. Jim King (MA)	2:40:20	154. John J. Kelley (CT)	2:46:43
25. George J. Pfeiffer (CO)	2:31:14	90. Daniel Parker (NY)	2:40:31	155. Douglas White (DE)	2:46:44
26. Timothy Fox (MI)	2:31:33	91. Thomas G. Allison (PA)	2:40:33	156. Robert J. Branch (CA)	2:46:45
27. Wayne Roe (MD)	2:31:47	92. George W. Guins (OH)	2:40:35	157. Michael J. Naples (NJ)	2:46:46
28. William J. O'Brian (NY)	2:31:51	93. Lawrence Garner (FL)	2:40:38	158. Francois Wulliemier (Swit)	2:46:50
29. James P. Boyle (NY)	2:31:56	94. Patrick Davis (IL)	2:40:39	159. Frank D. Ratti (OR)	2:46:54
30. Philip B. Stewart (WA)	2:31:57	95. Tetsuji Iwase (Japan)	2:40:42	160. Adolf Lammer (W.Ger)	2:47:01
31. Rob Duncan (MA)	2:32:05	96. Edward Ayres (WA)	2:40:43	161. Manuel Candelaria (PR)	2:47:02
32. Kim Nutter (WV)	2:32:21	97. James L. Lears (MD)	2:40:46	162. Dan L. Fuller (MI)	2:47:05
33. Risto Lindstrom (Fin)	2:32:25	98. Victor J. Matthews (Can)	2:40:59	163. Tommy Derderian (MA)	2:47:17
34. Stephen H. Molnar (PA)	2:32:37	99. William L. Bernard (OH)	2:41:02	164. Steve Shostrom (IL)	2:47:18
35. Antonio Aponte (PR)	2:32:42	100. James J. Gusek (CO)	2:41:12	165. John T. Dalheim (OH)	2:47:21
36. Richard Mabuza (Swazi)	2:32:46	101. Lee Cohee (FL)	2:41:18	166. Robert W. Crowther (IL)	2:47:24
37. Dennis J. Eberhart (AZ)	2:33:22	102. Larry R. Ridgeway (WI)	2:41:23	167. Barry D. Glennan (CA)	2:47:30
38. John T. Cederholm (MA)	2:33:27	103. James F. Green (MA)	2:41:48	168. Tom Dowling (NH)	2:47:37
39. Jeffrey R. Bradley (PA)	2:33:30	104. Dike Stirrett (IL)	2:41:55	169. Skip Shaffer (CA)	2:47:54
40. Samuel R. Maizel (NY)	2:33:48	105. Jerome F. White (NY)	2:42:01	170. Allen W. Smith (VT)	2:47:56
41. Augustin Flores (PR)	2:34:05	106. Robert D. Bazley (NJ)	2:42:09	171. Walter Schlonski (W. Ger)	2:47:57
42. Francis J. Verdoliva (NY)	2:34:16	107. Francis G. McGrath (Aus)	2:42:15	172. Alfred DenBleyker (NJ)	2:47:58
43. Juhani Heiskanen (Fin)	2:34:23	108. Walter Gantz (NY)	2:42:16	173. Takumi Takano (Japan)	2:48:15
44. Clent R. Mericle (TX)	2:34:35	109. Dennis Spars (WI)	2:42:20	174. Ron Gayer (IL)	2:48:16
45. Fritz Mueller (NY)	2:34:38	110. Lee Wilcox (WI)	2:42:33	175. David L. Whybrew (SC)	2:48:23
46. Jack Friel (Can)	2:34:49	111. Peter Senzig (WI)	2:42:34	176. Vincent J. Chiapetta (NY)	2:48:26
47. Heinz E. Wiegand (NC)	2:34:56	112. John W. Bitner (NY)	2:42:42	177. Toshio Kaneko (Japan)	2:48:27
48. Roger M. Gerard (CO)	2:35:09	113. Ronald Kay (MA)	2:42:45	178. Hank Votava (MN)	2:48:30
49. Robert Conn (MS)	2:35:36	114. Scott W. Mosenenthal (NY)	2:42:46	179. Mark P. Sullivan (NY)	2:48:33
50. John F. Grabowski (MI)	2:35:38	115. Fred W. Best (NJ)	2:42:48	180. Neil Weygandt (PA)	2:48:36
51. John F. Hurley (PA)	2:35:42	116. Joseph Kolb (MA)	2:42:54	181. Colin G. Beer (NJ)	2:48:48
52. Galen A. Green (IA)	2:36:02	117. James L. Roberts (NC)	2:42:55	182. Gerald Koch (TN)	2:48:48
53. Kirk R. Randall (NH)	2:36:14	118. Jacques Maineuy (Can)	2:43:24	183. Wade A. Brown (NC)	2:48:51
54. Pedro E. Santiago (PR)	2:36:17	119. Richard L. Caldwell (TX)	2:43:30	184. Fred F. Waybright (WV)	2:48:53
55. Laurence Olsen (MA)	2:36:39	120. John W. Pagliano (CA)	2:43:34	185. Harold D. Tinsley (AL)	2:48:59
56. Koji Uchida (Japan)	2:36:40	121. James Carter (MI)	2:43:41	186. Richard M. Breiner (OH)	2:49:03
57. Milton J. Place (OH)	2:36:59	122. Martin R. Cohen (MI)	2:43:43	187. Howard M. Worthen (Can)	2:49:08
58. David L. Collins (KY)	2:37:04	123. Robert A. Clifford (MA)	2:43:49	188. John S. Lamade (MA)	2:49:13
59. Gunther Brass (W.Ger)	2:37:11	124. Fred Clemmer (Can)	2:43:56	189. Donald M. Brown (PA)	2:49:14
60. Earl K. McGilvery (MA)	2:37:13	125. Carlos A. Conejo (CR)	2:43:58	190. Thomas V. Silvia (MI)	2:49:16
61. Mark Stevenson (MD)	2:37:18	126. Robert P. Gray (MA)	2:44:12	191. Robert T. Dalton (NY)	2:49:24
62. Victor Krol (IL)	2:37:23	127. Edward J. Bosch (PA)	2:44:26	192. Laurence Shea (PA)	2:49:30
63. Ken Ellingwood (FL)	2:37:32	128. Mark E. Bauman (FL)	2:44:27	193. Douglas B. Callison (WI)	2:49:34
64. Kenneth Young (AZ)	2:37:33	129. Richard Giannini (MA)	2:44:30	194. Douglas N. Hawlwey (GA)	2:49:36
65. Steven A. Wilkin (OH)	2:37:46	130. Jerome D. Williams (NY)	2:44:32	195. Wayne M. Dankner (NY)	2:49:38

196. William B. McMullen (NY)	2:49:49
197. Patrick W. Doherty (MA)	2:49:50
198. Jeffrey S. Eversmeyer (NJ)	2:49:55
199. Louis W. Putnam (MI)	2:49:59
200. Jack Brennan (NY)	2:50:03

WOMEN

1. Kim Merritt (WI)	2:47:10
2. Miki Gorman (CA)	2:52:27
3. Dorothy B. Doolittle (TX)	2:56:26
4. Gayle S. Barron (GA)	2:58:23

5. Nancy K. Kent (PA)	3:00:53
6. Marilyn T. Bevans (MD)	3:01:22
7. Claire Spauwen (Hol)	3:04:46
8. Harue Yamamoto (Japan)	3:05:36
9. Lisa M. Lorrain (GA)	3:11:01
10. Liane Winter (W.Ger)	3:12:44
11. Judy A. Gumbs (CA)	3:13:24
12. Kiysko Obata (Japan)	3:14:46
13. Gail M. Gustafson (CA)	3:15:26
14. Joan L. Ulliyot (CA)	3:15:57
15. Toshiko d'Elia (NJ)	3:15:56
16. Penny L. DeMoss (CA)	3:17:24
17. Kathleen Gervasi (CT)	3:17:59

18. Martha L. Gallagher (MA)	3:18:53
19. Christine Allison (PA)	3:19:28
20. Kathrine Switzer (CT)	3:19:35
21. Ruth N. Anderson (CA)	3:20:24
22. Ellen T. Turkel (NY)	3:20:44
23. Nancy Linday (NY)	3:21:12
24. Eleonora De Mendonca (MA)	3:21:57
25. Michele L. Cutsforth (MA)	3:22:01
26. Nina L. Kuscsik (NY)	3:23:08
27. Marty Newell (CT)	3:24:25
28. Jeanie S. Kayser (CA)	3:26:00
29. Carolyn Bravakis (CT)	3:26:25
30. Mary F. Lynch (NY)	3:27:48

More Notes On Topic A

● **Topic A:** How hot was it? Guesses ran from as low as 90 degrees to as high as 120. In fact, the official temperature at the start in Hopkinton was 90, and the high along the route was 96. One thermometer in the sun (which, after all, was where the marathoners ran) registered 116. The humidity reportedly was 60%.

The temperature soared and dipped wildly as a cold front struggled with the heat above Boston. It went from 96 at about the three-mile point in Ashland to 85 at Natick (10½ miles), back up to 93 at Wellesley (halfway), down to 78 through Coolidge Corner (24 miles), then plunged to 60 at the finish. The range in about two hours' time was 36 degrees.

● **Comparisons:** What difference did the heat make? It's easy to quote numbers on that since the best Boston conditions and the worst came just a year apart.

The total field was down somewhat this year, 1898 official starters vs. 2031 in 1975. But the runners this time should have been faster with the stiffer qualifying requirements in effect.

The majority of runners had broken three hours previously. However, only 414 did it here. That's 22%, compared to 44% a year ago.

In 1975, all but 6% of the runners were under 3½ hours. This time, when everyone presumably had done this before, nearly 40% of the starters either dropped out or missed the cutoff time.

Last year, a record 113 men broke 2:30, compared to only 17 here. The 100th finisher last year ran 2:29, this time 2:41.

The women did better. Their 30th placer ran 3:27 in the heat, compared to 3:30-plus with the cool tailwind of '75. However, this may reflect the steady improvement in women's marathoning more than a superior ability to adapt to hot weather.

● **Individuals:** How much was a runner's time affected? It hurt so much that most runners forgot about time and concentrated on survival.

We can get an idea of the heat's toll by looking at the 1975 and '76 times of the leaders. Fourteen men placed among the top 100 both years. Their times averaged nine minutes slower in '76. These ranged from a low of 1:17 for Don Slusser to a high of 16:16 for Ralph Thomas.

Again, the women did better as a group. Of the 10 repeaters among the top 30, three ran *faster* than last year. Ruth Anderson and Martha Newell both improved by about four

minutes, and Harue Yamamoto ran nearly three minutes faster than before. But overall, there still was an average slowdown of 7:28. The two leaders from 1975, Liane Winter and Kathrine Switzer, fell off by 20 and 18 minutes.

● **Bright spots:** Did some like it hot? Mario Cuevas of Mexico and Jose DeJesus of Puerto Rico probably finished higher than they would have on a cooler day. (They were ninth and 17th last year.) The San Blas team from Puerto Rico put three runners among the first 35 for the team title. (The club had won the title last year with a higher score.)

Richard Mabuza of Swaziland said, "When I run, I like to be sweating. (The heat) is all right with me. When it becomes cold, oh trouble!"

Last year in the relative cold, he finished 39th. He ran smoothly in the lead this year until the temperature began cooling and Jack Fultz began warming up.

There's no ready explanation for the surprising sixth-place race of Jim Berka. He had done his "heat training" in the Minnesota winter.

● **Oldies:** Do older runners adapt best to the heat? That was one theory circulating in Boston, and perhaps there is something to it. Jack Foster, 43, was fourth in the men's race. And Miki Gorman, 40, placed second among women. Two more women in their mid-40s, Toshiko d'Elia and Ruth Anderson, ran 3:15 and 3:20.

Anderson couldn't stop shivering for hours after the 1975 race in which she did 3:24. Here, she ran 3:18 and had no after-effects.

Former winner John A. Kelley, now 68, said, "The heat helped me." He ran 3:28.

● **Winners:** How did the heat affect them? Kim Merritt hurt so badly she couldn't talk to reporters, and Jack Fultz (who had said, "I decided not to worry about it") felt so good he couldn't stop talking. Merritt went to the hospital to have her blistered feet treated. Fultz's worst problem was that he lost his number-14, the same one worn by 1975 winner Bill Rodgers.

More so than ever, every finisher was a winner, and few spectators knew who they were because numbers had washed off in the man-made rainstorm.

● **Conclusion:** In 1975, the story of the race was, "Never have so many run so far so fast." This year it was, "Never have so many handled so much heat so well." ●

Children of Boston

by George Sheehan

Like most distance runners, I am still a child, and never more so than when I run. I take that play more seriously than anything else I do, and in that play I retire into the fantasyland of my imagination any time I please.

Like most children, I think I control my life. I believe myself to be independent. I am certain I have been placed on this earth to enjoy myself. Like most children, I live in the best of all possible worlds, a world made for running and racing where nothing but good can happen. And like most children, I am oblivious to all the work done by other people to make it that way.

This is more than faith. Faith is an act of the will made by an adult. The child acts before will and reason and dogma. He simply knows. And the child in me knows that I am in a game that will always have a happy ending. I can enjoy the anxiety leading up to the race, and the tremendous challenge in running, and the sweetness or bitterness of the ending, knowing that whatever happens I am already a hero, a winner. I know that in the end, whatever the crisis, there will always be someone to take care of me.

I hadn't realized this until this year's Boston Marathon. The temperature on Patriots' Day was in the 90s, a level listed as dangerous for livestock and death-dealing to runners. Any thinking adult would have sat this one out. But there I was with 2000 others, dressing at the Hopkinton High School gym.

Then, walking to the starting line, I passed a gasoline station with a thermometer on the wall reading 116 degrees. I passed by undeterred. At the starting line there were hoses to fill our cups, to douse our heads and caps and shirts. The family of man already was operating. The people already were taking care of their children.

The whole thing was absurd. The race should have been postponed until later in the day. There was no way for a runner to go those 26 sun-baked miles to Boston relying on offi-



Jeff Johnson

cial help. Yet I set out knowing I would get whatever I needed, knowing I would survive.

For one thing, Boston Marathon crowds are special. I recall my first Boston and how astonished I was that people called me by name all along the way. They stood in groups with one person picking the names out of the *Globe* so that when I got to them there would be cries of, "You can do it, George," or, "George, you're looking strong," or in the late stages, "Keep it up George. Only three miles to go."

What that can do to a childlike runner previously known only to his family is unbelievable. I felt capable of anything, even completing a Boston Marathon.

This year the crowd outdid itself. Within two miles we were running in the rain provided by hose after hose after hose. There was water everywhere. Mile upon mile of people offered water to drink and pour. The people gave me aid with the same enthusiasm they had shown an hour earlier while supplying the leaders.

In the Newton Hills, I saw this solemn 4-year-old standing with a tiny cup, hoping someone would stop. I did and drank the two ounces and told her, "You're my honey." Boston is like that—a voice, a face, a child that you remember forever.

When I got into Boston, I should have been home free. I wasn't. I was running a poor marathon, and when you run a poor marathon you not only hurt, you hurt longer. I had been out on the roads longer than any time in my 14 years of running. But through all the pain and not knowing whether I would finish and dragging out those terrible miles, I always felt safe. I knew I was surrounded by friends and family and they would take care of me no matter what happened.

I knew, too, that if I stopped they would say, "You gave it your best, George." Whatever I did, I would not disappoint them. Only a child still lives in a world where such days are possible. ●

The Happiness of Pursuit

Running is a pursuit of happiness." This is the theme of Joe Henderson's latest book, *The Long-Run Solution*. He says people run toward the things which make them feel good and flee the unpleasant.

Running obviously doesn't promise everlasting happiness. It doesn't even promise to be fun every minute of every run. Some runners say they only enjoy the feeling they get *after* a run. But overall, running must be a mental plus rather than a minus if it is to continue.

Henderson offers impressive evidence from a number of doctors and runners who tell of the psychological benefits of running. But he warns that these benefits do not come automatically. They must be pursued along a carefully planned path. Otherwise, running may turn to the unpleasantness one is compelled to escape.

Running has picked up an unlikely ally in psychiatrist William Glasser, a non-runner. Glasser writes in his new book, *Positive Addiction* (Harper and Row, 1976) that running is "the hardest but surest way" to reach this desirable state. He says the best results come from running when one is positively addicted to it, and that forming such a habit should be a runner's first priority.

Glasser writes, "Positive addiction increases your mental strength and is the opposite of negative addiction which seems to sap strength from every part of your life except the area of the addiction . . . The positive addict



John Marconi

enjoys his addiction, but it does not dominate his life."

Henderson says positively addicted runners can use the sport as meditation, as mental self-therapy, as a means of travel and sight-seeing, as a social event and as a racing test.

But at its extremes, running also can produce chronic tension, fatigue and depression inside the runner and pressure from outside. These are a drag on one's running and on life in general.

The following series of articles

centers on making running a happier experience.

Robert Bahr is a former editor of *Fitness for Living* magazine.

Michael Bonner reports on runners in Atlanta who are experimenting with transcendental meditation (which, incidentally, Dr. Glasser also says is positively addicting).

Finally, Dick Hessler, a medical sociologist at the University of Missouri, takes a light-hearted view of the runner's state of mind.

Channeling Our Meanness

Choose one:

- Sports encourage aggression.
- Sports discourage aggression.

It's a controversy that's probably as old as organized sports. Yet, for the volume of research undertaken to prove one side or the other, no one has yet produced a convincing argument.

The relationship between sports and aggressiveness is a lot more than one of those armchair debates of the sort that occupied theologians of the Middle Ages (how many angels could dance on the head of a pin, and such). In fact, the very future of civilization may rest firmly on the answer.

Aggression in the sense we're using it here is more than beating someone to a parking space or a sales counter. It's the stuff wars and murders are made of—behavior most of us would prefer to ignore but which nonetheless exists in every community and every nation.

According to one school, aggression is a basic instinct. We can't eliminate it, but thanks to competitive sports we can express aggression in a well-channeled, socially-acceptable way.

Argues the other school, aggression is learned, not inherent. By introducing people to competitive, aggressive sports we actually teach them to fight, conquer and destroy.

Thus, the question takes on an importance that can't be exaggerated. Aggressive sports either play a large role in preventing war and murder or in causing them.

Last June at the American Medical Association's annual convention in Atlantic City, sides were drawn once again on this eternal debate. Richard Grey Sipes, Ph.D., of Long Island University argued for what he called "cultural patterning," the sports-causes-aggression view. Sipes had done his homework. He'd prepared a strong argument, an almost infallible one—but not quite.

Sipes selected 10 warlike and 19 peaceful societies throughout the world, then analyzed the games they played to determine whether they were "combative" or not. They were if they in-

by Robert Bahr

volved the acquisition of disputed territory or property as in hockey, basketball and football, subduing an opponent (wrestling) or actual warlike situations—fencing, dodging thrown objects, karate and the like.

Sipes said, "Of the 10 warlike societies, nine had combative sports and one did not. Of the 10 peaceful societies, only two had combative sports and eight lacked them."

Sipe's recommendation was that "aggressive behavior is best reduced by eliminating combative or conflict-type sports." Obviously, that would include competitive activities like foot-racing, bicycling and such.

Some of us are, of course, addicted to running and racing, and even for the good of the nation and world we might find it next to impossible to kick the habit. We needn't worry, for Dr. Sipes had not shown a causal relationship between aggressive sports and warlike societies at all. He simply has shown a relationship. His work argues as strenuously in favor of combative sports as it does against them.

In a book I have just completed for G. P. Putnam's, to be published this year, I discuss at length the direct relationship between male hormone testosterone and aggressiveness in humans and animals. In animals, there is no question that aggressiveness develops in direct ratio to the amount of testosterone in the blood. In man this relationship also exists, but it is overridden by societal conditioning.

Thus, we do not learn aggression, but exactly the opposite—we learn to *control* our natural biological aggression.

There is evidence that some societies—both human and animal—are more responsive to testosterone than others. Most of us have felt tension building in us at one time or another, and some of us have even resorted to punching a wall, a pillow or a punching bag to relieve that tension. It works. We know it because we have felt the release.

Societies are, after all, simply large

groups of individuals. Just as certain people have a higher psycho-biological level of aggression, so do certain societies. Individuals punch walls to relieve the tension. Societies kick footballs. It's not surprising that more warlike societies attempt to control excessive aggressiveness through sports. It would be surprising if they did not.

The fact that aggressive sports provide a healthy release for aggression was pointed out by another speaker at the AMA convention, Barry Alan Smolev, M.D., of the UCLA Medical Center in Los Angeles. Using a widely-accepted personality test, Smolev found greater assertiveness, individualism and adventurousness among athletes. They were more likely to be action-oriented and seemed to have greater energy levels. Perhaps another way of describing them is that they are more naturally aggressive.

Still, they proved to be more sensitive to other people and environmental demands than were non-athletes Smolev tested.

Among the non-athletes, there was found greater levels of worry, concern and apathy, anxiety, dissatisfaction and self-doubt. Non-athletes were more likely to be uncomfortable in social situations.

Smolev interprets those personality characteristics not as non-aggressive, but as aggression turned upon the self or repressed. A basic principle of psychiatry is that repressed hostility is very dangerous. Not only does it sometimes lead to mental illness, but it occasionally explodes into violence against society. Smolev's study shows that competitive sports offer precisely the positive outlet needed by particularly aggressive personalities.

In subtle measures of aggression, the non-athlete is more hostile than the athlete and less well-adjusted.

The next time you're running, when your lungs are burning, your feet are blistered and you think you can't go another step, look at it this way. Every mile you cover may be putting more distance between you and your destructive tendencies. ●



OMPPhoto

Sit Down and Relax

At this late date, there probably aren't many people who haven't at least heard of transcendental meditation, or the "science of creative intelligence," as it is sometimes called. If you are like me, your curiosity was probably aroused but never quite satisfied—at least not enough to pay about \$100 for the training.

It seemed there was a lot more to TM than gurus and lotus blossoms, particularly where the physical aspects of strength and stamina were concerned. And there were plenty of test results to back up some pretty big claims. But still I wasn't sure it had any value for distance runners.

For instance, the test results reported that there is a noticeable drop in the heart rate during TM sessions. Taken by itself, this might have been predictable, since this occurs in ordinary sleep. But as the TM literature was quick to point out, "Scientists have found nothing similar to the deep rest of TM."

Test results also indicated an improved cardiovascular efficiency through the use of TM, which means that "the heart does less and accomplishes more." Additionally, there was the claim concerning vital (lung) capacity, that "TM increased significantly...the ability to take in and exhale more air, indicating an increased resiliency and elasticity of

by Michael Bonner

the tissues and increased strength of the respiratory muscles."

The most spectacular news was that "the cardiovascular efficiency gained during transcendental meditation (as well as the gains in the vital capacity and other systems) is maintained after meditation during both rest and vigorous activity."

That was it—no strings and no buts. You meditate, you accumulate the results, and the benefits stay with you. Do it, they say, and it doesn't go away. But just what is this "it," anyway?

"Two 20-minute rest periods each day," Larry Reuter of the Atlanta Center of the International Meditation Society told me. "During rest periods, we practice the technique of meditation. This is not a code of beliefs or a set of rules, and it is not a religion."

"And it's not a way of life, and it's not a life-style," said Steve Farrell, also of the Atlanta Center.

So how does it work?

"It's just like taking a bath," Reuter said. "You do it, you refresh yourself, and then you forget about it."

Forgetting that I could understand. But realizing that a good, hot bath probably never helped my running times or anyone else's, I wanted to know more.

Reuter explained, "TM is a direct experience of deep rest, more profound than deep sleep, and it is this deep rest that releases stress. It's not at all passive. It's not a lot of sitting around. Meditation and activity go hand in hand. In fact, meditation gives a person an increased capacity to act."

"More energy?" I asked.

"Potential energy," he explained.

"The energy is there when you want it."

This seemed to agree with some of the data compiled on cardiovascular efficiency, wherein one group of scientists concludes in its report that "TM accomplishes the work of nourishing the tissues and maintains a greater reserve capacity for emergency situations."

I was curious to know how these sets of facts stacked up against middle- and long-distance "emergency situations." Would your average runner really gain all of these benefits?

"Of course," was the consensus reply.

"Everyone?"

"Everyone," they agreed.

"Of the hundreds of thousands of people who have been taught the technique," Farrell explained, "no one has ever failed to learn it."

All that remained was finding a runner who actually used the technique and

(continued on page 56)

had something to say about it. To satisfy me, the data on running would have to come from runners with TM experience and not from charts and graphs.

Luckily, I located several such runners. One of them is Bob Varsha of the Atlanta Track Club, who has been practicing TM for two years. The student at Emory Law School in Atlanta praised TM.

Varsha's most recent marathon effort produced a victory in the Mardi Gras race. Running in what race officials described as "the worst conditions we've ever had," with winds gusting up to 50 miles per hour amid intermittent thunderstorms, Varsha demolished a strong field with a time of 2:20:50. It was Bob's third marathon and a 14-minute improvement on his best time.

His only attempt at this distance before he began to practice meditation was the 1973 Peach Bowl Marathon in Atlanta, which he did not finish.

"It works for me," Bob said. "It's extremely relaxing. Practicing TM every day, the physical effects are undeniable. I find it extremely relaxing."

Bob stressed the mental benefits of TM, and the research done in this area seems to back him up. Studies done on TM on the Freiburger Personality Inventory revealed "reduced nervousness, reduced depression, more self-assurance, more self-confidence, more tolerance in frustrating situations, and increased staying power and efficiency."

Other results showed "a significant decrease in anxiety level." Another pointed to "a positive improvement in self-regard," and yet another cited "increased inner control and increased self-confidence."

Since most runners probably would agree to a point with Marty Liquori's recent assessment on the Johnny Carson

Show that successful running is about 80% mental, these reports would seem to be worth listening to.

Carl DeSantos, an excellent runner himself and a longtime practitioner of TM, is a close friend of Bob Varsha.

"Bob got a lot better," DeSantos said. "He got a lot more confidence in his running. You could see it. It calmed him down. He became more dedicated.

"Of course," he added, "it might have been a coincidence."

In spite of this possibility, Carl has noticed changes in other runners who have tried meditation. "Just look at Wayne," he said.

"Wayne" is Wayne Roach, winner of the 1974 Tuborg-Peachtree Road Race, a 10-kilometer race with an annual entry of more than 1000 runners.

"Wayne is really competitive," he noted. "When he started to meditate, he became less competitive. Meditation calms you down. It mellows you out some. I think it might have calmed him down."

Roach, however, disagreed. "No," he said, "I don't think it helped me that much." (Nevertheless, he admitted that he is planning to continue with TM.)

Wayne's wife Barbara has another opinion. When asked if she thought meditation had made a difference in him, her reply was "most definitely."

Becoming less competitive is seen by Bob Varsha not as a weakness of the system but as a tremendous asset. "The competitive edge," he pointed out, "is replaced with confidence."

The mental and physical changes associated with TM are most easily observed during the direct act of meditating. But at least one runner has felt the effects of meditation during his running.

"It's something," said Sam Barnett, also of the Atlanta Track Club. "You

just look up some time all of a sudden and you notice that you're running like a sonuvabitch."

"I can feel it," Carl DeSantos said. "I can feel my pulse slow down. I can feel my respiration. No doubt about it, you are definitely in a different state."

However, as Varsha pointed out, determining directly to what degree these results carry over into the actual practice of running is difficult. "Overall, the improvement might be there," he explained, "but it's hard to single things out like that."

In other words, the lowered heart rate, the improved cardiovascular efficiency, the improved lung capacity and the other benefits are all there. But it's difficult to draw a line and show where the effects of normal, vigorous training end and the effects of TM training begin.

"After all, that's what training is," Varsha said. "Improving these areas is exactly the type of activity we're involved in to begin with."

When asked if he considered himself a better runner since he started practicing TM, his answer was "definitely."

"However," he added, "it's impossible to say how much of my improvement you can attribute to TM. There's no way to tell."

"The only thing I can pinpoint," DeSantos said, "is that I enjoy it (TM). And if I enjoy it, I might enjoy something else. It carries over into running, and everything else for that matter."

"But does it make a difference physically?" I asked.

"Of course," Carl said. "Look. I haven't had a headache for 2½ years. And now if I get one, I know how to get rid of it."

"All I know is that it works for me," he added, "It's just a shame the training costs so much." ●

Is Running An Illness?

Runner meets Non-Runner and Non-Runner is astounded upon learning that Runner puts in 90 miles a week in training. Non-runner blurts out accusingly, "You must be sick!"

Runner smiles wanly and, in the tradition of the best patronizers, explains to Non-Runner that only runners

by Dick Hessler

can understand the extraordinary satisfaction of competition, long runs and the attendant improvements in health status that running brings. Non-Runner is now convinced that Runner is ill. And Runner is certain that Non-Runner is

only dimly aware of the world around him.

As a medical sociologist and veteran marathoner, I think such exasperating confrontations between the lay public and runners could be reduced considerably if only a simple concept of medical sociology—the "sick role"—could be

applied to running behavior. My thesis is that running is an illness and individuals who have this affliction have the right to assume the sick role, just as victims of kwashiorkor or alcoholism adopt the sick role. Once society recognizes that running is an illness behavior, and that its victims have assumed the sick-role, the relationship between the non-running and running public will improve markedly. Perhaps even dogs will retreat instinctively from victims of running.

Of course, the entire argument rests on establishing the premise that running is an illness behavior. I happen to believe it is, but sociologists in their right minds know better than to argue from personal preferences and an "N of one." For this reason, I shall draw upon an informal survey which I perpetrated upon the unsuspecting members of the Columbia (Mo.) Track Club. Joe Duncan, published the Hessler 10-Item Runaholism Scale in the *CTC Newsletter*. The spouse or any "significant other" of the runner filled out the questionnaire. (Questions were answered yes or no.)

1. Has another person mentioned your spouse's running behavior?
2. Have you ever been embarrassed by your spouse's running behavior?
3. Are holidays more of a nightmare than a celebration because of your spouse's running behavior?
4. Does your spouse's running make the atmosphere in the home tense and anxious?
5. Are most of your spouse's friends running fanatics?
6. Do you find it necessary to lie to employer, relatives or friends in order to hide your spouse's running behavior?
7. Has your spouse ever failed to remember what occurred during a period of running?
8. Has your spouse denied how far he/she has run on a given day?
9. Are you afraid of physical or verbal abuse when you confront your spouse about running?
10. Does your spouse have periods of smugness after a running occasion and criticize non-runners for their perceived torpor?

The questionnaire was completed by virtually every spouse or close friend of the CTC runners. If three or more items were scored "yes," the runner in question was labelled a "runaholic." Analysis of the returns showed that scores ranged from 3-10 and the mean score was an unbelievable 8.9.

This left little doubt, granting the validity and reliability of the scale, that

runaholism is severe and running rampant here in Missouri, the land of grass roots. The question remains, however. Is runaholism an illness?

First of all, by the process of elimination, we can reject the view of some motorists (the ones that aim at you when you are finishing an 18-mile run and are too tired to get out of the way), golfers (the ones who think golf courses are for golfers) and dog lovers (they are all alike) who argue that runaholism is a crime. When it comes to understanding



"Runaholics are ill, and the sick role is a necessary option. . ."

running behavior and all of its complex symptomatology, the aforementioned groups have no sense for sense. Their minds turn automatically to the false, the impossible and the unreasonable.

We can inform sensible persons who believe that running is a crime that any civilization gets the criminals it deserves, for crime is embedded in culture and lawlessness is supported by enduring normative patterns. Criminals provide services which conventional mores would condemn but which most human appetites crave. Crime, in contrast to running which most human appetites abhor and shun as the plague, provides booze, prostitutes, drugs, gambling, protection and all the other desirable but lawless behaviors of the time.

The question concerning running as a form of illness is more difficult to decide. Illness connotes a process in which a pathogenic agent interacts with a susceptible host to produce entropy. But illness is much more than a pathophysiological process. It is an inherently social phenomenon as well.

When one becomes ill, he recognizes the symptoms of the disease and makes some decisions about what to do for the

problem. For serious and persistent symptoms, e.g. running 12 miles a day, the decisions will invariably lead to the "sick role."

The sick role is characterized by four fairly standard expectations which the members of society hold for the encumbent of the sick role.

1. Ill persons who assume the sick role are not held responsible for their incapacity.
2. They are exempted from usual role or task obligations, such as parenthood, home maintenance and so forth.
3. They must want to leave the sick role and get well.
4. They are obliged to seek and comply with technically competent medical advice.

Runaholics are ill, and the sick role is a legitimate and necessary option for the beleaguered runner. The symptoms of runaholism are severe and unrelenting. Unnatural attention to diet, shoe fetishes, withdrawal symptoms when unable to train, and uncontrollable desires to heap verbal and even physical abuse upon dogs and other carnivores are compelling symptoms, and the sick role is a welcome status for the sufferer of runaholism. Without the sick role, the ensuing frustrations would mount and runaholics could possibly unite to overthrow the oppressive social order.

Therefore, the sick role not only provides runaholics with the opportunity for recovery but it protects society from unchecked running behavior. A society of runners with compulsory intervals before breakfast would be unthinkable.

Runaholics must have free access to the sick role, unencumbered by public ridicule and skepticism. Verbal abuse, criticism through the media and pressure to meet family obligations only add to the misery of the illness. Such tactics could incite runaholics to radical action.

Compassion, humor, tolerance and understanding are the best known treatments, although such treatment is merely palliative, since there is no known cure for running. At any rate, even if a cure were discovered, runners would reject it in their determination to continue wallowing in the mire of endless training.

Alas, we must take solace in the aphorism of Boswell who admonished critics to lower their expectations of others who want to do their own thing. As he pointed out, it is not a question of how well a dog walks on his hind legs that counts but rather that he walks at all. ●

Jeff Johnson

Long, slow runs have a lot of things going for them, but I don't think injury-prevention is one of them."

He wasn't saying this for the sake of argument. I'd run with the man on several mornings during National Running Week, and we seemed to agree on the way we like to run.

Now I was in front of the crowd, answering questions about the gentle style of running. He had stood to ask a question. He wasn't challenging me. He simply wanted an answer to a problem of his.

He said, "I love to run this way. But I seem to get hurt *more* often, not less. For instance, every time I try to race, I'm at least very sore for several days afterward. And often I hurt my achilles tendons, calves or knees. The sudden changes from very slow to very fast running seems to be too much of a shock on the legs. Do you think at least a little bit of speedwork is necessary to get used to the stresses of racing?"

I said, "Yes, you have a good point there. It may be possible to race *too seldom* as well as too often. Racing too often can exhaust you and break you down. But if you race too seldom, you may not be up to handling the 'shock,' as you put it.

"This is why I say that about 5% of the total miles should be at racing pace. It seems to be about the ideal ratio, at least for me. It's enough to keep me ready to race without tearing my legs apart, but not so much that it grinds me down.

"So, to answer your question in a round-about way, if you're racing regularly—about one mile in every 20—I don't think you need any supplementary speedwork in training. But if you've gone long periods between races, you may want to do one of two things to be safe: (1) run a couple of 'break-in' races at less than full speed to get yourself used to this kind of stress again, or (2) add a few short, non-exhausting speed runs to your training."

I was talking down to him, talking as if I had all the answers and he had none, and talking in the abstract. As I look back on the exchange now, I see that this runner and I had gone through the same things and he had learned faster than I had. I had raced and been hurt because I hadn't followed either of the recommended paths. There had never been a "break-in" race. Every race was all-out. And I'd never done anything but slow running on all the other days since August 1966.

Only in the past few months have I seen something else which seemed to

Repaying A Small Speed Debt

by Joe Henderson

go against my cherished theories about running. I hurt when I *don't* race. When I go a long time without running fast, my calves, achilles tendons, heels and knees take on a dull, stiff soreness. Racing sometimes corrects it.

It's becoming clear to me now that it isn't the race itself which loosens me up. More often, one set of pains is replaced by another after racing. The reason the race is therapeutic is that it gets me up off my heels and stretches out muscles which have been moving only through a narrow, stereotyped range. A gentle kind of fast running will do the same things without the same risks that racing has.

During National Running Week, I debated with Hal Higdon on the subject of fast vs. slow training. This was odd for a couple of reasons. First, Hal was defending the "fast" side. Several months earlier, he had been involved in a similar debate—giving the "slow" point of view. Our debate came at a time when Higdon was doing all-slow running and when I was starting to question the wisdom of this approach. We found ourselves agreeing more than arguing. We agreed basically that it isn't wise to be dogmatic at either extreme.

Hal has written, "Perhaps the most cogent comment I can make on speed

training is that the top runners use it too much and the bottom runners use it too little . . . My advice would be that the speed runners do less and the slow runners do more, and maybe we'll all meet in the middle."

And when we arrive, maybe we'll find Dr. Ernst van Aaken already is there.

Dr. van Aaken is the German physician-coach-researcher-theoretician whose book, *The Van Aaken Method*, we recently published. It was a hell of a job editing that book. The doctor is a far better thinker and doer than writer, for one thing. He writes in paragraph-long sentences which are as confusing as his method is simple. He repeats and sometimes even contradicts himself.

There were days when I was so disgusted with the whole mess that I would have sent it out the back door to the garbage bin. But in the end I was happy with the book and happier that I'd worked so closely with it. Easy jobs are never examined. They're done quickly, then forgotten. *Van Aaken* wasn't easy, so I had to study it word by word.

I learned from him again. A year ago, he'd taught me how to walk so I could run farther ("The Pause That Refreshes," July '75 *RW*). Now he'd taught me how to run fast without self-destructing.

Van Aaken set the ideal ratio of endurance to speed running at about 20:1—20 easy miles for every hard one. It doesn't mean taking the speed miles in one racing bash followed by a long recovery period, as I once thought. Van Aaken's is a "pay-as-you-go" plan.

Previously, I had taken my weekly or monthly 5% all at once, gone deeply into debt and then spent the rest of the week or month bailing myself out.

It was as if I were doing stretching exercises only a few times a month. I'd forget how to stretch from one session to the next. And I'd make each session so long and violent that I'd need a long time to get over the soreness.

I know I can't do this with stretching. I must stretch a little bit every day to stay loose. I should have known that the same is true of speed. Fitness doesn't come from once-in-a-while torrents of hard work, but from regular dribbles of moderate effort.

Van Aaken has known this for decades. That's why his runners go through a full range of movements each day—mostly gentle running, but with some walking and faster dashes, too.

His Germans end their long runs

with mini-speed sessions. These are no more than one-twentieth (5%) of the total distance, no faster than the pace of one's race, no more than one-fourth the racing distance and are never exhausting.

Dr. van Aaken is a scientist. He is precise in the running he prescribes. The speed sessions are formalized, on the track, measured and timed.

I'm more haphazard about my running. So while I agree completely with the doctor on the proper combination of endurance and speed, I combine them in a somewhat different way.

I'm way past the point of doing anything in running just because it's good for me. I don't run 100-mile weeks or go 20-plus miles on Saturdays or train twice a day or carbo-load or guzzle athletic drinks to gain a few seconds of time. And I won't add speed just for that reason. Racing fitness alone isn't enough to justify it. It must be a plus in terms of the overall pleasure I get from running. There are enough minuses conspiring to stop me without adding a new one.

The first test of anything new I add to my running is, "Did I start doing it without first asking is it worth doing?"

The speed supplement passed this test. One day in February, near the end of an hour's run, I simply started. I didn't plot it out in advance. I didn't think what it might mean to the immediate health of my legs or to my future racing.

It was spontaneous and instinctive. A voice in me shouted "go!" and I went. I accelerated for a minute or so, slowed down to jog for a while, sped up again, slowed, sped. That was enough. The voice which had urged me on was quiet now. I felt loose and exhilarated.

I'm an hour-a-day runner. One-twentieth (5%) of an hour is three minutes. So I now add three minutes of faster running to my usual long and slow runs. It's blended right in without a break, and is done wherever I happen to be at the moment—road, trail, grass, anywhere but a measured track.

The faster runs are not timed, except in the sense that I sped up for 30 seconds or a minute or two minutes. The distance covered in that time is unknown, and I'd rather not know it.

The idea here is to accelerate and decelerate gently, to reach out and drive powerfully but smoothly, to get the feeling of relaxed speed.

The runs are meant to be exhilarating, not exhausting. And they quickly could become a grind if I knew my pace and started racing the watch.

Out of the first few months of running this way had evolved a pattern or plan for speeding.

1. Continue to run the same distances as always. These are based, in my case, on the longest distance I plan to race.

2. Insert the fast runs at will, after a thorough warmup of slow running. I like to do mine after the first 20-30 minutes.

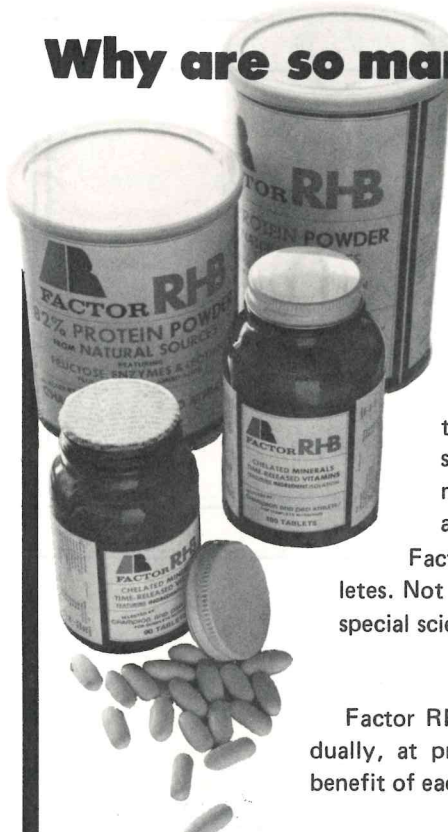
3. Do the pickups at about the pace of the fastest race.

4. Fall back into normal, gentle pace after each pickup. Recover fully before

starting the next one.

5. Run fast for only 5% of the total training time—one minute in every 20. I find it is easiest to use Hal Higdon's approach. Do "three of something." In a 30-minute run, I insert three 30-second pickups; in an hour run, three one-minutes; in two hours, three two-minutes. This works out to a perfect 5%.

6. Don't do the pickups when muscles and tendons are painful and faster running increases the pain. More likely the speeding will have the opposite effect. It has for me. ●



Why are so many Olympic athletes using *Factor RHB*?

First—Many top names in today's Olympic contention use Factor RHB because it provides a balanced dietary supplement of vitamins, minerals, proteins and electrolyte replacement. And they use Factor RHB because it works.

Second—It meets an athlete's exceptional requirements when performing under stress. Factor RHB helps provide greater stamina, reduced muscle soreness and cramping, and faster recovery.

Factor RHB was developed specifically for athletes. Not just Olympic athletes, but all athletes. These special scientific processes insure that it works:

Time-Releasing

Factor RHB is programmed to release its elements gradually, at pre-set intervals. This assures you of the full benefit of each ingredient over an eight-hour period.

Ingredient Isolation

Certain elements can neutralize each other when taken simultaneously. Factor RHB eliminates this by "enteric coating" each element with proteins. Each element thus is isolated until it is metabolized by the body.

Chelation

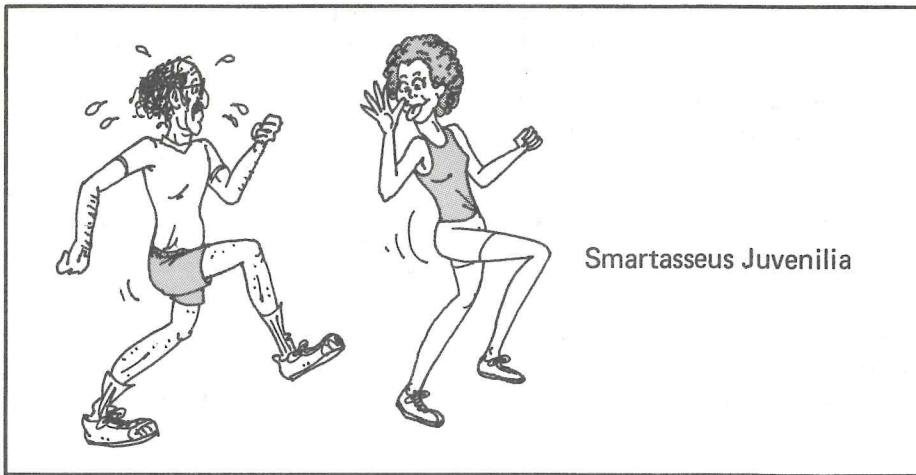
Chelation of minerals in Factor RHB increases the absorption of nutrients.

Order Factor RHB today, or write for more information.

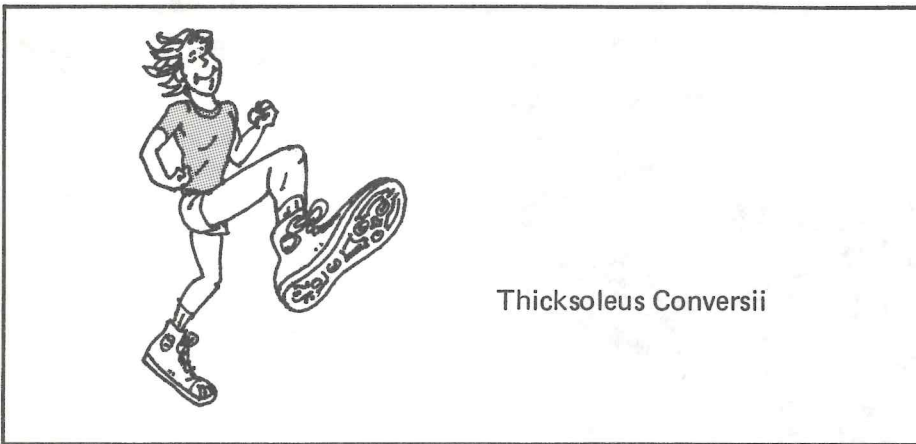
- [] 180 capsules & 1 lb. protein powder, \$14.00 plus \$1.00 postage
 - [] 90 capsules & 10 oz. protein powder, \$8.40 plus \$.75 postage
 - [] 180 capsules, \$10.79 plus \$.50 postage
 - [] 90 capsules, \$6.47 plus \$.50 postage
 - [] Please send more information
- California residents add 6% tax

Send check or money order to:
Factor RHB
 10445 Mary Ave.
 Cupertino, CA 95014

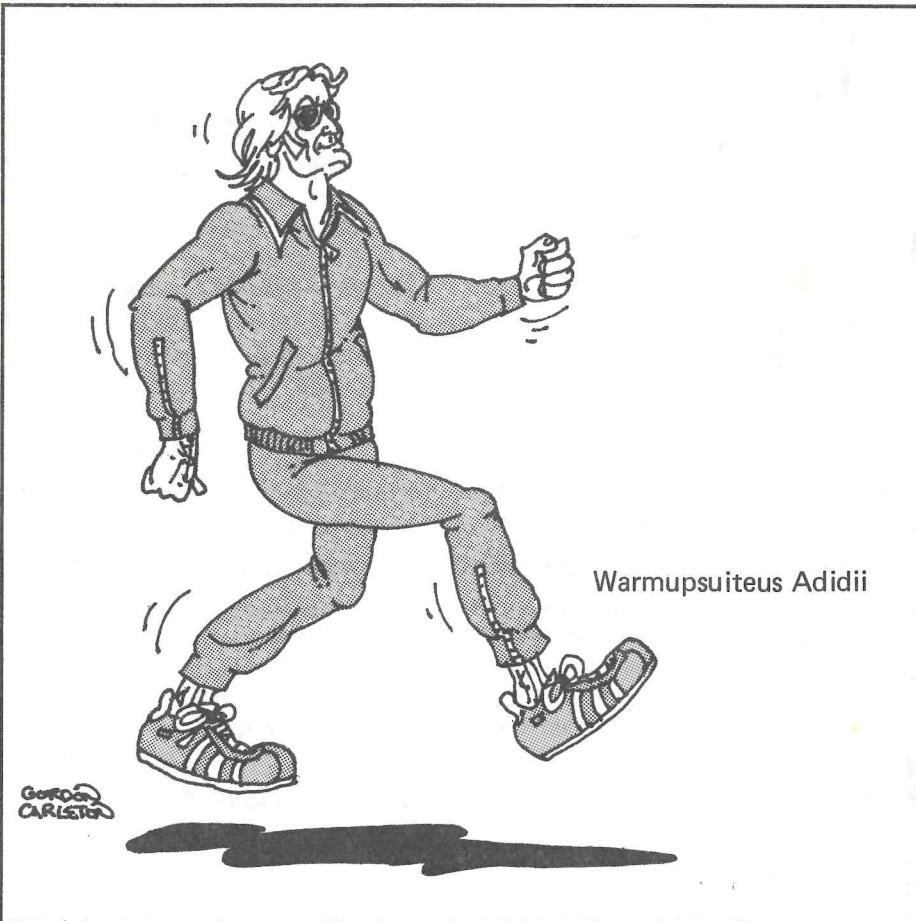
Name _____
 Address _____
 City/State/Zip _____



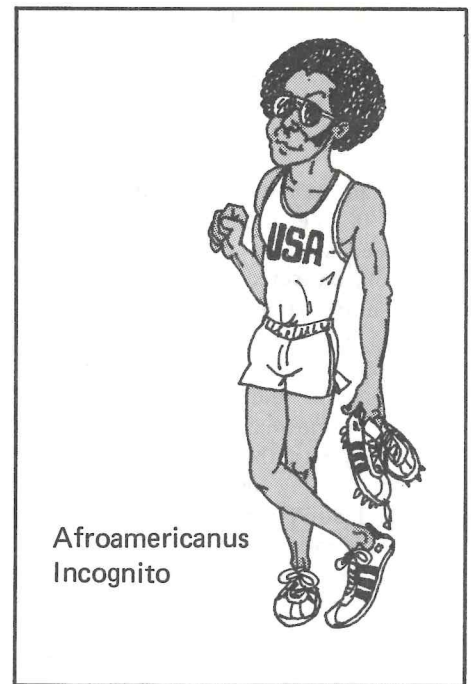
Smartasseus Juvenilia



Thicksoleus Conversii



Warmupsuiteus Adidii



Afroamericanus Incognito

RUN WATCH

by Frances Fruit

A runner is a runner is a runner... right? Wrong! There are numerous types, each with distinctive plumage, call or style of movement. After long and patient observation, I have collected data on several of the most common.

- The Prancing Superstar (*Warmupsuiteus Adidii*): Noted for its gaudy plumage, this type moves as if it were being filmed in slow motion for a shampoo commercial. Usually accompanied by the Adoring Groupie (*Decorative Blondii*) whose plumage includes short-shorts and halter top.

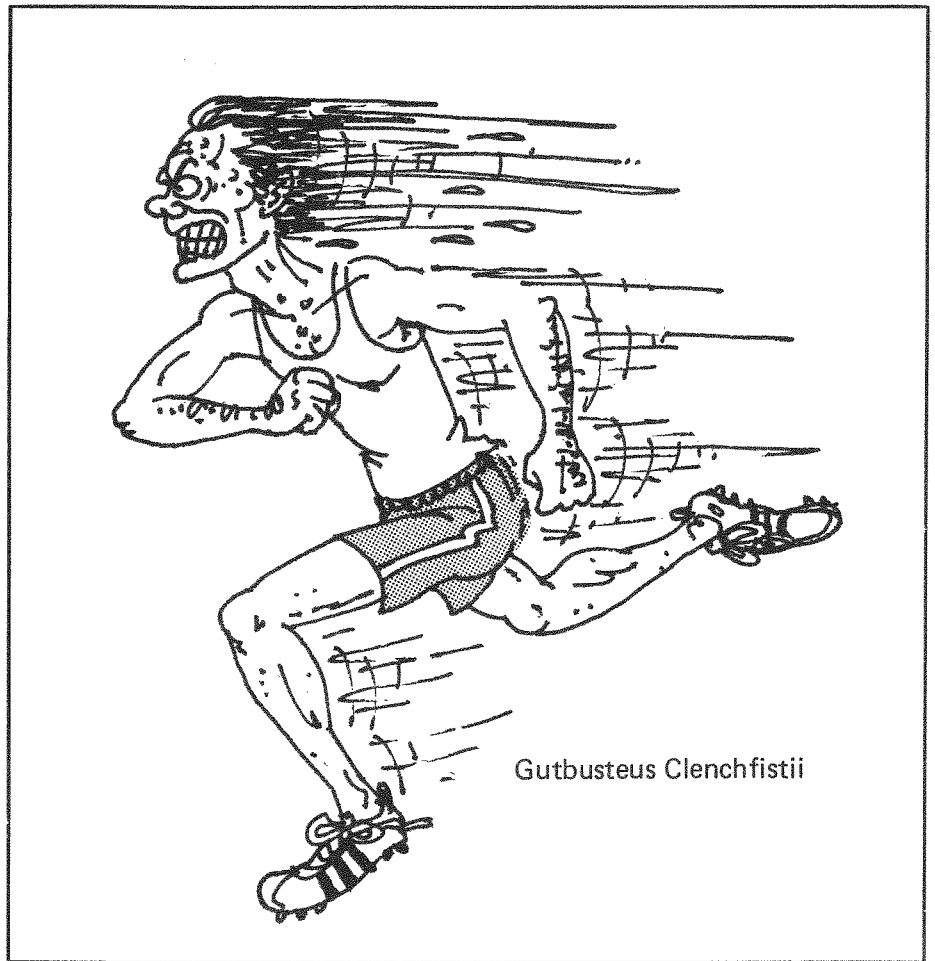
- The Long-striding Flatfoot (*Thicksoleus Conversii*): This type is easily recognized by its unique sound when in motion: thud... thud... thud... thud... Runs exactly one mile in exactly the same time every day of the year. No matter how many flavors of ice cream are offered, always picks vanilla.

- The Child Prodigy (*Smartasseus Juvenilia*): Most often seen by adult runners as it passes them, uttering its dreaded call, "Hang in there, old man!" This type is evolving rapidly, becoming younger and faster every season.

- The Phantom Sprinter (*Afroamer-*



Obesitans Lethargica



Gutbusteus Clenchfistii

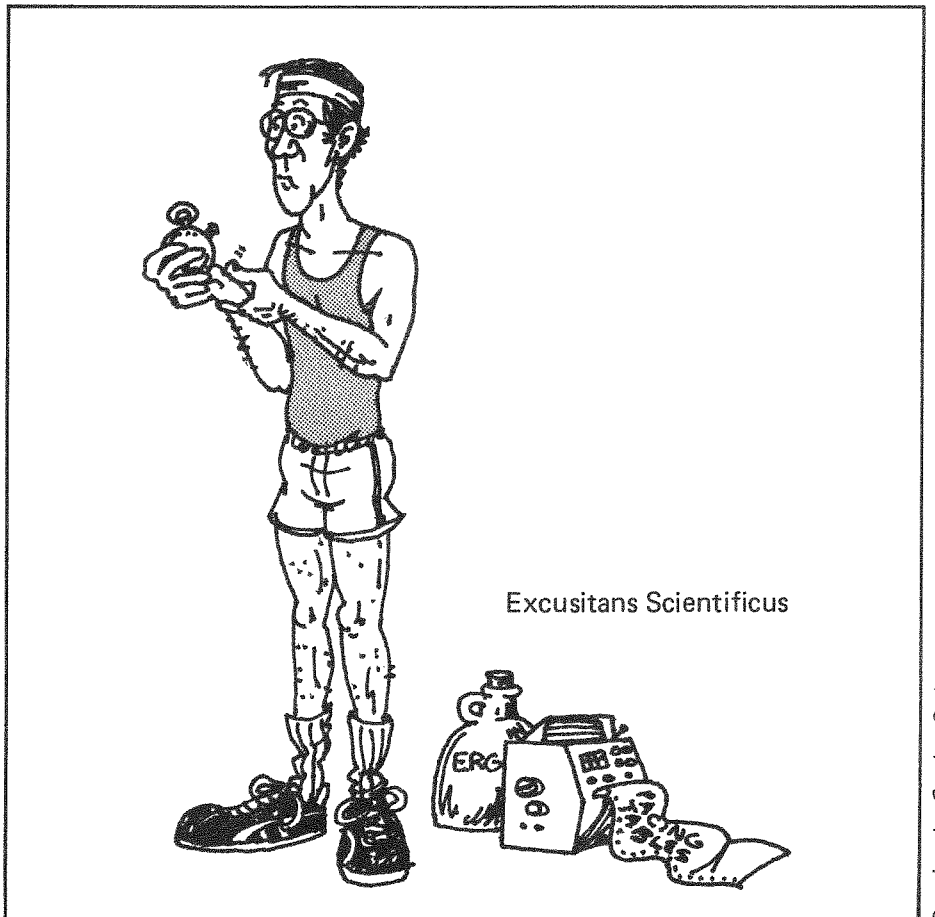
NER HING

icanus Incognito): Striking fear into the hearts of 25.9-second 220 runners, this type can psyche out a whole track club just by showing up wearing shades and warmups with "USA" on them—and then placing second in the three-mile.

- The Shuffling Waddler (*Obesitans Lethargica*): Normal plumage is baggy sweatsuit and \$1.98 tennis shoes. Considers two laps of a quarter-mile track in under half an hour a strenuous workout. The male of the species is sometimes seen in a rubber outfit in 90-degree weather, attempting to sweat off 50-100 pounds of fat in one day.

- The Agonized Grimacer (*Gutbusteus Clenchfistii*): This type most often appears on the first nice day in May, runs three 110s and is not seen again the rest of the year. Occasionally times itself to the nearest 10th of a second, using its wristwatch, between any two randomly-chosen lines on the straight-away.

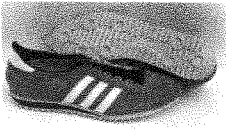
- The Computerized Pacer (*Excusitans Scientificus*): Frequently seen with one hand on a stopwatch, the other pressed to a pulse point, this type *thinks* much better races than it runs. Post-race behavior includes hour-long explanations of its less-than-expected performance, to anyone who will listen. ●



Excusitans Scientificus

We have the top 9 shoes in stock!

Adidas SL 72 & 76



First in popularity and overall quality in the RW shoe survey! A nylon training shoe designed to relieve strain on the achilles tendon, with an elevated, rounded heel. SL 72 is blue with white stripes, SL 76 is green with yellow stripes and has special easy-lace closing. Sizes 6-12, \$29.95, with discount, \$26.95.* Indicate if color can be substituted to speed up processing of your order.



Puma 9190



"Puma's answer to the SL 72... matches its rival point for point in all other respects [besides number of users]—a blue and white nylon training shoe, with a slightly-more elevated rounded heel, slightly-more flexible ripple sole, and high tendon pad. Sizes 3-13, \$29.95, with discount, \$26.95.*

Tiger Jay Hawk



The leading racing flat, designed for distance and cross-country. A lightweight shoe with a thin, flexible sole, rounded heel and gum rubber suction cup tread. Gold nylon with navy stripes, sizes 3-13, \$22.95, with quantity discount, \$20.75.*

Nike Boston '73



Worn by four of the first seven finishers in the '72 Olympic marathon trials. A racing flat with rounded heel, unique stitch-free toe, Spenco insoles, and good arch support. Blue with white nylon, sizes 3-13, \$21.95 with quantity discount, \$19.75.*

Tiger Montreal '76



A light, protective nylon trainer, available in either blue or red with white stripes. This nylon version of the popular Cortez has a ripple sole, wide heel, and color-coordinated thick heel wedge. Sizes 3-13, \$25.95, with discount \$23.35* Indicate if color can be substituted to speed processing of your order.

Adidas



**SPECIAL
PURPOSE**

Nike Oregon Waffle



For cross-country and all-weather track racing. Built on a spike last, with rubber nubs which substitute for spikes, and a partial cutaway under the arch. Has small heel lift and good flexibility. Yellow nylon with green trim, sizes 4½-13, \$24.25, with discount, \$21.85.*

Adidas Marathon



For race walking and distance running. Soft, form-fitting goat-skin upper with ventilated, seamless toes and contoured, arch-supporting interior. One of the lightest flats on the market. Blue with white trim, black toe cap and sole. Sizes 6-12, \$36.95, with quantity discount, \$33.25.*

* Special Quantity Discounts

Order three or more pairs of shoes (same or different models) and take special discount price listed with each shoe.

Starting Line Sports

Or Come by 246 Castro Street, Mountain View, CA

ORDER FORM

Quantity	Model	Color	Size	Price	Total

Subtotal

Charge Information: 4-Digit No. (M/C) _____

Cal. res. add 6% tax

Card No. _____

Postage*

Expiration Date _____ Letter Code _____

TOTAL

Check to receive free calendar with shoe order.

Check to order calendar separately. Include \$1.95 plus 50 cents postage, 6% tax in California.

*Postage: \$1.50 for first pair, 50 cents each additional pair.

Name _____

Address _____

City/State/Zip _____

Starting Line Sports, P.O. Box 8, Mountain View, CA 94040

CALL OUR HOTLINE NUMBER (415) 965-3240 TO CHARGE IT TO YOUR BANKAMERICARD AND MASTER CHARGE

New Balance 3:05



New nylon training shoe with special flared heel stabilizes the foot, reduces ankle-roll injuries. Tough but light ripple sole with rounded heel, available in D and E widths. Blue with blue & white trim, sizes 7-12 D-E, \$23.95, with quantity discount, \$21.55.*

Nike Road Runner



A hot new item that's sure to be widely popular by next year, says the survey. Green nylon with blue and yellow trim, rigid heel counter, extra-high achilles pad, thick heel wedge and rounded heel. Sizes 3-6½, 8, 8½, 10-11, 12½, \$20.95, with discount, \$18.85.*

Country

"One of the most popular leather shoes on the market." Gives you the extra support and protection of leather, but weighs no more than some of the nylon training shoes. Rounded, flared heel. White with green trim, sizes 5-13, \$27.95, with discount, \$25.15.*

Tiger Nairobi



"A light but durable shoe which can be used for racing and training. Next to the SL 72/76, it's the most preferred all-purpose model," states the survey. Ripple sole, blue nylon with white stripes, sizes 3-13, \$22.50, discount, \$20.25.*

Runner's Calendar



Free
with every
shoe order:

Adidas Runner



Lightweight trainer of beautiful gold easy-breathing mesh nylon. Built-in wedge and durable star profile sole make for good, hard mileage. Blue velour reinforcements at the stress points add foot protection. Sizes, 7-12. \$34.95, discount, \$31.45*.

FREE!

Attractive wall calendar with striking running photos, quotes from noted runners, and important running dates already marked. Perfect to hang on the wall of your office, den, study or kitchen! \$1.95 if ordered separately.

Looking at People

Notes on the individuals making news this month.

● **Lasse Viren**, who won the 5000 and 10,000 meters at the 1972 Olympic Games but has been experiencing difficulties since then, seems to be getting back in tune as he set a new course record during the recent Helsinki, Finland, 25-Kilometer. Viren bettered Anthony Simmons' old mark of 1:14:29.6 by finishing the course in 1:14:21.2.

Viren has been training in Kenya and returned to Finland five days before the start of the Helsinki race. He was welcomed back to his native land with frigid 35-degree weather during the race.

● **Steve Heidenreich**, the Indiana University miler whose brush with death and miraculous recovery are still being discussed in medical circles ("A Life Saved, a Dream Lost," May '76 *RW*), will be undergoing surgery this July while the 1976 Olympic Games are being conducted at Montreal.

"They took a piece of bone out of my skull after the accident. Now I'll have that replaced . . . something to do with blood going to the brain when I'm exercising, or running hard," Heidenreich said.

Heidi will face surgery this month to repair broken jaw bones.

Doctors have told the 22-year-old runner that he won't be able to resume running until next year and that he'll never be a world class performer again in his favorite event, 1500 meters. Heidenreich says, however, that he is a miler and doesn't intend to become a marathoner.

Heidenreich has been lifting weights and walking without pain since returning to his Watertown, S.D., home. He has regained nine pounds on a liquid diet.

● **Jerome Lewis** writes that when vacationing **Gordon McIlroy** of Great Britain showed up for the first annual Arrow Track Club 10-Kilo race at Sunnyvale, Calif., he discovered he was without shorts or shoes. Gaining no help immediately from fellow runners, McIlroy stepped to the starting line and started peeling down to his bright green "jockey" shorts.

Race Director **Warren Olds** said, "Nothing doing. We'll get you some shorts."

Although it may seem strange for a

runner to show up for a race without his equipment, McIlroy explained that he had gotten separated from his wife who had the car and the running gear.

McIlroy ran as far as he could in his stocking feet and expended substantial effort during the race just keeping his substitute shorts from falling to his knees. He managed, however, to finish the 6.2 miles in 33:12 for fifth place in a field of more than 185 runners.

After the race, McIlroy, still minus his wife and his gear, joined the other runners at a nearby restaurant for the informal awards presentation. He was last seen talking on a pay telephone, presumably still searching for his missing wife.

● An obviously intoxicated citizen at Unna, Switzerland, slipped into a field of 1000 runners during a 100-kilometer run by convincing officials he was the last runner.

As the first control point was being dismantled, an elderly gentleman appeared through the darkness proclaiming, "I'm the last one. If anyone else comes along, he must be drunker than I am."

While at the checkpoint, the gentleman requested that beer be used to fill his cup rather than the traditional tea and added, "Tea is harmful to the body."

The beer lover lasted but 30 kilometers, however, before police removed him from the race.

"The man was an extreme risk in this state in the middle of the night and presented a danger for the other runners," one official said.

● Eight-year-old **Kevin Strain** is youthful proof of the country idiom, "When you're hot, you're really hot." Kevin set four age-group world records in one week during February, which were added to his growing list of at least 50 marks that he has set and reset.

At the National AAU One-Hour Run at Roseburg, Ore., Feb. 21, Kevin broke the six-mile and the 10,000-meter marks for eight-year-olds with times of 38:15 and 39:39 en route to his final distance of nine miles 626 yards. At the Trail's End Marathon one week later at Seaside, Ore., Kevin broke the world eight-year-old record with 3:15:42.

Although Kevin said his idol is the late **Steve Prefontaine**, he might consider 12-year-old **Reggie Heywood** of Mesa, Ariz., who set an age-group marathon of 2:47:09 during the Mission Bay Marathon in January.

Reggie's rather, **Rich**, anticipating criticism that he is "pushing him too hard," said, "when he was six, they said he wouldn't be running by the time he was eight. When he was eight, they said he wouldn't be running when he was 10. He enjoys running."

● The philosophy on life espoused by a 12-year-old runner from the Washington, D.C., area is gaining about as much attention as her excellent performances during three recent outings.

Although **Hannah Rowe** may be shadowed by her sister's excellent running record as a state champion in the 880-yard and mile runs, the youngster placed seventh in a field of 82 at the recent Baltimore Women's 10-kilometer race, second at the Virginia Beach "5" and first place at Alexandria, Va., in the 5.5-mile with a time of 35:30.

When asked about her goals, Hannah shrugged and said, "Take each day at a time, each race in stride and life will fall into place."



Horst Muller

A run with '52 Olympic stars

● Two Olympic champions from the 1952 Games joined some other notables recently for an informal run in Germany. **Herbert Schade**, far left (who was a bronze medalist at 5000 meters during those Games), **Emil Zatopek** (who won gold medals in the 5000 meters, 10,000 meters and marathon), and **Josef Barthel** (who won the 1500-meter in 1952), far right, joined 84-year-old **Arthur Lambert** (who has run the 10,000-meter in 59 minutes), second from right, in an informal run around the park. The four gathered for the run in Arolsen, West Germany, a small town near the city of Kassel, West Germany. ●



NJA Proudly Announces A "Spirit of '76 Jog"



Join the Jogger's Personal Freedom Trail of up to 1776 Miles for Patriotism and Health
in Observance of the American Revolution Bicentennial!

NJA'S THREE BICENTENNIAL JOGGING CHALLENGES:

- I. *The 76-Mile Jog* — A modest challenge for beginners or those with physical limitations. Advanced runners may, of course, accomplish the 76 miles in a special week or two. Completion and certification will earn an attractive, embossed silk ribbon to display in your home or office.
- II. *The 200-Mile Jog* — A more ambitious, but achievable challenge. Completion and certification will earn a distinctive, embroidered emblem for your jogging shirt or jacket.
- III. *The 1776-Mile Jog* — The greatest challenge of all and an achievement to earn the admiration and respect of everyone! Completion and certification will earn a

beautiful and exclusive embroidered emblem, enrollment in NJA's Spirit Of '76 Hall of Fame and national publicity!

THE PERSONAL LOGBOOK & CERTIFICATION 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 Spirit Of '76 Jog Logbook. You may embark on your Bicentennial Jog immediately upon receipt of the Log. Enter the miles jogged daily and the total miles jogged to date in your log. As you complete each the cumulative milestone challenge for '76 and/or 200 miles, notify NJA national headquarters by card or letter for presentation of your earned award. Joggers completing the 1776-mile challenge

must submit their Logbook for certification and presentation of award. The Logbook will be returned with the award.

Throughout 1976, the NJA newsletter, *The Jogger*, will carry reported stories of interest on particular courses or distances run in honor of the Bicentennial.

ENROLLMENT & CHALLENGE COMPLETION PERIOD:

Enrollment for *The Spirit Of '76 Jogs* is NOW OPEN. Just fill in and return the attached Application Form with your \$5.00 fee. Your Logbook will be sent to you on enrollment.

All three Spirit Of '76 Jog challenges must be completed no later than July 4, 1977, to be eligible for the earned awards.

APPLICATION / The National Jogging Association's SPIRIT OF '76 JOG

**Early Enrollment Affords
More Time To Complete
Your SPIRIT OF '76
Jog Challenge—
SO ENROLL TODAY!**

I accept the challenges of NJA's special American Revolution Bicentennial Celebration Jogging Program . . . Enroll me today!

I hope to complete the: _____ 76-mile, _____ 200-mile, _____ 1776-mile Challenge

NAME _____

STREET _____

CITY _____ STATE _____ ZIP _____

DATE _____ Enrollment Fee \$5.00, enclose with Application

Return to: The National Jogging Association, 1910 K Street, N.W., Suite 202, Washington, D.C. 20006 J



SKYLON INTERNATIONAL MARATHON

WHEN: — Saturday, October 16, 1976 — 12:30 p.m.

WHERE: — The Race begins in Delaware Park, Buffalo, N.Y. (see map), runs across the famous Peace Bridge into Canada, continues up a winding, tree-lined road along the Niagara River Parkway to the finish line at brink of the Canadian Horseshoe Falls in Niagara Falls, Canada. The course, which is A.A.U. certified, is basically flat, and the last 20 miles are on a roadway regulated at 30-40 mph.

SANCTIONED BY: Niagara Association A.A.U. (886) and Canadian Track and Field Association.

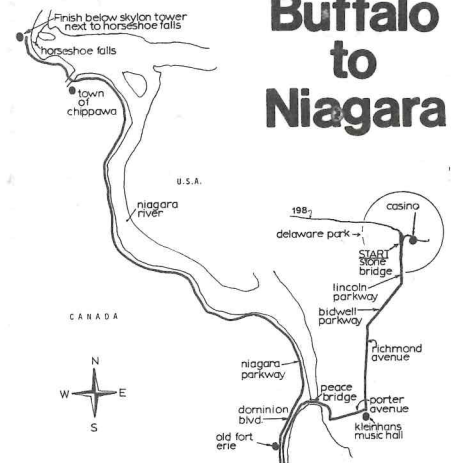
ENTRY DEADLINE — Postmarked midnight September 24th, 1976. No entries will be accepted thereafter. The uniqueness of this marathon, in running from one country to another, requires time for the Customs and Immigration Officials to process entries.

AWARDS—Open—first 15 finishers, 30-34, 35-39, 40-44, 45-49, 50-54, 55-59, 60 and over—first 4 finishers. Women—first 8 finishers; Teams first 3 teams.

FEATURES — T-Shirts and Post-Race Buffet to all entrants. Available to guests at a nominal charge. Certificates to all finishers along with action photographs when possible.

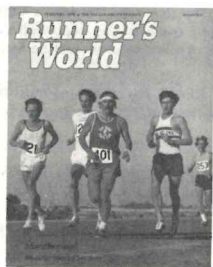
For Entry And Further Information Write:

SKYLON INTERNATIONAL MARATHON
Skylon Tower
5200 Robinson Street
Niagara Falls, Canada
L2G 2A3



Buffalo to Niagara

Announcing the 1976 Marathon Handbook



It's here. The *1976 Marathon Handbook*, printed in the February issue of *Runner's World* magazine.

The runner's, the races, the results. You can find it all in the *1976 Marathon Handbook*. The top 100 marathoners. Also listed, everyone who broke three hours last year.

A look to the future too. All upcoming races through March, 1977. Plan your own marathoning schedule, order your copy today.

ORDER FORM

Please send _____ copy(ies) of the *1976 Marathon Handbook* (February *Runner's World*), at \$2.00 per copy, postpaid.

Name _____

Address _____

City _____

State/Zip _____

Runner's World
P.O. Box 366
Mountain View, CA 94040

Technical Tips

Answering the needs of our readers.

SPRINT MYTHS AND METHODS

Brooks Johnson is on the coaching staff for the US Women's Olympic team. He also coaches world record sprinter Steve Williams of the Florida Track Club.

Track and field myths exist in greater quantity in the US than in any other "technologically advanced" nation. These myths, born of ignorance and arrogance, have held back progress in many areas of the sport, but in particular they have been detrimental in the area of sprinting.

Past philosophies have been either that sprinting was so "natural" it was beyond in-depth coaching, or that it was so "technical" it was beyond the scope of most coaches. But sprinting is still as much of an art as it is a science. "Natural talent," therefore, is still of prime importance. But there are areas where science can be applied successfully. The bringing together of the two, talent and science, can bring common sense to sprinting.

First of all, we use the sprint start to initiate movement, to help us generate acceleration. We can best generate acceleration by thrusting our center of gravity forward enough so that we initiate a falling action. We immediately counter with a recovery-support action. We continue to increase the quickness of the whole cycle until we reach maximum speed.

During the total running exercise we accomplish movement. A generally rotary or cyclical movement of several parts of our body results in horizontal and vertical movement from one point to another. The rotary actions take place in the shoulder region with the arms moving around an axis formed at the shoulder socket. The same is true of a rotary action of the legs as they move in the hip socket.

The faster we can repeat the falling, recovery and rotation, the shorter the time it takes us to get from one point to another. Several factors have a direct bearing on just how fast and just how long we can keep up this activity.

The first trait every successful

sprinter must have is the *coordination* necessary to make the precise muscular contractions and relaxations at the right time in the sequence. This is where "natural talent" is the most prominent factor and where the inborn faculties are most important. Consequently, many coaches have thrown up their hands, categorized the sprints as "natural" and forsaken any responsibility for further study and knowledge about the events.

Strength is extremely important because sprinting has a tendency to use our energy reserves inefficiently. A common error is to assume that just because a sprinter has strength it automatically will result in an increase in speed. Strength development *per se* will not develop speed, but will, if properly incorporated, facilitate the generation of more speed.

In other words, if the development of strength hinders coordination, it actually will not help generate more kinetic speed, although it might be a potential source of additional speed. Strength training has to be incorporated in a dynamic fashion to feed directly into the coordinated efforts of the athlete. As much as possible, strength should not be considered separate from the actual skill of running.

One method that has proven worthwhile is to lift weights *during* practice, thereby guaranteeing that whatever strength develops is immediately followed by exercise that stresses the necessary kinetic function. Lift light weights as slowly as possible to insure that more muscle fibers are affected.

By moving very slowly, we are able to get full resistance, for the full range of the exercise, thereby strengthening the total muscle system involved. By stressing slowly, we are also assured of taking the weight the full range of the muscle contraction and extension, thereby avoiding developing just a small part of the muscle. By taking the weight the fullest possible range of movement, we stretch the antagonistic muscles as well, thereby improving flexibility and strength at the same time.

Flexibility, the ability of muscle groups, tendons and ligaments to stretch easily, is extremely important. We attain our leg movement frequency by the time we are 10 or 11 years old. After that we get faster because we have longer limbs to increase length of strides and to hold maximum frequency longer. Stride length during running is directly connected to the elasticity or flexibility of the muscle groups involved. The less resistance the muscles have against being stretched, the less the fatigue and the less the chances of pulls.

As at the beginning of the sprint race, we need to get our body's center of gravity in front of the legs and feet. For as long as possible, we want to maintain a *forward lean* that will keep our feet from striking in front of our center of gravity. When the foot strikes in front of the center of gravity, an equal and opposite thrust is set up from the ground, working against the forward progress of the runner.

Most sprinters incorrectly try to get more out of their stride by overstriding. They pull their knees up very high and their lower legs stretch out in a sort of drum-major fashion. This increased stride length causes a loss of momentum, especially noticeable in the latter, tiring stages of a sprint. Flexibility in the hips can help compensate by allowing for a longer stride length without over-extending the legs. In addition, flexibility and strength can stave off the ultimate time in the race when forward lean is not possible.

Also connected with body position is the *relative position of certain key parts of the body* at certain strategic times in the running cycle. As mentioned, the legs perform a rotary action around the axis of the hip. The science of physics tells us that rotary motion can be accelerated if we simply shorten the radius of whatever is moving around the axis. In sprinting, we should strive to keep the legs on their upward and recovery phase, as tight as possible to the buttocks, thereby shortening the radius and increasing rotary velocity.

The same principle is true of the arm action. If we seek a faster movement from it, then we merely have to shorten the radius, or hold the hands higher.

Sprinters who seek to increase their leg stride by swinging their legs and arms long should be aware that they are setting up a situation where they are actually slowing their body movements down. To keep these body movements at a competitive rate for long requires added strength that runners may lack.

(continued on page 68)

VAN AAKEN

Expert **RUNNING** information from a running expert

Most runners have never even heard of him. But almost every runner has been affected by the research and training methods of Dr. Ernst van Aaken.

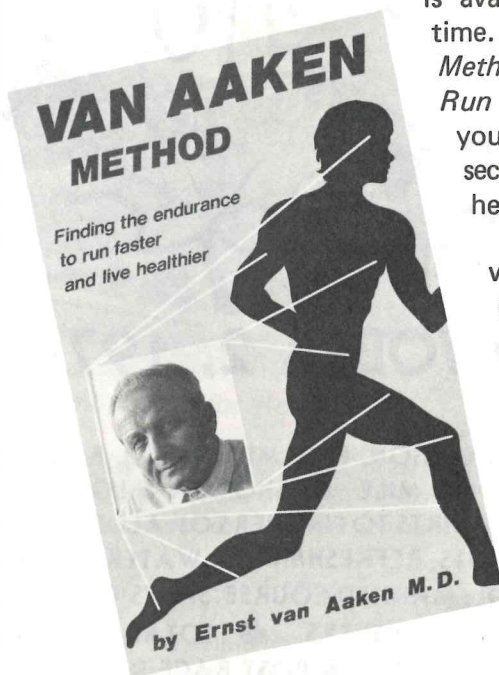
Much of running's popularity has been attributed to van Aaken's findings that special dieting and slow, endurance-building running make for a better runner and a healthier person. When applied to his coaching methods, van Aaken's scientific findings have helped him produce many world class runners.

Now, a book, originally published in German, describing van Aaken's research and training methods, is available in English for the first time. The book, *The Van Aaken Method, Finding the Endurance to Run Faster and Live Healthier*, lets you in on many of the doctor's secrets to successful running and health.

So, officially subscribe to Dr. van Aaken's teachings today (you've probably been using some of them for years) and read *The Van Aaken Method*.

Available soon at your local bookstore. Or, you can purchase *The Van Aaken Method* by mail, just send in the coupon below.

1976, 144 pp., \$5.95 Hb.,
\$3.95, Ppb.



Order Form

Please send _____ copies(y) of *The Van Aaken Method*.

() Hardback, \$5.95 () Paperback, \$3.95

Enclosed is 40c postage per book, plus 6% tax (Calif. residents only).

Name _____

Address _____

City/State/Zip _____

Runner's World, P.O. Box 366, Mountain View, CA 94040



The "sprinter's syndrome" is a psychological phenomenon that allows a sprinter to exert the greatest amount of his energy and talent over a relative short time and distance span. There is a drive that allows a sprinter to burst forth, almost in a reckless fashion, with a tremendous amount of his total energy while others balk at the same expenditure.

We know, for example, that the mind and body have safety devices that cause us to slow down or even stop short of real or imagined physical disaster. Per-

haps in sprinters this safety mechanism is just a little looser than it is in most of us. This would allow for sprinters to take risks and go faster than most would dare go.

We have heard about how successful the Russians have been with their sprinters by running them down inclines. Supposedly this improves leg speed because one can run faster with less effort, turning over the legs faster, thereby developing a neuro-motor canal efficiency for this kind of action.

This may be true, but I feel the

reason that downhill running helps is because of the psychological benefit it provides. Running downhill places the runner in a more precarious position than flat running, and to maintain it the runner has to get used to taking a bit more risk and run with a bit more abandonment than usual.

Once this has been done successfully, the runner is apt to lose some of his fear of falling and can get closer to having a "sprinter's syndrome" because he has partially overcome the fear of falling and can more easily "let it all hang out." The fear of falling is very important in an event that by its very nature is simply a series of falls and recoveries. The faster the speed, the greater the concern is for falling. Reduce the concern about falling and we can run faster and longer.

Most books on the biomechanics of running maintain that a sprinter has to decelerate before the end of 100 yards. I have yet to find a study that scientifically tells me why. The conjecture and speculation is that as a sprinter speeds up, the amount of time in contact with the ground is less, therefore the forward thrust is less.

But countering that is the fact that at high speeds it takes less effort to keep the body moving because of Newton's law of inertia (a object in motion tends to stay in motion at the same speed it's traveling). Therefore, all we have to do is to counteract the outside forces like wind and friction to keep going at that rate.

Another idea is that we lose speed because we are not able to maintain the forward lean necessary for acceleration. I support the idea that lean, and therefore acceleration, is turned off just as the runner's fear of falling dictates that a critical point has been reached. But I contend that a sprinter could maintain his maximum much longer than assumed if we could understand and eliminate the anxieties involved in his doing so.

In the meantime, the myths go around, our progress goes down and everyone accepts it as being inevitable. With the amount of talent and the facilities we have in which to get our work done, we could lead the world again not only in sprinting but also in all of the track and field events.

Brooks Johnson

Reader responses keep *RW* moving, since more than half of each issue is contributed by writers, photographers and artists outside of our office. If you have material to share, write the editor. ●

OKTOBERFEST^{U.S.A.}

U.S.A. ROAD RACES

LA CROSSE, WISCONSIN



SATURDAY, OCTOBER 2, 1976

★ FULL MARATHON, HALF MARATHON, FIVE MILE ★ ALL RACES ARE OPEN ★ CARDIAC DIVISION 5 MILE ★ SHOWER & LOCKER FACILITIES, UW-LA CROSSE ★ T-SHIRTS TO FINISHERS OF ALL RACES ★ CERTIFICATES TO ALL ENTRANTS, REFRESHMENTS, WATER ★ AID STATIONS ★ TRAFFIC CONTROL, MARKED COURSE, SPLITS CALLED ★ RACE RESULTS MAILED TO ALL FINISHERS ★ TOTAL OF 78 AWARDS FOR THE VARIOUS DIVISIONS ★ POST RACE REFRESHMENTS ★ FINISH DOWN THE OKTOBERFEST MAPLE LEAF PARADE ROUTE ★ MARATHON ROUTE HAS A LOSS OF ELEVATION FROM START TO FINISH.

For additional information & entry forms WRITE:
LA CROSSE FESTIVALS INC.

OKTOBERFEST U.S.A. ROAD RACES Sponsored By:

P.O. BOX 1063

LA CROSSE, WI 54601

*La Crosse Festivals Inc.
& the
Wisconsin Heart Assoc.
La Crosse Div.*

In many ways, the United States Olympic Trials is a better track meet than the Olympics itself. That's because the Trials is still a track meet, while the event to which it sends athletes is increasingly a media and political circus.

There never has been an American track meet like the one Eugene, Ore., is hosting June 19-27. For the first time, the men and women run their Trials at the same place. Also for the first time, every invited competitor has his or her way paid to Oregon. This is the one meet which no one has to miss because he or she can't afford it, and the only one which no serious contender can afford to pass up.

The meet on the fast University of Oregon track offers 64 running and race walking positions on the Olympic team — 38 for men and 26 for women. Assuming there will be some doubling, roughly four dozen people will qualify for Montreal — from a starting field five times that large.

Only about a dozen of the runners and walkers in Eugene have ever been to an Olympics before, so the US team selected there will be a fresh and hungry one no matter what happens.

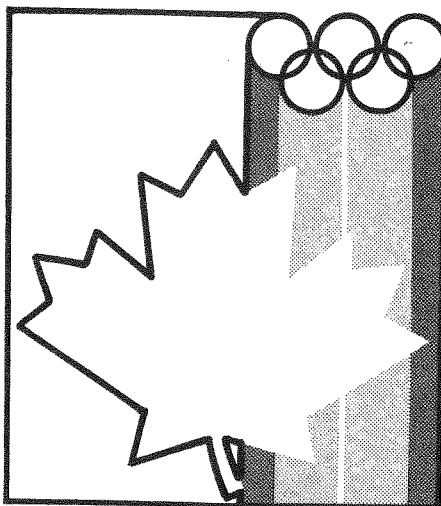
The turnover in US track from Olympics to Olympics is almost complete. While there are odd two- and three-timers in the running again, this is the first and only chance that nearly all of the athletes will have to go to the Games.

No one "trains through" this meet. No one's Olympic spot is that secure. The scramble to get to the big meet is such an effort in itself that more than a few athletes who make the team at Eugene won't come close to those performances at Montreal.

Never are so many US runners racing so desperately as they do in the Trials. That's what makes the meet so exciting.

Each of the nine days will have its own excitement. But the last one, Sunday, June 27, will be especially delightful to fans of middle-distance running. Three of the four longest track races for men (1500, 5000 and steeplechase) are that day, plus the women's 1500.

Some athletes will rate special atten-



Montreal '76



Jeff Johnson

Number four for Ron Laird?

tion because of their durability, others because of their youth and still others because they have come to the top so quickly.

Only one American, George Young, has run in four Olympics. Young is retired now, but Willie Davenport (see "One last Barrier to Cross," page 32) still is active. The 33-year-old hurdler is trying for his fourth Games.

Walker Ron Laird, 38, who beat Larry Young in the recent AAU 25-kilometer race, also has a chance at his fourth Games. He competed at Rome, Tokyo and Mexico City but missed Munich.

Race walkers Larry Young and Tom Dooley, 800-meter runner Madeline Manning-Jackson and hurdler Pat Van Wolvelaere each are seeking their third Olympic berth.

Laird walked in his first Olympics shortly after Rudy Chapa was born. Chapa, 18, apparently will be the

youngest male runner in the meet (see "Success at an Early Age," page 24). He qualified at 10,000 meters. Another high schooler, Eric Hulst, may be in that race as well. And of course young Houston McTear has a good chance at making the 100-meter team.

Before the Trials are over, we may be much more familiar with names such as Harvey Glance, Nolan Cromwell, Benny Myles and Dedy Cooper, who only in the last few months have shown their Olympic potential. No doubt there will be surprises again this time which equal those of then-little-known Rick Wohlhuter and Jon Anderson in 1972.

The runners were beginning to peak as this issue went to press. Many of them were waiting until the last few weeks to set their best qualifying marks. And final invitations for the Trials hadn't been sent. So it is impossible to give a full list of athletes and their times here.

This is the schedule for the meet in Eugene. Each day's events run from late morning until early evening. The first three finishers in each event qualify for Montreal, provided they have bettered the listed times within the past year.

MEN

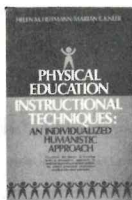
Event	Mark	Date
100 meters	10.44	June 20
200 meters	21.04	June 22
400 meters	46.54	June 25
800 meters	1:47.4	June 21
1500 meters	3:40.6	June 27
Steeple	8:32.0	June 27
5000 meters	13:40.0	June 27
10,000 meters	28:40.0	June 22
110m hurdles	14.04	June 24
400m hurdles	50.64	June 21
20k walk	1:38:00*	June 19

(*Qualifying time for Trials only; there is no Olympic standard.)

WOMEN

100 meters	11.64	June 21
200 meters	23.74	June 24
400 meters	53.64	June 25
800 meters	2:04.0	June 22
1500 meters	4:15.0	June 27
100m hurdles	13.64	June 27 ●

Individualized P.E. Teaching Techniques



Teach physical education the humanistic way with this all new "how-to-do-it" book. Tested practical teaching methods promote a new concept of physical education that is no longer bound by group instruction. Designed to help each student learn productively. Order your copy of *Physical Education Instructional Techniques: An individualized humanistic approach*, now. It's just out from Prentice Hall. \$11.95, 350 pages, illustrated hardback.

Order Form

Please send _____copy(ies) of *Physical Education Instructional Techniques*, \$11.95, plus 40 cents postage and 6% tax (CA residents only) per copy.

Name _____
Address _____
City _____
State/Zip _____

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

BIORHYTHMS

Chart your course. Plot your own biorhythm cycles and see for yourself the ups and downs of your life. *Biorhythms, How to Live With Your Life Cycles* and *Biorhythms, Personal Science*, are two of the best books available on the scientific methods of determining biorhythms. Clip the coupon below to purchase your copies today!

Please send:

() *Biorhythms, A Personal Science.*
\$8.95, Hb.

() *Biorhythms, How to Live With Your Life Cycles.* () \$7.95, Hb. () \$4.95, Ppb.

Add 40c postage per copy. CA residents add 6% tax.

Name _____
Address _____
City _____
State/Zip _____

Runner's World
P.O. Box 366
Mountain View, CA 94040

Good News

New products, publications and services for runners.

A bulletin board and a big mouth are essential when trying to disseminate ideas and information to large numbers of people without expending a lot of energy. Unfortunately, not every runner can carry a bulletin board with him or her on the daily runs, nor does every runner have ready access to a big mouth.

Consequently, in our continuing effort to meet the needs of every runner, we are beginning with this issue a new feature which will blend our best big mouths and bulletin boards to present for you what is new in the sport of running.

"Good News" brings information concerning products, publications and services that not all runners may have heard or read about. Each month we will empty our bulletin boards of the vast amount of information that scientists, manufacturers, publishers, athletes and potential athletes will be sending up to keep our readers abreast of what is developing in the sport.

Work has already begun for the second annual edition of the *Runner's World* special shoe supplement. The supplement is expected to be included in the October 1976 issue of *RW*.

The May issue guide incorrectly listed the cost of the Runner's Mecca camp in Utah as a flat \$75 per week, which is actually the single room per week rate. Rates for doubles are \$160 per month.

Since the shoe market is changing so rapidly, we are seeking information from manufacturers and runners who are familiar with the new shoes.

This month we will clear our bulletin board of the remaining addresses of running camps across the country. (In May, we listed 21 others)

CALIFORNIA

High Sierra Running Camp, Squaw Valley, Calif., Aug. 30-Sept. 3.

Director: Tom Feroah, 1264 N. Sierra, Reno, Nev. 89503.

Staff: not available.

Cost: \$150.

Eligibility: all ages, male and female.

Emphasis: runners forum and high altitude training.

CONNECTICUT

Roy Chernock Cross-Country Camp, Sa-lem, Conn., Aug. 22-28.

Director: Roy Chernock, 36 Lake Lane, Princeton, N.J. 08540.

Staff: Roy Chernock, Al Berkowsky (others available).

Cost: \$99 for seven days (includes insurance-team rates available upon request.

Eligibility: not available.

Emphasis: cross-country running.

INDIANA

Top of the World Distance Running Camp, Bloomington, Ind., July 25-30, Aug. 1-6.

Director: Doug Blubaugh, 631 Fox Hollow Rd., Rte. 10, Bloomington, Ind.

Staff: Bruce Waha.

Cost: \$100 per session.

Eligibility: No one who has had enough preparatory education to be academically eligible to enter college in the fall of 1976 will be permitted to attend the camp. However, students who have already enrolled in college as well as junior high and high school are welcome.

Emphasis: distance running.

MASSACHUSETTS

New England All-American Cross-Country Camp, North Easton, Mass. (Stonehill campus), Aug. 29-Sept. 3.

Director: Bill Squires, Box 44, North Easton, Mass.

Staff: Bob Sevene, Bruce Lehane.

Cost: not available.

Eligibility: grades nine and up.

Emphasis: cross-country and distance running.

NEW YORK

Stroudsburg Cross-Country Camp, rocky Point, N.Y. Aug. 15-20, Aug. 22-27 and Aug. 29-Sept. 3.

Director: Jim Smith, 229 Rocky Point Landing Road, Rocky Point, N.Y. 11778.

Staff: Jim Smith, Dick Weis, Kieran Moran, Bob Baratta, Doug Sharples, Howie Rayn, Tom Haley and Gene Martin.

Cost: \$80 per week per camper, \$75 for 10 or more from any one school, \$150 reduced rate for two weeks and \$220 reduced rate for three weeks.

Eligibility: not available.

Emphasis: cross-country and distance running; special Aug. 15-20 session on race walking directed by Bruce McDonald.

Mel Pender Track and Field Development Camp, New York Military Academy at Cornwall-on-the-Hudson, N.Y.

Director: Mel Pender, Box 182, Cornwall-on-the-Hudson, N.Y. 12520.

Staff: Dave Wottle, Tom Hill, Fred Dwyer, John Moon, Irv Mondschein, Rich Michalski, Charlie Greene, Norm Tate, Tim St. Lawrence, Mamie Rallins, Jack Carter, Mike Wilson, Tino Clemons, Louise Tricard, Greg Perry and "others."

Cost: not available.

Eligibility: boys and girls ages 8-18.

Emphasis: intensive instruction in all aspects of cross-country and track and field.

We're Guaranteeing* these Books Will Improve Your Running

* If you read any of these books and don't learn anything that improves your running, return them for a full refund.

Practical Running Psychology—Athletic motivation, the running habit, and the psychological warfare that is an integral part of all competitive running. 1973 Ppb., 48 pp., ill., \$1.50.

Athletes' Feet—Leading podiatrists and other medical experts tell how to avoid both foot injuries and foot-related back and leg problems. Also covers first aid, choosing shoes, and exercises for the feet. 1974 Ppb., 48 pp., ill., \$1.75.

The Complete Runner—Covers every aspect of running in great detail. Articles by running experts, picked and assembled by *Runner's World* magazine staff. 1974 Hb., 398 pp., ill., \$10.95.

Yoga and The Athlete—A liberating personal view of the role yoga can play in the life of an athlete. Applicable to your own life. 1975 Ppb., 100 pp., ill., \$2.50.

Guide to Distance Running—First book published devoted entirely to distance running. Nearly 100 articles on distance running, by distance runners. 1971 Ppb., 208 pp. (oversize), ill., \$5.95.

Food for Fitness—Revolutionary look at the dangers of a traditional diet. Compiled by athletes who have experimented with different diets. 1975 Hb. & Ppb., 144 pp., ill., \$5.95/\$2.95.

Dr. Sheehan on Running—A fascinating look into the world of runners. Philosophical and stimulating reading from the Medical Editor of *Runner's World*. 1975 Hb. & Ppb., 203 pp., ill., \$5.95/\$3.50.

Runner's Training Guide—This book doesn't push any single training method. Instead, it describes the principles that underlie most methods. 1973 Ppb., 96 pp., ill., \$2.95.

Running with the Elements—How to adjust to extremes of heat and cold, wind, altitude, terrain, air pollution, hecklers, dogs, and more. 1974 Ppb., 96 pp., ill., \$2.75.

Encyclopedia of Athletic Medicine—Dr. George Sheehan looks at sports medicine from the runner's point of view. Chapters cover injury causes, care and prevention and the new hazards of today's environment. 1974 Ppb., 96 pp., ill., \$1.95.

Age of the Runner—The effects of age on performance, and of running in slowing down the aging process. Includes charts for comparing racing times, age for age. 1974 Ppb., 56 pp., ill., \$1.75.

The Runner's Diet—A factual, unbiased guided tour through the complicated and controversial subject of athletic nutrition, written for the runner. 1972 Ppb., 80 pp., ill., \$1.95.

Beginning Running—A must for the novice or the person who is helping the novice. Takes the new runner from his first steps to his first race. 1972 Ppb., 32 pp., ill., \$1.00.

The Running Body—Direct, easy-to-understand information about physiology as it applies to running. 1973 Ppb., 48 pp., ill., \$1.50.

The Female Runner—Dispels some of the myths surrounding the woman runner and goes into physiological and psychological factors in her performance. 1974 Ppb., 32 pp., ill., \$1.25.

Run Gently, Run Long—A practical book that reads like a novel. Joe Henderson describes his slow, painful journey from intervals to long slow distance. 1974 Ppb., 96 pp., ill., \$2.50.

African Running Revolution—Some of the reasons behind the African runners' recent success story, including effects of high-altitude training and living. 1975 Ppb., 122 pp., ill., \$2.50.

ORDER FORM

Qty.	Title	Price	Total
6% tax (Calif. res. only)			
40c per book postage and handling			
TOTAL			

Please send me the books I have indicated.

Name _____

Address _____

City/State/Zip _____

Runner's World, Box 366, Mtn. View, CA 94040

Highlights

The Boston Marathon is, of course, April's main event. That race is covered in a special supplement in this issue, with results appearing on pages 50-51.

Otherwise, the stars of the month were Julie Shea for her world best time for women in the 10-mile run, Bob Varsha for his 10-mile time of 47:26, and Chuck Smead for his 12 miles 309 yards in an hour.

NORTHEAST

Three Eastern races, all on April 4, all within 200 miles of each other, attracted a total of more than 2000 runners (see results below).

The biggest of those, the Acacia-Cherry Blossom Classic, featured what is thought to be a world best time for women. Julie Shea, a 16-year-old, ran 57:04 on the AAU certified 10-mile road course. Carl Hatfield set a course record of 49:09 to win the men's division.

Tom Fleming took the Caesar Rodney Half-Marathon and Tom Cappelluzzo was first home in the Eastern Regional AAU 15-Kilometer. Both races had fields of about 350.

In other area highlights, Olympic Trials qualifier Martin Sudzina won the Penn Relays Marathon in 2:28:19 (Philadelphia, April 20). Puerto Rican Olympian Tony Colon led a New York City 10-kilometer race with 30:42 (April 11), and Morgan Fennell took the Eastern Regional 10-K title with 30:56 (Yonkers, April 25). Mike Cotton, 17, ran 31:01, and Marie Roach was the women's winner at 39:02.

ACACIA CHERRY BLOSSOM

Washington, D.C., April 4 — 10 miles: 1. Carl Hatfield 49:09; 2. Jack Mahurin 49:47; 3. Will Albers 50:30; 4. Donald Slusser 50:37; 5. Bruce Robinson 50:42; 6. Richard Salazar 51:15; 7. Clifford Karthaus 51:31; 8. Jeffrey Peterson 51:37; 9. Joseph McCool 51:51; 10. Mark Stevenson 52:08.

11. Mike Sabino 52:12; 12. Bob Thurston 51:19; 13. Thomas Carr 52:28; 14. Wayne Roe 52:43; 15. Mark Fisher 52:58; 16. Mark Baldino 52:59; 17. Ed Ayres 53:04; 18. William Scholl 53:05; 19. Joseph O'Connor 53:12; 20. Otha Dee Corey 53:20...Frank Pflaging (43) 54:08...Todd Bergey (16) 55:51...Chris Sherwin (12) 1:00:35...John Davenport (54) 1:02:45.

Women: 1. Julie Shea (16)

57:04; 2. Aileen O'Connor (15) 59:51. (949 finished, 150 under 1:00; an additional 445 finished a two-mile fitness run; from Steve Clapp).

RODNEY HALF-MARATHON

Wilmington, Del., April 4 — 13.11 miles: 1. Tom Fleming (New York AC) 1:06:28; 2. John Greenplate (Del Sports Club) 1:07:56; 3. Larry Schemelia (Sports East) 1:09:59; 4. Dirk Skinner 1:10:10; 5. Ken Kling



Tom Cappelluzzo at Scarsdale

(Sports East) 1:10:19; 6. Tom Donnelly (Phila Pioneers) 1:10:44; 7. Dan Rincon (Del Sports Club) 1:11:08; 8. Frank Goldcamp (Sports East) 1:11:29; 9. Joel Pasternack (NYAC) 1:11:33; 10. Kenneth Keehn 1:11:45...Carmen Hagelgans (45, Lehigh Valley AA) 1:16:27...Bill Gordon (52, Del SC) 1:23:18...Henry Crielli (64) 1:40:38. Women: 1. Pamela Adams (South Jersey Chargers) 1:29:54; 2. Gina Sinovich (Del SC) 1:34:19. Team: Sports East (359 finished, 59 under 1:20, 136 under 1:30; from Thomas Fort).

EASTERN 15-KILOMETER

Scarsdale, N.Y., April 4 — 1. Tom Cappelluzzo (21, St. Johns UAA) 47:16; 2. Arthur Hall (29, Oakwood TC) 47:26; 3. Larry Hanson (20, Columbia UAA) 47:30; 4. Justin Gubbins (24, New York AC) 48:18; 5. Paul Heck (21, Columbia UAA) 48:21; 6. Mike Cotton (17, Millrose AA) 48:31; 7. Steve Lubar (23, Millrose AA) 48:34; 8. Ken Rolston (24, ECAC) 48:45; 9. Tom Clark (21, St. Johns UAA) 49:03; 10. Dave Callaghan (18, St. Johns UAA) 49:09...14. Fred Best (40) 49:34...98. George Sheehan (57, Shore AC) 57:15. Women: 1. Cheryl Norton (27, Columbia UAA) 59:26; 2. Pamela Fitzpatrick (20, Wm. Patterson College) 1:06:43. (341 finished, 63 under 55:00, 132 under 1:00; from Joe Kleinerman).

SOUTHEAST

Bob Varsha of Atlanta (who is featured in "Sit Down and Relax," page 55) has developed into one of the South's best road runners. Recently, he ran 47:26 to win the Chickamauga Chase 10-mile by nearly three minutes. Gayle Barron did 58:43 there (see results below).

Running on what city fathers call "the world's most famous beach," Daytona, Steve Foster rushed through four miles at 4:32 page. Versatile Robin Campbell won the women's two-mile.

Tom Childers won a 10-kilometer race at Ft. Walton Beach, Fla. in 30:46 (April 10). It may not sound so fast until you hear this is more than a minute faster than the course record held by Olympian Jeff Galloway.

Bill King, 46, won the Southeastern Masters Marathon in 2:57:43 (Raleigh, N.C., April 4).

CHICKAMAUGA CHASE

Chattanooga, Tenn., April 3 — 10 miles: 1. Bob Varsha (24, ATC) 47:26; 2. Randy Stroud (21, ATC) 50:14; 3. Tom Raynor (25, ATC) 51:13; 4. Doug Hawley (35, CTC) 52:30; 5. Ken Winn (38, ATC) 53:12...10. Gerald Koch (42, HTC) 54:09...22. Hans Hamm (16, ATC) 56:25...70. Lloyd Lundin (56, KTC) 1:05:20...85. Joe Shepherd (61, KTC) 1:08:56. Women: 1. Gayle Barron 58:43. (139 finished, 43 under 1:00).



Steve Foster at Daytona Beach

EASTER BEACH RUN

Daytona Beach, Fla., April 18 — 4 miles: 1. Steve Foster (Fla TC) 18:08; 2. Barry Brown (Fla TC) 18:17; 3. Tom Childers (Fla TC) 18:59; 4. Wally Rodriguez (Fla TC) 19:08; 5. Reginald Clark (Fla TC) 19:13; 6. Benji Durden 19:14; 7. Herb Wills (high school) 19:16...Jack Rademaker (40+) 22:46. Women's 2-mile: 1. Robin Campbell 10:38; 2. Lynn Hollins 10:44.

MIDWEST

We've overlooked a significant indoor performance from Janu-

ary. John Cramer set American records at 15 miles with 1:23:07.8 and 25 kilometers with 1:26:09.0 (Mankato, Minn., Jan. 24).

The Drake Relays Marathon also was the USTFF National Championship. Greg Carlberg qualified for the Olympic Trial by winning in 2:22:25. The results listed Mark Enyeart of Logan, Utah, in 2:58:38. Enyeart was the half-mile sensation of 1975, and he had come to Drake to compete in his specialty (see results below).

Hal Higdon used age-graded scoring tables to decide the places in the Midwest Masters 15-Kilometer (Michigan City, Ind., April 4). While 30-year-old Chuck Koeppen had the fastest time for 10 miles, 49:49, the "winner" was 40-year-old Alan Claremont with 51:57.

Duane Gaston ran 25:05 for five miles, and Wally Saeger did 1:17:58 for 15 in fast races at Franklin, Ohio, April 4.

Bill Gavaghan, 2:26:06, and 14-year-old Lora Cartwright, 3:11:16, won their divisions of the Windy Marathon (Carmel, Ind., March 15).

DRAKE-USTFF MARATHON

Des Moines, Iowa, April 24 — 1. Greg Carlberg (Plains TC) 2:22:25; 2. Charles Burrows (Twin Cities TC) 2:23:34; 3. Ray Frederickson (Wisconsin-Parkside) 2:23:58; 4. Bruce Mortenson (Twin Cities TC) 2:24:40; 5. Michael Seaman (St. Cloud TC) 2:26:30; 6. Paul Raether (Twin Cities TC) 2:27:23; 7. Dennis Hinkamp 2:30:21; 8. Joe Rubin 2:30:31; 9. Jeff Ford (Air Force) 2:31:55; 10. Dan Hildebrand (UCTC) 2:32:45. Women: no results reported. (189 finished, 77 under 3:00, 138 under 3:30; 169 under 4:00).

SOUTHWEST

Dorothy Doolittle, now a consistent sub-three-hour marathoner, ran 2:53:43 in the White Rock race at Dallas in February. Don Kennedy paced the field with 2:25:59 (see results below).

Farther south in Texas, Jim Ewing won two big races. He ran 47:55 to take the Gulf AAU 15-Kilometer title (Houston, April 10) and 32:32 to win the Fiesta Mission 10-Kilometer (San Antonio, April 24). Women's winners in the two events were Rebecca Ryder, 1:07:08, and Carol Urish, 41:16.

WHITE ROCK MARATHON

Dallas, Tex., Feb. 21 — 1. Don Kennedy (28) 2:25:59; 2. Roger Vann (21) 2:26:50; 3. Dennis Dierckman (22) 2:33:09; 4. Mike Matheny (33) 2:33:44; 5. Nolan

Grayson (26) 2:33:55...13. John Weinstock (40) 2:40:53...19. Kim Wrinkle (17) 2:45:03...90. Warren Rebourrn (54) 3:14:19...126. Clyde Villemez (64) 3:29:14. Women: 1. Dorothy Doolittle (29) 2:53:43; 2. Brenda Hon (33) 3:14:46. (178 finished, 56 under 3:00, 127 under 3:30, 165 under 4:00).

WEST

Northern Californians and former northern Californians have a monopoly on hour run leadership. Chuck Smead recently totaled 12 miles 307 yards (Arcata, Calif., April 11) to move to fourth on the all-time US list. Chuck is a graduate of Humboldt State University, as are Gary Tuttle and Bill Scobey (first and third on the list). Number two man Bill Clark is Smead's former teammate in the West Valley Track Club.

Smead took a workout in the Paul Masson Marathon (Saratoga-Cupertino, Calif., April 17). He finished one second behind Ernie Rivas, who ran 2:34:49. Women's winner Yvette Cotte did 3:36:29.

Phil Camp won the Mission Bay 15-Kilometer (San Diego, April 17) by more than two minutes. His time was 47:15. Forty-eight-year-old Graham Parnell finished seventh in 51:04. Nadia

Garcia led the women with 56:45.

Two young girls had the outstanding marks in a 10-kilometer run at Mountain View, Calif. (April 4). Roxanne Bier did 36:59 and Vicki Bray was 10 seconds back. Jan Sershen won the men's race in 31:16.

Two short races in Oregon featured wins in fast times by Brian Chapman and Joe Skaja. Australian Chapman ran five miles in 24:14 as part of a 10-mile relay (Roseburg, April 3) in which he teamed with Paul Thompson. Skaja ran seven miles in 36:06 (Portland, April 3).

Jim Pearson won the marathon he organizes, the Birch Bay in Washington (April 10). His time was 2:30:19.

Two runners survived the annual Camellia Festival 100-Mile (Sacramento, Calif., March 13-14). Don Choi ran 21:36:31 and John Arberry, 23:26:06.

CANADA

One of the country's oldest road races, the Around-the-Bay event, went this year to Rich Hughson. He beat international veteran Bob Moore by two minutes (see results below).

John Grabowski and Eleanor Thomas won the Montreal Marathons in 2:34:17 and 3:24:04, respectively.

AROUND-THE-BAY

Hamilton, Ontario, March 27 — 19½ miles: 1. Rich Hughson (Toronto OC) 1:42:00; 2. Bob Moore (TOC) 1:44:24; 3. Ken Inglis (Kitchener-Waterloo TC) 1:44:24; 4. Jack Friel (UTTC) 1:46:01; 5. Dave Yaeger (TOC) 1:49:04; 6. Fred Gordon (BWAC) 1:49:58; 7. Fred Clemmer (UTTC) 1:50:21; 8. Brian Armstrong (TOC) 1:50:43; 9. Norm Patenaude (LUTC) 1:51:53; 10. Dave Wise 1:52:35...13. Art Taylor (40+, WCAA) 1:54:06. (85 finished, 22 under 2:00).

WALKS

Ron Laird is ready. He beat Larry Young in the AAU 25-Kilometer race, bettering the Olympic Trials qualifying standard en route with 1:34:48 for 20-K (see results below). Laird will be trying for his fourth Olympic team.

Other recent national championships have gone to Shaul Ladany (75-K), Jack Boitano (Masters 25-K) and Paul Ide (100-K).

Ide set American records for 50 miles (8:15:06) as well as 100-K (10:31:30) in his race at Longmont, Colo., April 3. Augie Hirt finished second with 10:45:30.

AAU 75-KILOMETER

Old Bridge Township, N.J., April 11 — 1. Shaul Ladany (Israel) 7:13:46; 2. Tom Ambury (USMMA) 7:58:02; 3. Alan Price (Capitol Race Walkers) 8:03:26; 4. Tom Knatt (North Medford Club) 8:14:07; 5. George Lattarulo (NMC) 9:08:05; 6. John Counihan (NMC) 9:12:17; 7. Rufus Reed (NMC) 9:14:20; 8. Alan Wood (Shore AC) 10:03:05; (8 finished; from Elliot Denman).

AAU 25-KILOMETER

Seattle, Wash., April 17 — 1. Ron Laird (New York AC) 1:59:09; 2. Larry Young (Columbia TC) 2:00:33; 3. Tom Dooley (West Valley TC) 2:00:40; 4. Jerry Lansing (WVTC) 2:01:26; 5. Wayne Glusker (WVTC) 2:02:44; 6. Jerry Brown (Colorado TC) 2:07:22. Team: West Valley TC. (21 finished.)

AAU MASTERS 25-K

Verona, N.J., April 25 — 1. Jack Boitano (North Medford Club) 2:20:17; 2. Bob Mimm (50+, Shore AC) 2:20:55; 3. Bob Fine (NYPC) 2:28:02; 4. Ben Ottmer (Shore AC) 2:35:40; 5. Bob Lever (NMC) 2:43:34; 6. Ray Floriani (50+, Shore AC) 2:45:03...Ted Cash (67, Shore AC) 3:07:11. (From Elliott Denman.) ●

The Quiet Company 10,000 METER RUN JULY 4, 1976 MILWAUKEE, WISCONSIN LAKEFRONT

DESIGNATED USTFF NATIONAL CHAMPIONSHIP
SPONSORED BY THE NORTHWESTERN MUTUAL
LIFE INSURANCE COMPANY HOSTED BY THE
UNIVERSITY OF WISCONSIN-MILWAUKEE TRACK
CLUB MEN'S AND WOMEN'S OPEN, JUNIOR AND
MASTER CATEGORIES



FEATURES INCLUDE
COMMEMORATIVE BEER STEIN TROPHIES TRAVEL EXPENSE ALLOCATIONS
POST-RACE BANQUET T-SHIRTS, BELT BUCKLES, CERTIFICATES
INEXPENSIVE UNIVERSITY LODGING

Travel expenses for the first ten male finishers and first three female finishers will be allocated at \$25 per day up to two days and 12¢ per mile up to 500 miles.

Billy Mills, 1964 Olympic 10,000 Meter Gold Medal Winner will host the post-race banquet and serve as official starter of the event. 300 free banquet tickets will be allocated in proportion to the number of entries in each category.

FOR ENTRY BLANK WITH COMPLETE DETAILS WRITE TO:
THE QUIET COMPANY 10,000 METER RUN
720 E. WISCONSIN AV. MILWAUKEE, WI 53202

July Coming Events

NORTHEAST

- 4 Lansford Centennial 6.2-Mile, Lansford, Pa. (4 p.m.; Ed Gilden, 102 W. Water St., Lansford, Pa. 18232).
- 6 Loch Raven Fire Trail Race (5.1 miles), Baltimore, Md. (7 p.m.; Bill

- (9 a.m., Sears Parking lot in Buckhead; Tim Singleton, Dean of Men, Georgia State University, University Plaza, Atlanta, Ga. 30303).
- 10 Mountain Marathon, Winston-Salem, N.C. (11 a.m., Appalachian State University Stadium;

- City, Mich. (12:30 p.m.; National Cherry Festival, P.O. Box 141, Traverse City, Mich. 49684).
- 11 Iowa One-Hour, Ankeny, Iowa (8 a.m.; Dave Eidahl, Pekin High School, Packwood, Iowa 52580).
- 11 Mystic Mountain 10,000-Meter, Mystic, S.D.



California's "Great Race" features three-member teams—a bicyclist, a rower and a runner. The race is scheduled for July 17 in Sacramento.

- Schwartz, 1363 Halstead Road, Baltimore, Md. 21234).
- 10 Paul Bunyan Marathon, Orono, Maine (8 a.m., University of Maine; Dick McGrath, Bangor Daily News, Bangor, Maine 04401).
- 18 RRC-New York 10-Mile, New York, N.Y. (10 a.m., Queensboro Country Club; RRC, Box 881, FDR Station, New York, N.Y. 10022).
- 18 Six-Mile Constellation to Fort McHenry, Baltimore, Md. (9 a.m., Constellation Pier, Inner Harbor; Les Kinion, 1363 Halstead Rd., Baltimore, Md. 21234).

SOUTHEAST

- 4 Five-Mile Beach Run, St. Petersburg, Fla. (Tom White, 1250 Jungle Ave., St. Petersburg, Fla. 33710).
- 4 Peachtree Road Race 10-Kilometer, Atlanta, Ga.

- Ric Shriver, 2941 Kedron Ct., Winston-Salem, N.C. 27106).
- 17 Decatur-DeKalb YMCA One-Mile and Four-Mile, Decatur, Ga. (8:45 a.m., Decatur to DeKalb, Ga.; Jack McFarland, 262 Heaton Park Dr., Decatur, Ga. 30030).

MIDWEST

- 3 Breckenridge Marathon, Breckenridge, Mich. (6:30 a.m.; Breckenridge Track Club, RR 1, Box 4, Breckenridge, Mich. 48615).
- 4 Gilson Park 5000- and 10,000-Meter Run, Wilmette, Ill. (10 a.m.; Charlie Bugg, 922 Oakwood, Wilmette, Ill. 60091).
- 4 Freedom Festival 10-Mile, Detroit, Mich. (9 a.m.; Ed Kozloff, 10144 Lincoln, Huntington Woods, Mich. 48070).
- 9 National Cherry Festival 10,000-Meter, Traverse

- (10 a.m.; Jim Brown, Track Coach, Earlham College, Richmond, Ind. 47374).
- 17 Aurora Marathon, Aurora, Ill. (Alberto Meza, Waubensee Country Club, 47 at Harter Rd., Sugar Grove, Ill. 60554).
- 17 Missouri Valley and Open 15-Kilometer, Columbia, Mo. (7 a.m.; Joe Duncan, 4004 Defoe Dr., Columbia, Mo. 65201).
- 25 Hopkins-Rasperry Festival Five-Mile, Hopkins, Minn. (John Christian, 230 Central Ave. North, Apt 211, Wayzata, Minn. 55391).
- 31 South Dakota AAU One-Hour, Brookings, S.D. (7 a.m.; Sexaver Field; Jay Dirksen, South Dakota State University Track Coach, South Dakota State University, Brookings, S.D. 57006).
- 31 Iowa One-Hour, Madrid, Iowa (6:30 p.m.; Dave

Eidahl, Pekin High School, Packwood, Iowa 52580).

SOUTHWEST

- 3 Eight-Mile Zoo Run, Tulsa, Okla. (7 a.m., Mohawk Park; Vern Whiteside, 6916 S. Knoxville Ave., Tulsa, Okla. 74136).
- 4 Fourth of July 13-Mile, Ada, Okla. (Dorsey Jack Reiridon, 1101 S. Johnston, Ada, Okla. 74820).

ROCKY MOUNTAIN

- 3 Northwestern Bank Bicentennial 10-Mile, Great Falls, Mont. (8 a.m.; North Junior High School; Road Runners Track Club, Inc., Box 504, Great Falls, Mont. 59403).
- 18 Lake Tahoe Marathon, Incline Village, Nev. (8 a.m.; Skip Youngdahl, Box 3193, Incline Village, Nev. 89450).
- 24 Deseret News Marathon, Salt Lake City, Utah (Keith West, Deseret News Marathon, Box 1257, Salt Lake City, Utah 84110).
- 25 Frontier Days Marathon, Cheyenne, Wyo. (7 a.m.; Cheyenne Track Club, Box 10154, Cheyenne, Wyo. 82001).

WEST

- 3 San Bossetti Marathon, Hilo, Hawaii (6:30 a.m., Mooheau Park; Jack Healy, 2296 Kalaniana'ole Highway, Hilo, Hawaii 96720).
- 4 AAU Open and Junior 15-Kilometer, Santa Barbara, Calif. (John Brennan, 4476 Meadowlark Lane, Santa Barbara, Calif. 93105).
- 4 Fourth of July Three-Mile, Redwood City, Calif. (11:30 a.m.; Sten Mawson, 415 369-6251).
- 17 Great Race, Sacramento, Calif. (The Runyon Agency, Inc. 2701 K St., Suite 3, Sacramento, Calif. 95816).
- 31 Resurrection Pass Marathon, Hope, Alaska (10 a.m.; Lyle Richards, c/o University of Alaska at Anchorage, 2651 Providence Dr., Anchorage, Alaska 99504).

CANADA

- 28-31 Olympic Games, Montreal, Quebec, Canada
- ? Police Games Marathon, Toronto, Ontario (Mike Freeman, 154 Cactus Ave. Number 57, Willowdale, Ontario M2R 2V3 Canada).

RACE WALKS

- 4 AAU Junior 15-Kilometer, Chicago, Ill. (Dr. John Boitano, 46 McLeod Place, Stratford, Conn. 06497). ●

Best of Times

Statistics and analysis by Ken Young, National Running Data Center.

What age accounts for the most runners? What is the average age of US long-distance runners? What is the ratio of men to women runners, and how does it change with age.

From the race results reported to *RW* in 1975, I was able to determine the ages of 18,446 runners. The men and women are separated into five-year age groupings in the chart below.

AGES OF THE RUNNERS

Age	Men	Women	M-W Ratio
6-9	23	8	2.9
10-14	344	91	3.8
15-19	2664	145	18.4
20-24	1635	92	17.8
25-29	1681	151	11.1
30-34	1523	79	19.3
35-39	1186	41	19.4
40-44	1010	30	33.7
45-49	520	25	24.8
50-54	367	8	45.9
55-59	159	1	159.0
60-64	83	0	---
65-69	34	0	---
70-74	9	0	---
75-79	4	0	---

The peak period for the males is ages 15-19. Surprisingly, it is 25-29 for the females, who show a secondary peak at 15-19.

At individual ages, both men and women have their best participation at age 16 (640 men, 40 women), and both have a secondary maximum at 27 (363 men, 37 women) and 28 (364 men, 30 women). There is a pronounced decrease in numbers during and following college for both men and women.

Runners under age 20 account for 26.7% of the men's total and 35.3% of the women's total. Similarly, runners over 40 account for 20.2% of the men and 9.2% of the women. In other words, there are fewer older women and more younger women in comparison to the men. This is reflected in the average ages (29.2 years for men and 25.2 years for women) and in the median ages (27.0 years for men and 24.4 years for women).

Another feature which is related to this is the ratio of men to women. The chart above lists it for each of the five-year groups. At ages below 15, there is roughly one female to every

four male runners. Above age 40, this ratio becomes one to 30.

We may speculate as to the reasons behind these figures. One suspects that the dip for both sexes around age 22 reflects graduation from college, getting married, getting a job and in general finding little time for running. As people get settled and start gaining a few pounds, they start thinking they should do something to keep in shape. Since most beginning runners never race, and those who start racing usually have a few years' background, the increase evident by age 25 reflects a beginning closer to 23. The 30th birthday does not seem to be much of an impetus to start running. Rather, it is a gradual increase throughout the mid- and late 20s.



The runner's age is timeless.

The marked decline in women runners after 30 and the increase in the men/women ratio over 30 may reflect a change in attitude toward women's participation in sports, commencing perhaps 8-9 years ago. If this is the case, then the total number of women runners should continue to increase at a greater rate than for men, and the number of over 30 women runners

should double in the next few years.

What we may expect to see in the next few years is an extension of the "baby boom" following World War II. These people are now in their 30s. At the same time, the decline in births (25% decrease from 1960) should tend to shift maximum participation to somewhat older ages. Thus, we may expect relatively fewer under 20 runners and more older runners with an increase in the median age. This suggests races with age divisions for 30-39 may have more runners than in the past.

Another suggestion given by the data is that the high school running programs seem to promote distance running (road racing) whereas colleges seem to discourage it. This may reflect a wider degree of participation in high schools, with colleges encouraging only the best runners and neglecting the rest. The continued decline even after college graduation may reflect the track emphasis in college and the lack of emphasis on running for pleasure.

I'm sure the data suggest many other interpretations and ideas. In the future, we will be able to analyze trends in the data. But this is the first such comprehensive census of active distance runners attempted. We know only where we are and only have the knowledge that participation has greatly increased in the past 10 years. It will be interesting to see how these analyses will change in the next 10 years.

The next column will present a preliminary record list for the 10-mile, by ages and sex, similar to the age records for the marathon (February '76 *RW*). Eventually, I will have age records for each standard distance from 15 kilometers up. These will be presented as space permits and designed to provoke additional data from readers to make these lists as complete as possible.

The complete US rankings for 1975 will be available soon—200-plus pages for \$6.50. This list, compiled by the National Running Data Center, contains 28,000 performances and is the first such list of US long-distance statistics. However, I estimate that it is only 80% complete, a fact which is not my fault. I need *complete* race results sent to me, Kenneth C. Young, Institute of Atmospheric Physics, University of Arizona, Tucson Ariz. 85721. Include the site and date of race, distance, first and last name of each finisher, time, age and hometown (also indicate women runners). Even if you do not have all this information, I still want the race results. Please restrict to distances longer than three miles. ●

Donald Duke

BODY PUNCH

the fluid replacement drink

Body Punch is quickly becoming the most demanded fluid replacement drink available today. And we believe it is important for you to know why. First, it is a specially formulated fluid replacement drink developed to meet

the needs of today's athlete—the athlete like you who is on the go, working and playing hard and fast. Secondly, we believe it works better than most replacement drinks on the market. And here are the reasons why:

formula

RESEARCHED

Scientifically formulated, a leading scientist developed the formula for Body Punch after eight years of athletic drink research.

SUCROSE

Delivered to the bloodstream as quickly and naturally as glucose.

HYPOTONIC

Studies show that hypotonic solutions empty from the stomach into your system faster than isotonic or hypertonic solutions.

FOR ATHLETES

Consumption during and after endurance and high stress activities delivers excellent results.

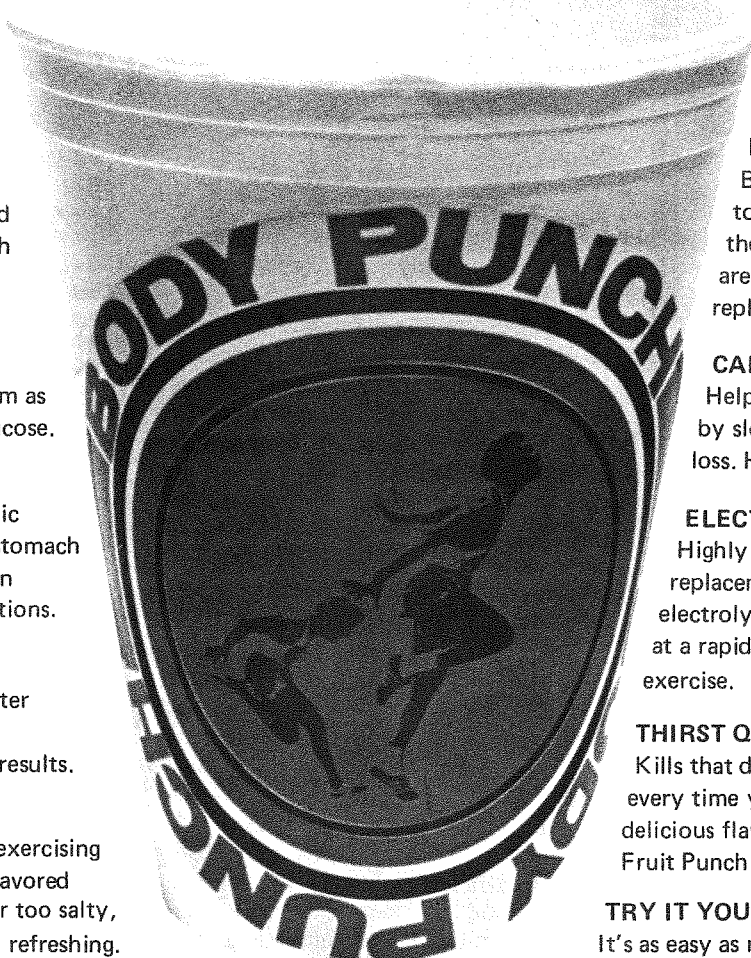
GOOD TASTE

Research has revealed that exercising athletes dislike a strongly flavored drink. Body Punch is neither too salty, nor too sweet, but cool and refreshing.

fill your cup

Every cup of Body Punch goes a long way toward quenching your thirst and relieving the stress and strain of a hard workout. Each half-gallon size packet of Body Punch goes a long way too. Drink it before, during and after workouts. Feel the difference yourself.

If you've never tried Body Punch, we have a special sample package, one packet of each flavor. The coupon at right will give you the ordering information. Go ahead and send it in. Then test Body Punch during your next workout.



results

FLUID REPLACEMENT

Because Body Punch is hypotonic, it empties quickly from the stomach to reach the vital areas of the body where fluid replacement is needed.

CARBOHYDRATE

Helps rebuild your energy levels by slowing your carbohydrate loss. Hastens your recovery time.

ELECTROLYTE

Highly sophisticated electrolyte replacement formula keeps your electrolyte supply from diminishing at a rapid rate during vigorous exercise.

THIRST QUENCHER

Kills that demanding thirst you get every time you exercise. Three delicious flavors. Regular, Lemonade, Fruit Punch.

TRY IT YOURSELF

It's as easy as mailing the coupon below.

quench my thirst!

I would like to order the amount of Body Punch indicated below:

Sample Packet, \$2.50 (3 pkgs) Case, \$16.55 (24 pkgs)

Box, \$7.40 (10 pkgs) 3-case, \$41.50 (72 pkgs)

Lemonade Fruit Punch Regular

All orders are postpaid.

Name _____

Address _____

City/State/Zip _____

Starting Line Sports,
Box 8,
Mountain View, CA 94040

**MASTERS
3 WEEK U.K. TOUR**

5th Aug. to 26th Aug.
British Vets. Champs
Manchester
World 10 Km., Rugby.
Coventry
Special 10 Km. Glasgow
hiking trip Loch Lomond
Scottish Entertainment
1st class accommodation
Travel with Canadian Masters
Inclusive Cost
ex Toronto \$875.
ex Vancouver \$975.
Write Ken Richardson
4156 E. Hastings St.
Burnaby, B.C.
V5C 2J4
Canada.

**Your guide to
Distance
Running**

Five excellent chapters cover physiology and technique, races and racing, coaching and training, psychology and well-known runners. A sixth presents a fantastic pictorial survey of distance running with more than 100 photographs. Compiled in 1971 and revised in 1974, this book has been used extensively by runners around the world. 1971 Ppb., 206 oversize pages, illustrated, \$5.95.



Please send me _____ copy(ies) of Guide to Distance Running. Enclosed is \$5.95, plus 40 cents postage and 6% tax (CA res. only) per copy.

Name _____
Address _____
City _____
State/Zip _____

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

Fun-Run Update

Where and when the Runner's World events are scheduled.

It's catching. It's catching faster than the sniffles in hay fever season but lasting longer. Thousands are catching it every week and thousands more are beginning to feel the first symptoms.

Unlike the hay fever or swine strain virus, however, this epidemic is healthful. For this epidemic is physical activity, unpressured physical activity which incorporates fun into the world of fitness. This activity, which is sweeping the country is unprecedented numbers, is the *Runner's World* Fun-Run. If you haven't caught it yet, beware because no inoculation has been found. The symptoms, however, are very simple.

The prescription for the Fun-Run is simple. Using no restrictions on age, size or experience, a group of people gather at an appointed place at a regular time to share the joys of running. The course is measured and marked not to see who will break the world record for a given distance, but instead to allow each individual to assess his or her performance on an individual and personal level.

After checking with the local Fun-Run directors listed below to see what specific distances will be run at the local site, participants choose their distance in accordance with their needs and preference.

During their runs, participants will be told their times which they then relay to officials at the run. The officials then award all participants a color-coded certificate for finishing a run.

• **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., starting May 1, 1976. John A. McAuliffe, 617 Gibson Ct., 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., starting June 5, 1976. 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. Ray Brammeier, 1704 Tennyson Dr., Concord, Calif. 94521.

• **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., starting June 5, 1976. 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 Schlfe, 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., June 6, 1976. 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., starting June 12, 1976. Robert Wade, No. 5 Windward Hills, Talafofo, Guam 96914.

• **Site 017** — Carthage High School, Carthage, Ill. Weekly, Saturday 10 a.m., starting June 5, 1976. Philip Clark, RR 2, 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., starting June 5, 1976. Ray F. Bartels, 4440 Winfield, Saginaw, Mich. 48603.

KARHU The finest manufacturers of Athletic shoes. Latest improved styles--leather and nylon uppers. The best in the industry..made in FINLAND



THE FINEST, THE GREATEST, THE BEST NYLON UPPER SHOE EVER MADE.

That's really boasting, and we sure mean it. Lightweight, extra durable--soft leather reinforced along sides, front and back of heel. 3/4" rubber heel pad. #2323

Tough wearing role, brought up back of shoe. Cushioned rubber insole and arch. Orange color. Nylon, black trim. *Sizes 3 to 13.*

OUR PRICE \$25.95



KARHU--MARATHON, TRAINING, LEISURE

#2302--Finest white leather uppers, 3 layers of rubber, extra shock absorbing, padded ankle & achilles protection. Sponge rubber insole and arch. Most comfortable training shoe. *Sizes 2 1/2 to 13. OUR PRICE \$18.00*

#2310. Same as above with an extra 3/8" gum rubber sole. Long lasting. *Sizes 5 to 13. OUR PRICE \$19.50*

#2412. Same as above but in suede colors. Beige, Scarlet, Royal, Brown, Golden tan. *Sizes 2 1/2 to 13. OUR PRICE \$17.50*



#9310 "POINT FOUR" Special closeout shoe. An excellent shoe for training, cross country, practice, jogging, etc. Leather and Nylon uppers, RED and BLUE. Soft comfortable double rubber sole. Rubber brought up in front and back of shoe. Padded ankle, achilles padded protection, terry cloth arch and insole covered with soft rubber padding. School price \$19.50

#5047 "POINT FOUR" Closeout. Gold nylon, gold leather, blue trim. Double sole, has all the features of above shoe. Great for training, jogging, cross country, leisure, etc. etc. *Sizes 6 to 13*
Your choice School price \$19.50

Our Price \$12.95

710 MARATHON--ADIDAS

YOUR CHOICE

301 OLYMPIA--ADIDAS

308 ANTELOPE--ADIDAS



\$12.50 pair



Sizes Available 11 thru 14

Sizes Available 13-14 only

\$7.50 Sizes Available 11 1/2 thru 13

PLEASE ADD \$1.25 PER PAIR FOR SHIPPING AND HANDLING.

CARLSEN IMPORT SHOE CORP. 524 Broadway, New York, N.Y. 10012

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

10,000 METERS-JERSEY SHORE STATE BANK TIADAGHTON RUN—Saturday, July 3, 11:00 a.m. Six age divisions, plus women's open. Trophies each age division. T-shirts first twelve in each division. Entry \$2.00. Contact: John Anderson, R.D. No. 1, Box 754, Jersey Shore, PA 17740.

KOCH BREWERY FARM FESTIVAL—August 21, Fredonia, NY Clinic, 3 mile fitness run/jog, 3 mile race walk, 10 K RACE. Flat, fast, safe course. 100 + awards—teams, 15 age groups, specials, ribbons. T-shirts to first 300 entries. For info/entry stamped envelope to Carl Olson, 25 University, Fredonia, NY 14063

MARIST COLLEGE DISTANCE RUNNING CAMP—Two one-week sessions: August 8-13, 14-19. Better international running stars than any other camp. Past guests: Marty Liquori, Frank Shorter, Dick Buerkle, Tony Waldrop, Dave Wottle, Tom Fleming, Barry Brown. Three special guests each week. Five teaching stations—no other camp has—including: Nautilus and Universal weight, training, videotaped form analysis, rehabilitation training, exercises, striding and pacing drills. Excellent dorm food and housing. Unlimited seconds on all food items. Hurry—enrollment limited to insure individualization! Rush for free brochure: Rich Stevens, Head X-C/Track Coach, Marist College Box 814, Poughkeepsie, New York 120601.

ATHENS TRACK CLUB—Mari-gold Festival Footrace, 10KM—All Classes, Special Awards, June 19 at 9AM, Winterville, GA

NEW BALANCE—Trackster III \$25.00, 305's \$22.00, Comps \$17.00. Free NB sweat band or cap with each order. No postage. Send length and width to: Steve Hoag, 2815 W. 44th St., Minneapolis, MN 55410.

CAN AM INTERNATIONAL TRAINING SITE—Track-Field Cross Country Camp or Training Opportunity for Men, Women: Age group Jr.—Sr. High, Camp Weeks: Open training time for all athletes. Aug. Clinic: Coaches, Collegians, Masters. Going to Montreal? We are on the way. Accommodations on a weekly or daily basis. Pre-Post Olympic Training Sessions open to all. Use of facility and coaching in your event. Write c/o Can-Am, Tully, NY 13159. (315) 696-8774.

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.

7th ANNUAL MID-ATLANTIC RUNNING CAMP—Medford Lakes, New Jersey. August 29 thru September 3rd. Directors—Former Villanova Olympians, Larry James and Browning Ross. Individualized instruction and top international runners, college coaches, and lecturers. Write for brochure: Larry James, Track Coach, Stockton State College, Pomona, NJ or Browning Ross, Sports East, 238 South Broad St., Woodbury, NJ 08096.

READING, PA, 2ND ANNUAL PENN SQUARE PAGODA HALF MARATHON—13.1 Miles, July 5, 1976. Age groups plus women's divisions. Send self-addressed stamped envelope to Ron Kiehl, 846 Beach St., Reading, PA 19605.

SOLE SAVER—Easy to apply to those worn running shoes. 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 94040.

NOW IN NEW YORK CITY—Lydiard training and racing shoes at Runner's Incorporated, 198 7th Ave., NYC, tel 691-2565, also Tigers, Adidas, Puma.

STRETCHING—by Bob Anderson. Best book in its field. A must for every runner. 183 pages, fully illus. \$7.00 post paid. (Colorado tax—22c) to: Stretching, Box 1002, Englewood, CO 80110.

GREEN MOUNTAIN CROSS COUNTRY CAMP—Lyndon Institute, Lyndon Center, Vermont—Boys & Girls, junior high and up. 1 session: August 8-17. Staff includes: Roy Benson, head coach; Florida Track Club, Peter Squires, New York Athletic Club. Ideal training on pine needle paths and dirt roads in the coolness of the Green Mountains. Daily video taped training sessions, comfortable Prep School housing, mountains, lakes & streams. Write for Free brochure: Peter Davis, GMCC, Lyndon Institute, Lyndon Center, Vermont 05850.

TEE SHIRTS CUSTOM PRINTED—Sweat shirts, jackets, jerseys. Schools, teams, clubs. Minimum 12: quantity discounts. Free catalog. Mandelker's RW, 2603 N. Downer Ave., Milwaukee, WI 53211.

5th ANNUAL CARMEL CLASSIC TRACK & FIELD CHAMPIONSHIPS—June 19-20—Carmel, Indiana. AAU, NCAA, USTFF sanctions. 71 Championship events. Men and women ages 12 thru Open. Master/Senior Mile. All-weather track, portapits. Meet Director, Chuck Koepfen, 147 Park Ln., Carmel, IN 46032 (317-844-1823 after 7:00 PM) Watches, Trophies, Medals. Entry Deadline—June 12, 1976. No late registration accepted.

NIKE, TIGER, BROOKS SHOES—Men's Brooks, 1-13, Women's Brooks, 4-10, Women's BC sizes. Nike 3-13. New women's training shoe & excellent men's. Nike, USA Track, Montreal 76 T-shirts. Information send self-addressed, stamped envelope: The Athlete's House, 1700 Portland Ave., Nashville, TN 37212.

TIGER Montreal '76—\$20.95; Jayhawk — \$19.95; Nairobi — \$17.95; Sizes 6-12, Team price on request — Send self-addressed, stamped envelope. Add \$1.50 postage one pair, plus 50 cents each additional pair. Write: James Morris, The Jog Shop, 1203 E. Warren, Brownfield, TX 79316.

24-HOUR RELAY T-SHIRTS—Identify yourself as a runner by wearing one of these colorful, inexpensive t-shirts. Available in a variety of colors and sizes—S, M, L, XL. Blue, Green, Yellow, Red, Gray, Orange, White. Just send \$3.50 (postage included) to Runner's World, Box 366, Mountain View, CA 94040. California residents add 6% tax.

BLOOMINGTON FREEDOM RUN—5.8 miles—Sunday, July 4, 1976, 10:00 a.m. T-shirts to first 200 finishers. 40 awards, 11 Divisions. \$2.00 entry fee by July 3, \$3.00 race day. Sponsored by Bloomington Recreation Department. Write: Dean Reinke, 3227 Market Place—IE, Bloomington, IN 47401.

BROOKS—Drakes, Penns, Texans & Spikes. All models 2pr/\$25 + \$1.25 postage per pair. Choose from single model or combination. Not all sizes available so enclose several choices (minimum order 2 pairs). Send to: Windy City Sports, 402 E. Virginia, Bensenville, IL 60106. (For additional information send self-addressed stamped envelope).

6TH ANNUAL 24 HOUR RELAY—Fort Meade, MD, Sat/Sun, August 14-15, 1976. Eastern Section of RUNNER'S WORLD National Contest. 440 yard all weather lighted track, all runners timed. Trophies to top 25. Medals to top 5 teams. Trophies to top 10 women, military, and various age groups. 1975 relay had 234 finishers. Winning team was Distance Unlimited, 281 miles, 1478 yards. John Cabell, Princeton University, top distance 29 miles, average 4:46.9. Entry fee \$1.25, Bob Rothenberg 13G, Ridge Road, Greenbelt, MD 20770. Phone (301) 474-9362. Starting time 12 noon. Extra attraction, 50 mile run and 50 mile race walk also on track. Starting time 6 P.M., 14 August. Walkers please register in advance and bring own lap counters.

PAAVO NURMI MARATHON—August 14, 1976, 8:00 A.M. Upson to Hurley WE. AAU Certified Course. Special Bicentennial T-shirt to all finishers. Age group awards. Contact: Hurley Chamber of Commerce, Hurley, WI 54534.

RUNNER'S NOVELTY BROCHURE—Decals, Bumper Stickers, Runner's Cartoon Books, Super Jog Books, Lucky Tokens, Gag Awards, and Coaches Aids. Send 25c in coin to: The W.F. PIPER AGENCY, 543 E. San Bernardino Rd., Covina, CA 91723

BIORHYTHM CHART—of your physical, intellectual, and emotional cycles. Computerized, accurate, explanation included. One year, \$3. Send Birthdate, remittance. Bio-rhythms, 2873 Nebraska-R, Boulder, CO 80301.

THE ROANOKE VALLEY BICENTENNIAL ROAD RACE—7.6 mile road race. Saturday, June 26, 1976. Women's divisions include the following age groups: 9 and under, 10-13, 14-17, 18-29, and 30 & over. Men's groups include: 9 and under, 10-13, 14-17, 18-22, 23-29, 30-39, 40-49, 50 & over. Awards to division winners; special awards, T-shirts to all finishers. For info, send self addressed-stamped envelope to R.V.T.C., 118½ E. Main Street, Salem, VA 24153.

NEW BALANCE—3:20's \$22.95, 3:05's \$19.95, 2:20's \$19.95, TR3's \$23.95, Tiger Jayhawks \$19.95. Nylon Shorts \$3.00. Bicentennial Boston Marathon T-shirts \$3.25. ERG, Gatorade 10 gallons \$9.95. No seconds, post-paid. Bauman's, 8308 91st Terrace, Seminole, FL 33542.

PENSACOLA, FLORIDA, FIESTA OF FIVE FLAGS RUNNING FESTIVAL—June 26, 1976. University of West Florida Fieldhouse. 8 miles road race, 2 miles run-for-fun, 1 mile ETA, 1 mile children's cross-country. All age groups for both men and women. Lots of awards, certificates, T-shirts. Register at 7:00 A.M., first race at 8:00 A.M. Contact: Pensacola Runners Association, P.O. Box 2691, Pensacola, FL 32503 (an RRCA chapter).

YOGA RUNNING—Beautiful forest roads, daily postures & meditation, classes, wonderful vibes, great food! For free 24-p. booklet & rates, write: George Beinhorn, Ananda, 900 Alleghany Star Rt., Nevada City, CA 95959.

RUNNER'S GAZETTE—New bi-monthly coming soon. News, features, photos of runs and runners. For details send stamped, self-addressed envelope to: Ed Gildea, 102 W. Water St., Lansford, PA 18232.

FORT STANWIX DAYS RUN—20 KM Adirondack Association Championship, Rome, NY, 9:30 AM, August 8th. Women's 5 KM—Free shirts, trophies—Open, Master's, Sr. Masters, Women, Team. Beautiful historic course. Contact Dee Howell, Rome Family "Y", 301 W. Bloomfield Street, Rome NY 13440.

NOTICE—Runner's Mecca announces their staff for the summer of 1976. These individuals are official representatives of Runner's Mecca. Executive Director: Rich Heywood, Director: Bruce Gove; Counselors: Joe Sicora, Larry Weber, Bradford Mudge, Brad Roy, and David Harris; Special Guests: Hal Higdon and son, Rory Donaldson and Son, E.C. Frederick (others to be announced.) Contact: Rich Heywood, Executive Director, Runners Mecca—Chalet Village,

General Delivery, Brianhead, Utah
Phone: (801) 586-6778.

WANTED AMERICAN RUNNERS—Last years United States/Mexico Marathon was won by a Canadian, Larry Brown. Second place went to Earnest Yabarra of Mexico. If you want international competition run the United States/Mexico Marathon, November 28. Contact Don Morton, P.O. Box 3645, El Paso, TX 79903.

THE GREAT RACE—Eppie's Restaurants sponsors this unusual relay event: cycling, water craft, running, Special Divisions: Open, 18 & Under, Senior, Women. Sacramento, July 17. Great prizes! Great fun! Write for details, entry form: The Great Race, 1828 29th Street, Sacramento, CA 95816.

LA LUZ TRAIL RUN—7½ miles up a 12½% grade makes the La Luz Trail Run the most brutal challenge on physical endurance in the US today. Only those in the most superb condition should attempt to conquer the majestic Sandia Mountains. Race date is August 22. Entries are open to both men and women in 6 age categories. Large trophies awarded for first man and first woman runners. Medals for first 3 places in each category. Ribbons for next 3 places. All finishers receive certificates of com-

pletion. Write for information. Albuquerque Police Athletic League, 121 Arno N.E., Albuquerque, NM 87102.

BLOOMINGTON MORGAN-MONROE SUMMER—2 & 10 mile—Sunday, July 25, 1976, 5:30 p.m. 40 awards (wind-breakers), 11 Divisions. \$2.00 entry fee by July 24, \$3.00 race day. \$1.00 "Fitness" 2 mile. Sponsored by Bloomington Recreation Department. Write: Dean Reinke, 3227 Market Place—IE, Bloomington, IN 47401.

JOG-LOG USA—Produced for runners by runners. Still only \$2.50. See page 13, February RW. Motion Sports Products, Dept. B, Box 821, Bozeman, MT 59715

EASTERN MASTERS OUTDOOR CHAMPIONSHIPS—Sunday, July 11, California State College (PA). Also selected Sub-Masters and Women's Masters events. Information and entries send SSAE to: Marty Uher c/o California State College, California, PA 15419.

CLASSIFIED ADVERTISING RATES—Race Notices: 40c/word, \$10.00 minimum. General Notices: 75c/word, \$20.00 minimum. All ads must be paid in advance. Next issue for advertising: August '76. Closing date: June 21, 1976. Contact: Advertising Manager, P.O. Box 366, Mountain View, CA 94043.

Marketplace


RUNNING T-SHIRTS

- Ancient Marathoner • 1000 Mile Club
- Montreal '76 • Go Pre! Memorial Shirt
- Boston Marathon (with finishing time) all **\$3.95** each

- "You design it" . . . **\$2.50** plus 15c per letter

Ask for greatly reduced quantity prices for 15 shirts or more. Add 50c per shirt or \$1.00 per three shirts postage.

FINISH LINE SPORTS, INC.
212 N. Parkerson
Crowley, LA 70526



RUNNING

THE JOURNAL OF THE SCIENTIFIC
STUDY OF DISTANCE RUNNING

"Information & ideas for the thinking runner"

- Physiology, nutrition, medicine, etc.

For the layman and the professional •

**Published twice yearly (Dec. & June).
a subscription is for four issues and
costs \$5.00. Issue no. 6 due in July
to subscribe send address & check**

RUNNING BOX 267 FLAGSTAFF, AZ. 86001

THE GREENSBURG, PA. Y.M.C.A. PRESENTS

SPIRIT of 17.76

SATURDAY—JULY 17, 1976—11:00 A.M.
EVENTS

17.76 KILOMETER RUN (11.1 Miles)

* Pre-registration by July 10, 1976

* Post race refreshments and picnic

*Entry fee \$3.00

AWARDS

1st. Place—14½" Silver Revere Bowl

"THE BICENTENNIAL BOWL"

Next 99 finishers receive Olympic Style

Medals on 30" Presentation Ribbon

Course: Hilly—Surface, macadam roads

Send entries to Fred Kneidler,

Greensburg, Pa. Y.M.C.A.

101 S. Maple Avenue, Greensburg, Pa. 15601

MARKETPLACE ADVERTISING RATES

Now you can advertise races, camps, clinics and equipment in small box-display ads. It's effective and eye-catching and we'll even do the layout and typesetting for you.

Deadline for August is June 21, send ad to Judith Madden Magruder, Adv. Manager, Box 366, Mt. View, CA 94040.

Box Size	Rate	Layout Charge (if not camera-ready)
1 inch	\$35	\$10
2 inch	70	15
3 inch	100	20

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

MECCA BRAGS:



Finest accommodations, best choice of meal arrangements (restaurant, snack bar, or self-prepared meals) best scenery, most runnable terrain at the highest elevation, cleanest air (Kaparowits Power project was defeated.) widest choice of activities, appeals to and accomodates more of every type of runner, close to hospitals and health services, modern facilities where you are able to rest properly while training, a good choice of culminating running activities . . . color T.V. for watching the Olympics, choice guest speakers such as Hal Higdon, and Rory Donaldson (National Joggers) . . . AND THE LOWEST RATES POSSIBLE WHICH ALLOWS YOU TO COME ANY-TIME DURING THE SUMMER MONTHS AND STAY LONG ENOUGH TO GET SOME GOOD FROM YOUR STAY.

Rich Heywood, Executive Director
Runner's Mecca—Chalet Village
General Delivery
Brianhead, UT
Phone: 801-586-6778

Club Notes

News from the sport's organized groups and ruling bodies.

The election of Jeff Darman and Stuart J. Brahs as co-presidents of the Road Runners Club of America (RRCA) during that organization's 19th annual convention at Boston highlights the premier publication of a new regular feature to *Runner's World* entitled "Club Notes."

The new column will provide information each month on organizations which influence and control the administration of the sport of running. The information provided each month will allow the reader to see the unique side-lights which are continuously happening in these influential organizations.

In addition, each month the column will contain notes on various club activities across the nation. Those notes will not be reports on the daily activities of the clubs but instead will include such oddities as unique ideas for sponsorship and promotion of races and reports on the formation of new clubs.

This month, Darman, who is from Washington, D.C., and Brahs, who hails from Rockville, Md., join past RRCA president Gar Williams to report on just what the RRCA has done and plans to do for runners.

THE ROLE OF THE RRCA

In his timely and perceptive article ("Why I Quitte the AAU" April '76 *RW*), Hal Higdon aptly noted that the Road Runners Club of America "forms the backbone of long-distance running in many parts of the United States." One of the primary factors underlying the RRCA's predominance is the fact that it has been able to avoid the pitfalls which beset most of the national amateur athletic groups in the country.

The RRCA is essentially a "do-it-yourself" organization in which the athletes are also the administrators. There is little or no red tape, and the bureaucracy at all levels is virtually non-existent. The main goal of the RRCA is to promote distance running and jogging for sport and physical fitness, and this is the common bond which unites our members from coast the coast. In the RRCA, runners themselves decide how money is to be spent, where and

when races are to be conducted, and they take care of the myriad of details related to a meet.

One of the RRCA's unique features is the primary importance of the local chapter rather than the national organization. We are not some type of monolithic structure in which policy directives are handed down from on high or in which the basic decision-making process is vested in only a few individuals. Rather, our emphasis is on the promotion of competitive and fitness running at the grass roots, an arrangement in which local groups plan and implement their programs with backstopping and support from the national level. The RRCA provides the initiative, organizational advice, technical assistance and encouragement. But the success of our nationwide program would be impossible without active local involvement by runners and joggers in the areas where successful Road Runners programs are being conducted.

Through a wide variety of activities, the RRCA stimulates running. We sponsor a national postal competition in 10 different distances, each having six divisions, with the rankings determined by times achieved in local sectional events. The RRCA has its own Personal Fitness Program, open to members and non-members alike. Numerous state and regional championships are being conducted by many local clubs, and we sponsor an age-group program consisting of a national cross-country championship and three postal championships—an effort in which we pioneered.

The RRCA publishes a quarterly newsletter, *Footnotes*. We present an annual award to the outstanding male and female runner (the awards for 1975 went to Bill Rodgers and Kathrine Switzer.) We present an annual award for excellence in journalism relating to running (the 1975 recipient was Dr. George Sheehan). The RRCA established and actively maintains the only American Hall of Fame for distance runners. We have developed over the years a unique and comprehensive handbook which is a compilation of the experiences of local and nation-

al RRCA officials, and which contains invaluable suggestions on club and race administration and the formation of a running club.

The RRCA represents runners at the national level and makes their views and concerns known to such governmental bodies as the National Park Service, the President's Council on Physical Fitness and Sports and the President's Commission on Olympic Sports. We have been able to gain valuable recognition for the sport of long-distance running and the importance of jogging in maintaining good health at the national level, and have also been able to assist a number of local clubs successfully resolving problems they experienced in the use of government facilities.

The modest dues which local clubs pay to the RRCA go directly to support running and not to send non-running officials on foreign junkets or to non-productive national meetings. What administrative expenses are involved are minimal and are used to promote our sport, whether in furnishing developmental and instructional material to an interested club or in sponsoring a lecture or clinic or in responding to the hundreds of inquiries we receive monthly about running, jogging and the RRCA program.

The essence of the RRCA is that it is a positive unifying force for *all* runners and joggers. Our members range from Olympians and national champions to two-mile-a-day joggers just trying to stay fit. One of the great strengths of our program is the diversity of the RRCA membership. We give ample recognition to all levels of performance and make no distinction between sexes. The athlete is the most important aspect of the RRCA program—man or woman, young or old, a sub-2:30 marathoner or a nine-minute miler, a seasoned veteran or a neophyte.

In our 18-year history of RRCA has grown as an *independent* national organization with a membership of almost 10,000 men, women and children, and with more than 60 local affiliates in some 30 states and one territory.

We welcome and encourage all those who may be interested to join with us in our programs, both national and local. For additional information, send a stamped, self-addressed envelope to Stuart J. Brahs, 803 Brice Road, Rockville, Md. 20852.

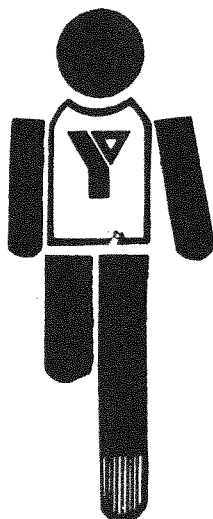
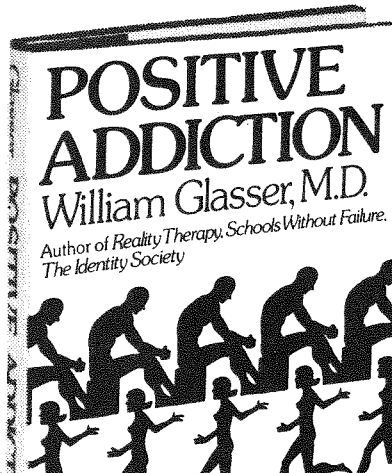
Jeff Darman,
Stu Brahs and Gar Williams ●

Dr. William Glasser shows how Positive Addiction helps runners enjoy more satisfying lives

Readers of *Runners World* will recall Dr. Glasser's "Help Wanted" questionnaire in the October 1974 issue. Hundreds of readers responded and told him how their addiction to running helped them overcome personal miseries, eliminate bad habits, and achieve better physical and mental health. Now, the distinguished Los Angeles psychiatrist, has written a provocative full-length book (featured in the May issue of *Runners World*) that effectively shows how Positive Addiction can be applied to all kinds of situations. His book describes the

psychology of strength and weakness, outlines the steps to Positive Addiction, and explains the benefits and manifestations of Positive Addiction. If you want to get the most from your running activities, read Dr. Glasser's widely hailed new book and learn how Positive Addiction through running can change your outlook on life and make

you a better person. Order a copy of POSITIVE ADDICTION today from your local bookseller, or send \$7.95 plus 50¢ postage direct to the publisher, Harper & Row, 10 E. 53rd St., N.Y. 10022, Dept. 372 RB. Money back if not fully satisfied.



GRAND RAPIDS YMCA MARATHON

Held at Grand Valley State College
Saturday, October 16, 1976

Races: 6½ miles, 13 miles full marathon.

Entry Fee: \$3.00 until Oct. 9, 1976

Late Fee: \$5.00 accepted until 11 am on Oct. 16.

Awards: Male Division 4 age groups; Female

Certificate given to all finishers. AAU certified course. Sponsored by Central YMCA, Noon Y's Mens Club. For official entry blanks write:

YMCA Grand Valley Marathon
Central YMCA
33 Library Street
Grand Rapids, Mich. 49502

KINGSWELL CATERPILLAR



The Training Shoe your feet will not let go of.

Deep flexi rubber ripple sole gives independent suspension whole length of foot. 7/16" heel lift, padded collar, tongue and contoured towel sock. Lined heel pocket, stiffened counter. Soft blue suede uppers, yellow trim. Wt. 11½ ozs size 8. Sugg. ret: \$29.95. See your dealer, or write us:

**KINGSWELL
SPORTS USA**

Steuben Rd., Peekskill,
NY. 10566 (914) 739-0096

PACE YOURSELF



With the pace of life moving faster and faster, the things *Run Gently, Run Long* (now in its third printing) has to say are more relevant than ever before. Author Joe Henderson comments on the "fleeting things and lasting things" in running, writing for "those of us who look as running as too good to throw away, who have this vision of what running can be, and know if we run for fun we can run forever." 1974, 100 pp., ill., \$2.50.

Please send me ___ copy(ies) of *Run Gently, Run Long*. Enclosed is \$2.50, plus 40c postage, per copy. (Calif. residents add 6% tax).

Name _____

Address _____

City/State/Zip _____

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

Readers' Comments

*Reactions to events in the sport and
features in the magazine*

THE "YOU" IN AAU

I enjoyed Hal Higdon's blast at the AAU ("Why I Quit the AAU" April '76). I have had some personal dealings some of the points raised in the article. The main issue, I believe, is the elitism of the AAU which gets translated into minimal concern with a broad-based, mass participation type of running program in this country. The AAU needs the criticism and the runners need their consciousness raised.

You are doing a great service to amateur sports by publishing articles such as Hal's.

*Dick Hessler
Columbia, Mo.*

Hal Higdon's "Why I Quit the AAU" was the best thing I have seen or read concerning the stupidity of the Amateur Athletic Union.

The financial control Higdon mentions also strikes close to home, as the Southern Pacific Association and the long-distance running committee have come within a hair of "parting company" over it.

The current president of the Southern Pacific Association is demanding that all sports under AAU favor contribute a certain amount of that sport's money to keep the local AAU office open.

Our local association also has raised sanction fees with the weary excuse of "rising insurance costs." And yet, no one athlete has been injured seriously enough for our road races to take advantage of that insurance.

I took the job of chairman of the long-distance running committee in the Southern Pacific Association thinking I could help the runner work from within.

However, for my experience, along with Hal's and Jeff Darman's, I don't think anything but getting rid of the AAU would help the runner.

*Steve Broten
Whittier, Calif.*

I do not wish to offend anyone, but Hal Higdon argues with a premise that just simply is not true in Indiana. The "other" distance running club in

Indiana has more than just several female members.

The Wabash Valley Pacemakers have existed for two years and have close to 50 members in the club. Whether to join the AAU is an individual matter and indeed some have not joined for the very reasons that Higdon mentions.

For many years, the Striders were the only club in the state, but the Pacemakers have worked hard and deserve more recognition than they have received. The biggest distance race in the state, the Marathon Marathon, the Eastern Express 20-Kilometer and other races in the southeastern part of Indiana have been or will be run by active members of the Pacemakers.

I'm proud to be a Pacemaker —one of the charter members. We're small, but very active. Please give us our due.

*David Fleming
Bloomington, Ind.*

I think the positive accomplishments and contributions of the AAU to long-distance running and athletics in general far outweigh their negative deficiencies. We members of the AAU who would like to see these negative deficiencies corrected should work within the organization rather than trying to organize some sort of "national boycott."

To "cop out" never has been a solution to any problem. History has demonstrated that to effect change from within is of far more lasting value.

*Chaplain Joseph F. Shea
Boston, Mass.*

The sequence of events that led to the virtual disappearance of AAU running programs in the Baltimore area and the subsequent success of the Baltimore Road Runners Club bear out your contention ("Running Commentary," April '76) that local programs should be runner-directed.

The South Atlantic chapter of the AAU is little more than a dues collection agency. If its *pro forma* participation in the highly successful Maryland Marathon (for which AAU registration is required) were withdrawn,

future marathons would be no less successful.

The local AAU's interest in or knowledge of running (as embodied in its current officials) is, to put it charitably, minimal. There has not been a track and field meet for years. Of course, these officials have made some lukewarm attempts to interest runners in conducting programs.

I was glad to see Les Kinion's name mentioned in Higdon's article. Very few people really appreciate the yeoman efforts that he (and others) have expended to make the RRCA success in the Baltimore area. They have done more for distance running in a couple of years than the AAU, in its past and present form, could accomplish in a century.

*Arnold Cummins
Baltimore, Md.*

In reply to your "Running Commentary" published in the April 1976 issue of *Runner's World*, I would like to say that after meeting and discussing our fun-runs (upcoming) with our local AAU commissioner, he has indicated that he may very well come to them to participate with us in the runs. Even AAU commissioners can run for pleasure.

*Joe Bynum
Ontario, N.Y.*

PSYCHOLOGICALLY POSITIVE

Joe Henderson's article, "New Beginnings in Running" (April '76) contained an interesting comment on how "psychiatrists are only now seeing . . . that running acts as an addictive drug which bends the mind in positive ways."

In his new book, *Positive Addiction*, psychiatrist William Glasser, founder of "reality therapy," believes that most people can overcome self-imposed weaknesses by cultivating a positive addiction. Glasser asserts that activities like running when engaged in regularly, lead to an addiction which is positive or beneficial because it enhances the person's competence and contentment in other areas of life.

I am now completing my fourth week of non-smoking. Joe Henderson's comment, as well as Glasser's beliefs, can claim me for their "exhibits," for my running 2-3 miles per day seems to represent such a positive addiction, replacing the negative addiction of smoking, and now a genuine feeling of health and well-being.

*Alan McTighe
Concord, Calif.
(continued on page 86)*



Identify yourself as a member of that great fraternity of runners. Display this specially designed high quality, 6 inch, three color vinyl decal, conceived by a runner for runners. Detach and mail with our order

Please send me _____ decals @ \$2.00 each

Name _____

Address _____

City _____

State/Zip _____

Send check or money order to:

Stick-it Creations
P.O. Box 24554
San Jose, CA 95154



The Athlete's Foot[®]

FUNSHIRT

100% Orlon

\$4.95 each

Write no. of shirts wanted in size boxes by designated color.

Colors

Royal Blue & White S M L Ex L

Kelly Green & Gold S M L Ex L

Scarlet & White S M L Ex L

Sizes

Name _____

Address _____

City/State/Zip _____

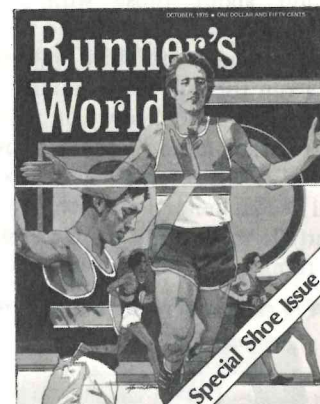
Please include 50c ea. for mailing & handling. Missouri residents include 3% state tax.

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.

Special Issue



Before you purchase your next pair of running shoes, read this

Shoes are an important investment. One of the most important investments a runner can make. So, as a guide to making that investment, *Runner's World* has produced the most comprehensive running shoe survey ever.

The survey's purpose is to save you time and money while looking for the shoe to meet your needs. An excellent analysis of the top 30 models of running flats, the top 15 spiked shoes and shoes for special conditions, helps you pick the right shoe for you, at the right price.

The price of this special shoe survey is only \$2.00, postpaid. And, there is a very limited supply. So, it's first come, first serve—order your copies today.

ORDER FORM

Please send me _____ copy(ies) of the October issue of *Runner's World*, containing the special shoe survey, at \$2.00 each, postpaid.

Name _____

Address _____

City _____

State/Zip _____

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

Your April 1976 *Runner's World* article "Strength for Distance" is the most articulate piece of writing on runners and physiology I have yet read in any magazine or book.

I was particularly intrigued with your information about those with knee pains. I am a former football and rugby player who literally stumbled onto the joys of a run for fun while training for these sports. I was hooked when I began to look forward more to the workouts than to the athletic events themselves.

I will recommend the dissemination of the article to as many people as possible. I think it should be made known

to high school track coaches. You will have a lot of agreement there.

*Toby Decker
Sea Girt, N.J.*

Many thanks to Ian Jackson for his "Hard Man Myth" (April 1976). After a lifetime (29 years) of being overweight, I began jogging and dieting myself into shape in September 1975.

Forty pounds and 400 miles later, I am mentally committed to running, but I realized after reading Jackson's article that most of my workouts have been of the painful variety. Trying his relaxed running idea, I completed my

first 10-mile run the day after I received your April issue.

The run was a beautiful experience mentally and physically and I am looking forward to my next workout.

*Don Storms
Dade City, Fla.*

ULTRA-SUB-PAR

The Greeks defeated the Persians at Marathon, and later succumbed to the Romans. Your Anglicizing of distance running reflects not the triumphs of Classical Greece but the hybridization of later periods.

"Ultra-" and "sub-" are Latin prefixes. When joined with the Greek "Marathon" they don't reflect the dignity of the distances, but point to a bastardization of a culture.

I suggest the use of "meta-" and "cata-" in place of "ultra-" and "sub-" Thereby in matters of Greek, do as the Greeks.

*Alan Cohen, M.D.
Harvard, Mass.*

GERRY WAS THERE

I enjoyed the article by Dennis McBride about Billy Mills ("Billy Mills: Champion of His People," April '76). However, one point is incorrect.

McBride asks the question of how Gerry Lindgren would have done had he been in the 10,000-meter final at Tokyo. Lindgren was, in fact, in the race and, despite the fact that he ran on a badly swollen and sprained ankle, finished a fine ninth.

*Terry Gallagher
Arlington, Mass.*

2000 IS A CROWD

I wonder what the Boston Marathon officials are going to do now to try to cut down the number of starters in the marathon?

Despite the new qualifying time for males under 40 years of age, this year's Marathon once again had nearly 2000 starters. There also were several unofficial starters without numbers.

I would suggest that 3½ hours once again become the qualifying time for all runners. Obviously the new qualifying time for males under the age of 40 did not significantly cut down the field of runners.

*Paul Ippolito
Chester, Vt.*

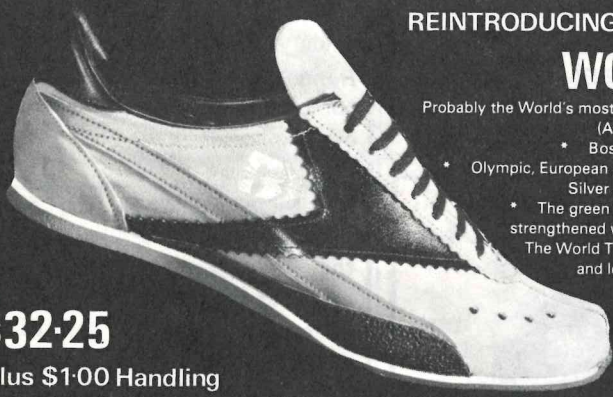
The number of starters at Boston, official, special divisions and unofficial, probably totaled more than 2500.

Reebok

MADE IN ENGLAND



REINTRODUCING THE FAMOUS WORLD TEN



Probably the World's most exclusive Marathon shoe. (Average shoe weight 5 oz.).

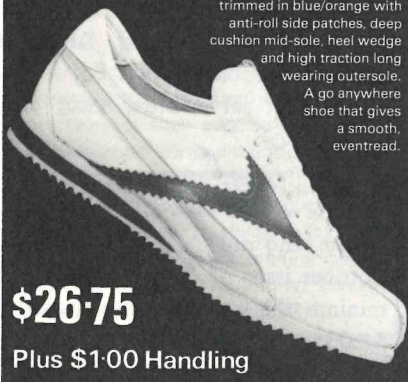
- Boston winner in record time.
- Olympic, European and Commonwealth Gold, Silver and Bronze medal winner.
- The green kid upper is fully lined and strengthened with anti-roll side patches.

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

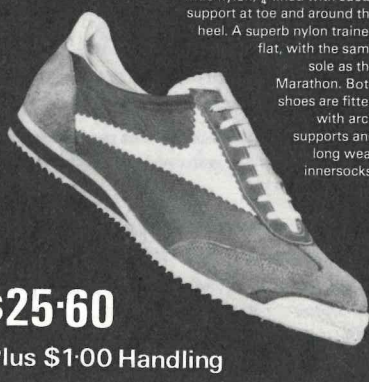


Super soft white cow hide trimmed in blue/orange with anti-roll side patches, deep cushion mid-sole, heel wedge and high traction long wearing outsole. A go anywhere shoe that gives a smooth, eventread.

\$26.75

Plus \$1.00 Handling

COUGAR



Blue nylon, ¾ 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.

WALK, DON'T RUN

After seven years of jogging and subscribing to *RW* for more than a year, I've stopped jogging and you're responsible!

I read some of your recent article on race walking (for example, "If You Can't Run, Try Walking," January '76) and in March I reacted to that. As a jogger I couldn't jog much more than three miles a day without feeling injuries.

But as a race walker, I'm doing five miles in less than an hour six days a week without any breakdown in sight.

Since *RW* made me switch and I'm a life subscriber to the magazine, how about a race walking article in each issue? After all, the initials are the same as your magazine's.

*Rosie Pearson
Saratoga, Calif.*

HUMAN'S BEST FRIEND

Please do not write anything bad about dogs ("Paws," April '76). I love dogs and run with two 60-pound dogs. I have never been chased by a dog, when running or on my bicycle.

This has included a friend who was walking three full-grown Great Danes when I was out jogging and walking. I went over and said, "Hello," and petted all three dogs which were licking me. He was shocked as the dogs were supposed to be guard dogs. They treated me like I was their long lost owner.

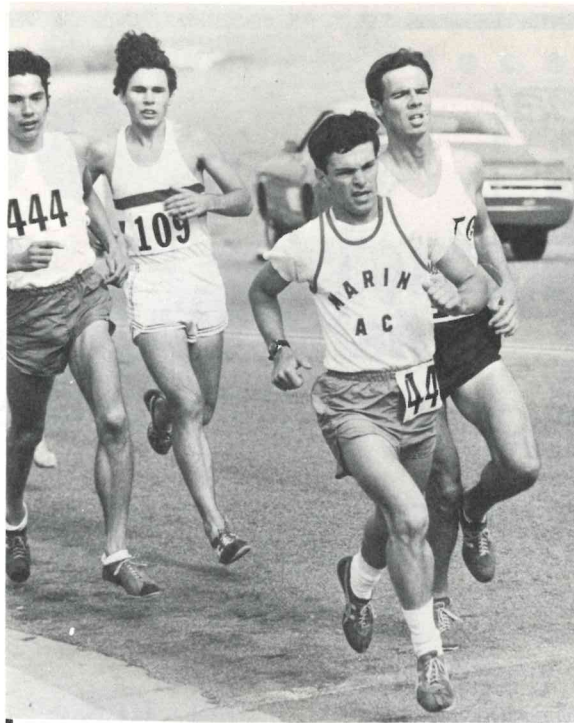
I also have run in the mountains with wolves watching. I spoke to them and they watched me as they tilted their heads in curiosity.

An animal responds to kindness with kindness. A house dog will rarely go past the house and property boundaries. If you act scared, they are sure you have a bad reason to be scared. If you yell, they think you are growling at them and challenging them to a fight or threatening their territory.

If a dog chases you, I recommend you stop and talk softly, even a bit playfully. The dog probably will run off. Dogs prefer to chase something moving. Remember, you are intruding into their personal territory.

*Carole Smith
Rugby, N.D.*

As you've noticed this issue, we're increasing reader participation. We welcome all of your questions and comments, and publish many of them in "Medical Advice," "Runner's Forum," "Technical Tips" and "Readers' Comments." Send letters to *RW*, Box 366, Mountain View, Calif. 94040. ●



**Runner's World
coaches over
50,000 runners.
Did you miss
any sessions?**

ORDER FORM

- | | |
|--|---|
| <input type="checkbox"/> May 1971 | <input type="checkbox"/> June 1975 (\$2.00) |
| <input type="checkbox"/> November 1971 | <input type="checkbox"/> August 1975 |
| <input type="checkbox"/> April 1973 | <input type="checkbox"/> October 1975 (\$2.00) |
| <input type="checkbox"/> June 1973 | <input type="checkbox"/> December 1975 |
| <input type="checkbox"/> July 1973 | <input type="checkbox"/> January 1976 |
| <input type="checkbox"/> August 1973 | <input type="checkbox"/> February 1976 (\$2.00) |
| <input type="checkbox"/> April 1974 | <input type="checkbox"/> March 1976 |
| <input type="checkbox"/> June 1974 | <input type="checkbox"/> April 1976 |
| <input type="checkbox"/> January 1975 | <input type="checkbox"/> May 1976 |

- Enclosed is \$1.00 (includes postage) per issue checked above, unless otherwise indicated.
 Enclosed is \$19.95—send the entire set.

Name _____

Address _____

City/State/Zip _____

RUNNER'S WORLD
Box 366, Mountain View, CA 94040

MAY, 1971

Jim Ryun Interview
Introducing Orienteering

NOVEMBER, 1971

Larry Young Interview
Another Look at LSD
Nutrition for the Runner

APRIL, 1973

Peaking for Big Races
Running Tour of Europe

JUNE, 1973

Monitoring a Marathoner
Bowerman on the Olympics

JULY, 1973

What Diet Can Do
Coping with Summer's Heat
Shoe Inserts

AUGUST, 1973

Runs that Never End
Computerized Cross-Country
The New Africans

APRIL, 1974

Women's National Marathon
Test of Running Potential

JUNE, 1974

Rod Milburn Interview
Effects of Air Pollution
What Makes a 2:20 Marathoner?

JANUARY, 1975

Cross-Country Nationals
Ernst Van Aaken Interview
Running and your Knees

JUNE, 1975 (\$2.00)

Boston Marathon Supplement
Using Biorhythms
Park Barner

AUGUST, 1975

Prefontaine's Last Miles
US Team China Tour
Brooks Johnson on Kick

OCTOBER, 1975 (\$2.00)

Special 96 page issue
Running Shoe Supplement
Pikes Peak Race

DECEMBER, 1975

Bob Anderson Interview
Women's National Marathon
The Six in Ten Who Break Down

JANUARY, 1976

Year of the Miler
Endurance, Pace, Speed Mix
Black Distance Runners

FEBRUARY, 1976 (\$2.00)

1976 Marathon Handbook
Greg Fredericks, Men's AAU

MARCH, 1976

National Running Week
East's Fastest Prep

APRIL, 1976

AAU Dissension
Beginnings in Running

MAY, 1976

Camp Guide
Training the Head

Third Annual



August 1, 1976 6:30 A.M.

CERTIFIED 26 MILES 385 YARDS ALONG OMAHA'S RIVERFRONT
COURSE RECORD 2:26:48.6

ENTRY FEE \$4.00 ENTRIES CLOSE JULY 28, 1976

- Awards: 1st Place and 1st over 40, round trip flights to Boston Marathon, 3 Team Awards, T-Shirts
- Scenic Course, mostly flat
- For entry forms and more information, send self addressed stamped envelope

RACE DIRECTOR
"OMAHA MARATHON"
1620 Dodge
Omaha, Nebraska 68102
402-346-2610

The Atlanta Journal

Covers Dixie Like the Dew

★ AND ★

THE ATLANTA CONSTITUTION

The South's Standard Newspaper

PEACHTREE ROAD RACE

Atlanta, Georgia

SUNDAY, JULY 4th 9:00a.m.

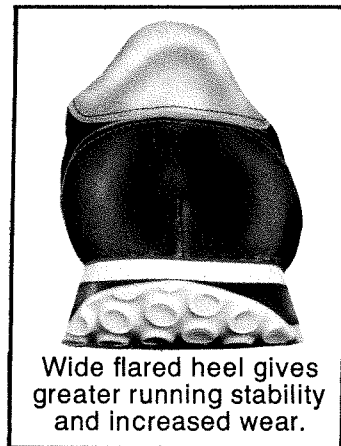
10,000 Meters (6.2 miles)
Along Atlanta's famous Peachtree Street

15 Divisions, 100 Special Awards
T-Shirts to first 1200 Finishers

Early Entry Fee \$2.00

For entry blanks and further information,
Send Stamped, Self-Addressed envelope to:
Dean Tim Singleton
Georgia State University
University Plaza
Atlanta, GA 30303
404-658-2204

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.

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

SHOE WEIGHT B
 11 ozs.—ideal training shoe weight

VARIABLE WIDTHS A
 Narrow 8-11
 Medium 4-13
 Wide 8-11

UPPER SOFTNESS A
 Blue Nylon upper with leather reinforced toe and heel

SOLE MAKE-UP A
 2 layer sole—1/2" thick at ball

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	B	17 Points
SL 72/76	B	C	A	B	B	A	A	B	A	A	B	19 Points

Rating Criteria established by Runner's World A = 1 B = 2 C = 3



The ATHLETIC ATTIC
 3411 West University Ave.
 Gainesville, Fla. 32607

Use Coupon To Order

Villanova II **\$19.95** per pair **\$1.00** per pair for handling

My order..... Quantity _____ Size _____ Width _____ Enclosed is my check for \$ _____

NAME _____

ADDRESS _____

CITY _____ STATE _____ ZIP _____

A



PRESENTS

THE SILVER STATE BICENTENNIAL MARATHON

SATURDAY SEPTEMBER 4, 1976

**Health and Fitness Seminar
Harrah's Hotel Convention Center**

Covert Bailey, A.B., M.A. M.S. Nutri-
tionist/Physiologist

Thomas Bassler, M.D. Editor, Ameri-
can Medical Joggers Newsletter

William Glasser, M.D. Author of "Posi-
tive Addiction"

Jack H. Scaff, Jr., M.D. Cardiologist

Billy Mills, 1964 Olympic 10,000
meter champion

SUNDAY SEPTEMBER 5, 1976

Silver State Bicentennial Marathon

Scenic 26-mile 385-yard course in the heart of the Ponderosa and the Comstock Lode. The AAU certified course begins 15 miles south of Reno at Davis Creek Park, encircles Washoe Lake, and ends at Bower's Mansion Park. Overnight camping facilities available at Davis Creek Park. Award ceremony, picnic and swimming at Bower's Mansion Park. Certificate, T-shirt, and Nevada Bicentennial Medallion to all finishers. All finishers may sign non-smokers rights petition.

**SPECIAL TOUR PACKAGE
AVAILABLE**

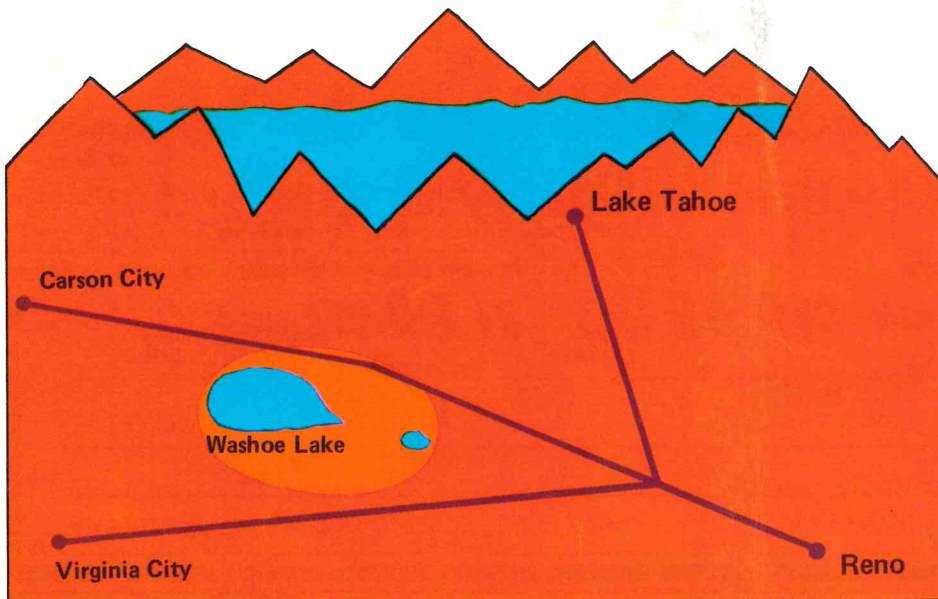
**3 Days and 2 Nights: \$35.50
Includes:**

Accommodations at your choice of over forty of Reno's finest hotels or lodges. Outstanding lounge show entertainment. Two breakfasts at Reno casinos. Steak dinner at Harold's Club. Special discount sight-seeing 1 Rent-A-Car and Airlin many other features.

For complete details reques
from Nevada Heart Fitness
thon Committee, 1324 J
Nevada, 89502. Include
stamped envelope.

**COME TO RI
LABOR DAY
WEEKEND
HEALTH-FI
SEMINAR
SILVER ST
BICENTENI
MARATHON**

For information, entry forms, and seminar registration forms, write to Nevada Heart Fitness Institute Marathon Committee, 1324 Jones St. Reno, Nevada, 89502. Include self-addressed, stamped envelope. (702) 322-3333.



RW A 68147A S74282 *78244 68147
WILLIAM A SHERRARD
2619 LINDA ST
OMAHA NE