

DISTANCE RUNNING NEWS

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Volume I

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START OF THE "HEART OF AM. MARATHON RACE"

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DISTANCE RUNNING NEWS

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lac, J.F. McCaffrey, Rudy Fahl, Mr.
& Mrs. Zimmerman, Shirley Zimmerman,
Aunt Mary, and to many others who
gave support to our new magazine.

A NOTE FROM THE EDITOR:

Do you want a better magazine? More
pages, better stories, more issues,
cheaper rates, etc? Well, you can do
something about this. Tell people
about Distance Running News, sell
subscriptions, get advertising, etc.
and then our wishes can come true.

MID-WEST DISTANCE RUNNING

by

Bill Clark

COLUMBIA, Mo.--The Heart of Am-
erica Marathon--one of the country's
most unusual sporting events--has
come of age. The race, which is sta-
ged each Labor Day thru the rugged

terrain of Southern Boone County
in Central Missouri under the spon-
sorship of the Columbia Parks and
Recreation Department, is one of
the youngest, yet most successful
races at the classic Marathon dis-
tance in the Western Hemisphere.
This Labor Day-Sept. 5--the Heart of
America race will take on added
prestige by being the Junior Na-
tional championship of the Amateur
Athletic Union.

The long distance running com-
mittee of the AAU awarded the jun-
ior championship race to Columbia
at the National AAU Convention in
Washington in early December.

Thus, this unusual event takes
another step forward in its un-
usual development.

The Heart of America Marathon
has been in operation only six
years. It has never been a race
which has drawn a huge starting
field, but it has grown steadily
from three starters in 1960 to 34
starters in 1965; and the record
has been lowered from 3 hours 57
minutes the first year, to the cur-
rent record of 2:37:17.7. Even
though the fields have not been
large, they have been filled with
some of the nation's best mara-
thoners who have come from almost
every state in the Union. Even
England's John Grundy has tried
his hand at the distance, finish-
ing second in 1963.

In the Heart of America, which
is hardly known for its ultra-dis-
tance runners, a marathon is in-
deed an unusual event. Why such a
race? How does it operate? What is
the lure of the race for the mara-
thoner? The questions are good ones
and have some unusual answers.

The race was originally con-
ducted by the Columbia Athletic
Club, a group promoting boxing in
the Columbia area. During the sum-
mer of 1960, the club was training
a team of boxers for a series of
matches under the eye of Bill Clark
who founded the Columbia A.C. and
coached its boxers for several sea-
sons. The fighters were required

to do six miles of roadwork daily, and during one of their road sessions, became involved in an argument with a pair of distance runners from the University of Missouri concerning endurance. The boxers maintained they could run 26 miles just as well as a distance runner.

So Clark, always looking for a bit of fun, matched the runners against the boxers on Labor Day in a 26-mile race to Fulton, the first town east of Columbia. Three runners showed up, but the boxers, content to rest on their ring laurels, stayed in bed. The three runners, undaunted by their forfeit victory, plodded off into the rising sun to prove a point. Joe Schroeder, a native of Granite City, Ill., and a Missouri distance man, won the initial run in 3 hours 57 minutes. Morris (Red) Patterson, also a Tiger distance man, was second, finishing on the wrong side of four hours. Darrell Palmer, who has developed into a fine walker, dropped out at 14 miles with bad feet. It was the first time any of the three had tried such a distance.

Somehow, the Associated Press found out about the run, and requested the results. Clark, careful not to let the cat out of the bag, gave the AP a lengthy story about the race as if there were dozens of entries--then set out to make the race a contest equal to the story he had given the news service.

For the next two years, the race was run over the same course--from Columbia to Fulton--and Bill Silverberg of Overland Park, Kansas, was the winner. He took the 1961 race in 3:09:15 and the 1962 run in 3:09:31 after taking a wrong turn and losing several minutes. Silverberg went on to become a fine distance man at the University of Kansas, and now is one of the nation's top steeplechasers. The 1962 race was marred by a severe thunderstorm which left the soaked runners with no place to go. Some were kept out of the rain in the city jail, but the jail was not the best place to stay, and the finishers were moved to the attic of an observer who felt sorry for them. This wet finish brought an entire overhaul of the race and turned the run into the major event it is today.

The race was conducted in 1963, and thereafter, by the Parks and Recreation Department, where Clark is Assistant Director. The course was changed into a huge loop from downtown Columbia, thru the hills south of town, and back to downtown Columbia. The administration of the race was tightened to meet all the rigid restrictions of international competition.

John Rose of LaCrosse, Kansas, won the 1963 race, beating John Grundy in a stirring duel; and became the first man to finish under three hours, taking the record down to 2:56:27. Jim Coucill of Rhode Island led for 24 miles until he fell on a hill two miles from the end. In the space of 300 yards, the race had four leaders with Rose sweeping past Ed Schneider and Bill Silverberg after Coucill faltered.

Rose's performance finished a difficult double. Only 10 days earlier, he had won the Pike's Peak Marathon. He twice has tried to duplicate the double and has had no success.

Ron Daws, the running machine from Minneapolis, has dominated the race the past two years, winning in 1964 with a record time of 2:47:27.5, and again this year with a new mark of 2:37:17.7.

The 1965 race was another fine duel between some of the country's best distance men. Rose, fresh from another victory on Pike's Peak, was the pre-race favorite. Daws was on hand along with Lou Coppens, the winner of the Road Runners' Club's marathon race. Also rated a top chance was Earl Eblen, the stubby little Huntsville, Ala., bulldog who had finished badly in 1964, coming in 14th in 3:51:32, his worst performance in many years. Arne Richards,

Dave Barenberg, John Dunkelberg, Bob Mohler, Pat Lanin and Chuck Flooding⁴ were all men with which to reckon in such a race.

Coppens, a fine runner from Philadelphia, raced out to lead for 18 miles, but Daws, running a beautifully paced race, left little doubt as to his superiority as he climbed the final three hills in front and won by nearly two miles. Coppens was caught in the final 1,000 yards by Eblen, and unheralded Gene Somer of Curtis, Neb., wound up fourth.

Also, Scandurra, who ran the Heart of America two years ago, calls the course a fine test of a runner's ability. The National AAU distance chairman and one of America's best ultra-distance runners, wound up ninth in 1964 in 3:15:11. The first seven miles are run on concrete and asphalt roads, and only one steep hill mars the course at that point, it comes at two miles. The next five miles are rolling down hill. Then the course gets tougher. A swing to the left takes the runners along a gravel road for five miles, and the first mile is a long, nagging hill.

Then comes another rolling swing down to the Missouri River, and a mile-long journey under a tunnel of trees along a road on the river's edge. At the halfway point, the course suddenly climbs a huge bluff overlooking the river, and this hill separates the men from the boys. The speed runners become also-rans here. The hill has properly been named "The Monster" by Arne Richards, who has raced up it three times in as many years. The journey back to town is a rolling trip for the most part, but hills at 17 miles, 20 miles and 24 miles have been like bad dreams for many of the men the past three years.

The final two miles are run thru the streets of Columbia, finishing on Broadway at Seventh Street in front of the Daniel Boone Hotel where the runners are rushed to showers and a rubdown by attending doctors. A victory dinner finishes off the day.

The race has always been run at 5 AM, and will continue to go off at that early hour to avoid the brutal humidity which usually accompanies the Labor Day holiday in Columbia.

Few races in the nation are such a problem to organize. Only two aid stations on the entire course are used twice. The runners are given the maximum of refreshment with water and refreshment stations alternated each mile for the final 18 miles of the race. In addition, cars touring the course are equipped with medical kits and refreshment for runners in trouble. Two doctors are continually touring the course in station wagons made into ambulances, and each aid station has a man assigned to the task of listing each runner's condition as he passes. No one on the entire course is more than five minutes away from contact with a race official.

Unlike many of the top races, the Heart of America race treats the tail-ender with the same attention as the front runner. The doctors attend the last man all the way, even if he is out for five hours. The aid stations do not close until the final runner passes. One runner complained of the attention, say he felt half-drowned by the time he sloshed home. Tea, oranges, lemonade, cokes and water are available on the course.

Runners are allowed to run as they please on the road. Aid stations are set at road intersections in the county, and attendants act as traffic police in addition to their other duties. Police cars and guides at every intersection in town give the runners plenty of protection once they return to Columbia.

The course is measured by a surveyor's footometer and is being certified⁵ by the National AAU's clerk of such matters--Ted Corbitt. On race day, the miles and kilometers are painted on the road so the runners have no trouble telling their distance. Joe Schroeder, the first race winner, has taken over the duties of head timer, and has a crew of watch operators who are stationed at every three-mile post, giving times to the runners until the final runner is past. Joe then rushes back to the computer he operates at the University of Missouri Medical Center, and feeds the times into the mechanical brain. By the time runners have finished dinner, Joe is back with the tabulations of the computer.

Huge trophies are awarded the first 10 finishers, and small trophies go to every finisher, regardless of the elapsed time.

Clark still conducts the race, but has a great deal of help from Ralph Sterling, the summer track and field director for the Parks and Recreation Department.

The Heart of America race started out as a one-time thing. It has, in the past four years, given birth to a full summer track and field program, a varied walking and road racing program and a solid series of Olympic Developmental meets. In an effort to condition the local runners and those from all over the Midwest interested in a summer road racing program, the Parks and Recreation Department runs distance races from 1,500 meters thru a two-hour run in preparation for the Heart of America race.

By putting the cart before the horse, the Parks and Recreation Department has come up with one of the nation's finest developmental programs from the age of six thru 60. Weekly age group track meets, a Saturday Olympic Developmental program with some of the Midwest's finest talent competing both on the track and the road, a decathlon for men, and a pentathlon for women, plus a walking program which this year brings the Senior National 30-kilometer championships to Columbia on the Fourth of July are all by-products of what must stand as one of the most unusual running events in our nation.

THE MARATHON
by
Percy Wells Cerutti

(Reprinted from Australian Harrier Magazine, June, 1965, No. 4, Pages 5&6)

Most athletes take on the Marathon for two main reasons: (1) They find they cannot succeed--big, in shorter events; (2) They get caught up with the so-called "glamour". (Incidentally, this was my case when after a serious sickness I came back to athletics for fitness. At 45 I tried to be what I was at 20, a-miler. Unable to beat five minutes for the mile I felt it would be tremendous merely to run a Marathon. I hoped for no other "success". All else that happened was merely fortuitous.)

To run in, and finish in, and best 3 hours, is quite a meretious performance for anyone. Merely to do that takes guts and sustained ability. To win an Australian Championship is far more meretorious than winning a sprint title since sprinting is mostly conferred on the sprinters as a gift. No one runs 26 miles as a "gift". It takes sweat, hundreds, perhaps thousands of miles, training in the wet and cold, the heat and with sore muscles. Always honour a Marathon runner. At least one who finishes!

How to train? THAT is easy. Mostly running: hundreds and thousands of miles! In the heat, wet, and cold. But how to run a world-class Marathon, Ah! that is a different question.

In the beginning, set about learning to run 26 miles without undue distress. Then extend the distance to 30, perhaps 35 miles, ran two or three times in the year.

These runs, faithfully down, and by the time you can do them at the rate of 7 minutes per mile (and six minutes per mile will be better) - you will find you have a basic pulse rate (taken resting in bed), in the forties, perhaps as low as 38 pulse beats per minute. You are now ready for speed work, a factor so often ignored by ambitious Marathon runners. So: to get speed, the tyro must pay some attention to the technique that he finds gets him easily and efficiently over the ground. Also, he must get his musculature working at a pre-determined speed. To beat the world this speed is now at the rate of 5 minutes per mile. This means, much "interval" running at that speed: two milers: five milers: and ten milers: repeated after a short rest, if possible.

On a wonderful day he may attempt 20 miles in or around 1:40 since that is the speed called for today! If he is not thinking in terms of world records or the Olympic Games, then he can settle for the speed he hopes to attain in his Marathon. If he settles for as slow a speed as six minutes per mile, and which returns a Marathon slightly over 2:36: well, he will enjoy his racing: but is little likely to win in Australia.

But even so, he must practice, and quite a lot, at the speed he hopes to race at. If he runs his predetermined speed, say, ten miles in 50 minutes, and a few hours later on the same day, can repeat that effort, if he has tenacity, one who does not easily quit, he will find he can link those two efforts together in the one run, when he really has to. That will give him another six miles to do. Somehow, if he is the sort, he will always do it. If not, he will pull out and watch someone else do it. It is as simple as that.

But be warned. Real Marathons, run really hard, are painful and gruelling affairs. It takes both persistence and guts to be a good marathon runner. For the Marathon, never was it more truly said, "Many are called, but few make the Grade":

Fercy Cerutti: (at 51 years
Victorian Native Marathon Champion and Record
Holder).

TRAINING AND GENERAL INFORMATION ON MICHAEL J. O'HARA
by
Bob Anderson

AGE - 52 DATE OF BIRTH - June 3, 1913 PLACE OF BIRTH -New York, New York
Personal records on cinders or grass track
2-mile 10:49 3-mile 16:30 10,000 meters 37:30 10-miles 58:45

WEIGHT (NOW)- 130. He has been 130 ever since he has been running. HEIGHT (NOW)-5'5". MARRIED? Yes. YEAR STARTED RACING- 1936. REASON FOR STARTING- "I was bicycle racing and the club I belonged to also had a running team-- so I competed in both for a couple of years, then I quit the bicycle racing". He was a member of the French Sporting Club, as a member he finished twelfth in the 1935 running of the 100-mile handicap bicycle race. Mike also has played handball and ping pong. HE COMPETES- for the St. Anthony's Boys Club. MAIN GOAL IN RUNNING: "I will compete as long as I am able". OTHER COMMENTS- "The last wo years I have had leg and foot trouble (hurt my achilles tendon) and then I have sciatica trouble which has been slowing up my time in the marathon. I do over 3½ hours now. I have hopes of getting down to 3 hours again".

WORKOUTS

These workouts are used now. The following are for a normal week.

A WEEK BEFORE A RACE:

Monday- Morning- 6 miles (to work) Between 8 & 9 Minutes a mile
 Lunch time- 3 miles. Between 8 & 9 minutes a mile (heavy shoes)
 Evening- 7 miles (way home from work) Between 8 & 9 minutes a mile
 TUESDAY- Morning- Lunch time- Same as Monday
 Evening- 7 miles (way home from work) Between 8 & 9 minutes a mile
 Night- 7 miles (after supper) 7 minutes per mile (lighter shoes)
 WEDNESDAY- Morning- Lunch time- Evening- Same as on Monday
 THURSDAY- Morning- Lunch time- Same as on Monday
 Evening- 5 miles (home) Between 8 & 9 minutes per mile
 FRIDAY- Morning- 5 miles (to work) Between 8 & 9 minutes per mile
 Lunch time- 2 miles Between 8 & 9 minutes per mile
 Evening- 4 miles Between 8 & 9 minutes a mile (home)
 SATURDAY- May jog 3 miles or sometimes just rest
 SUNDAY- Race Light shoes (flats)

WINTER:

MONDAY-TUESDAY-WEDNESDAY- Same as before a race
 Thursday- Morning- 6 miles Between 8 & 9 minutes a mile (to work)
 Lunch time- 3 miles Between 8 & 9 minutes a mile
 Evening- 7 miles Between 8 & 9 minutes a mile
 FRIDAY- Morning- Lunch time- Evening- Same as Thursday
 SATURDAY- Rest only little exercise
 SUNDAY- 20 to 25 miles at about 8 minutes a mile.

SUMMER:

Same as Winter workout.

"I do most of my training to and from work. I don't use spikes at all anymore. My heavy shoes have a double sole and heel. Light shoes are regular marathon shoes with one heel".

"My workouts in 1942 were as follows --Tuesday-20 miles at 7 minutes per mile or faster. Thursday- 15 miles at about 6:30 per mile. Sunday-5 mile races (my best time being 26:52 for a course). In these days, training every day was unheard of--three times per week was just the thing."

MICHAEL J. O'HARA'S MARATHONS

<u>NO.</u>	<u>TIME</u>	<u>PLACE</u>	<u>WHERE RUN</u>	<u>YEAR</u>
1.	3:33:12	25th	Portchester, N.Y.	1937
2.	3:36:22	30th	Yonkers, N.Y.	1937
3.	3:40:16	55th	Boston, Mass.	1938
4.	3:26:54	43rd	Salisbury Beach, Mass.	1938
5.	3:25:04	11th	Portchester, N.Y.	1938
6.	3:13:02	19th	Yonkers, N.Y.	1938
7.	2:46:25	21st	Boston, Mass.	1939
8.	3:22:31	21st	Salisbury Beach, Mass	1939
9.	3:42:18	7th	Baltimore, Md.	1939
10.	3:05:21	5th	New Haven, Conn.	1939
11.	3:06:03	8th	Portchester, N.Y.	1939
12.	2:57:39	17th	Yonkers, N.Y.	1939
13.	2:51:46	4th	Baltimore, Md.	1940
14.	2:53:16	24th	Boston, Mass.	1940
15.	3:00:47	12th	Salisbury Beach, Mass.	1940
16.	2:47:53	2nd	Portchester, N.Y.	1940
17.	2:47:45	10th	Yonkers, N.Y.	1940
18.	2:52:16	11th	Boston, Mass.	1941
19.	2:43:47	5th	Salisbury Beach, Mass.	1941
20.	3:04:13	2nd	Baltimore, Md.	1941
21.	2:43:00	6th	Yonkers, N.Y.	1941
22.	2:41:08	8th	Boston, Mass.	1942

MICHAEL J. O'HARA'S MARATHONS (Cont.)

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<u>NO.</u>	<u>TIME</u>	<u>PLACE</u>	<u>WHERE RUN</u>	<u>YEAR</u>
23.	3:03:07	5th	Baltimore, Md.	1942
24.	3:12:45	17th	Yonkers, N.Y.	1942
25.	2:46:14	10th	Boston, Mass.	1943
26.	3:02:54	11th	Yonkers, N.Y.	1943
27.	3:09:49	17th	Boston, Mass.	1944
28.	2:59:34	11th	Yonkers, N.Y.	1944
29.	2:56:57	15th	Boston, Mass.	1945
29.	D. N. F.		Boston, Mass.	1946
30.	3:10:00	11th	Montreal, Canada	1946
31.	3:37:52	7th	Quebec City	1946
32.	2:58:34	6th	Yonkers, N.Y.	1946
33.	2:53:56	29th	Boston, Mass.	1947
34.	3:16:40	6th	Quebec City	1947
35.	3:14:15	11th	Yonkers, N.Y.	1947
36.	2:56:56	24th	Boston, Mass.	1948
37.	2:55:52	12th	Salisbury Beach, Mass.	1948
38.	3:21:58	11th	Idlewild Airport, N.Y.	1948
39.	3:10:29	32nd	Boston, Mass.	1949
40.	3:00:29	15th	Yonkers, N.Y.	1949
41.	2:59:44	14th	Salisbury Beach, Mass.	1949
42.	2:57:37	11th	Boston, Mass.	1950
43.	3:12:26	14th	Yonkers, N.Y.	1950
44.		9th	Fort Fairfield, Me.	1950
45.	2:59:45	2nd	Baltimore, Md.	1950
46.	2:57:06	29th	Boston, Mass.	1951
47.	3:12:15	26th	Yonkers, N.Y.	1951
48.	3:24:12	15th	Belknap Recreation Area, N.H.	1951
49.	3:14:00	22nd	Old Orchard Beach, Me.	1951
50.	3:02:06	5th	Baltimore, Md.	1951
51.	3:05:57	13th	Boston, Mass.	1952
52.	2:55:46	3rd	Baltimore, Md.	1952
53.	2:51:31	28th	Boston, Mass.	1953
54.	3:06:06	11th	Yonkers, N.Y.	1953
55.	2:39:05	8th	Valley Forge, Pa.	1953
56.	2:54:35	6th	Philadelphia, Pa.	1954
57.	2:54:44	18th	Boston, Mass.	1954
58.	2:58:25	4th	Yonkers, N.Y.	1954
59.	2:58:38	9th	Philadelphia, Pa.	1955
60.	3:37:15	1st	Bronx, N.Y. (30 Miles)	1955
61.	2:52:27	33rd	Boston, Mass.	1955
62.	2:54:20	8th	Philadelphia, Pa.	1955
63.	3:04:41	12th	Yonkers, N.Y.	1955
64.	2:52:03	9th	Philadelphia, Pa.	1956
65.	2:57:26	3rd	Ozone Park, N.Y.	1956
66.	2:57:15	52nd	Boston, Mass.	1956
67.	2:59:55	13th	Yonkers, N.Y.	1956
68.	2:55:19	10th	Fortchester, N.Y.	1956
69.	2:57:10	10th	South Ozone Park, N.Y.	1956
70.	3:16:40	4th	Guelph-Hamilton (30 Miles)	1957
71.	3:01:42	19th	Boston, Mass.	1957
72.	2:57:03	17th	Yonkers, N.Y.	1957
73.	2:52:04	6th	Chester, Pa.	1957
74.	2:59:03	5th	South Ozone Park, N.Y.	1957
75.	3:33:17	1st	Macombs (30 Miles)	1958
76.	3:03:58	4th	Macombs	1958
77.	3:02:07	16th	Boston, Mass.	1958
78.	3:01:06	19th	Yonkers, N.Y.	1958

MICHAEL J. O'HARA'S MARATHONS (Cont.)

NO.	TIME	PLACE	WHERE RUN	YEAR
79.	2:56:57	18th	Jersey City, N.J.	1958
80.	2:53:20	6th	Valley Forge, Pa.	1958
81.	3:28:05	3rd.	Macombs (30 Miles)	1959
82.	3:04:16	48th	Boston, Mass.	1959
83.	3:03:32	24th	Yonkers, N.Y.	1959
84.	3:01:14	10th	St. Hyacinthe, Canada	1959
85.	3:02:18	10th	Macombs	1960
86.	3:04:58	41st	Boston, Mass.	1960
87.	3:05:15	31st	Yonkers, N.Y.	1960
88.	3:	3rd	South Ozone Park, N.Y.	1960 (27 Miles)
89.	3:06:36	13th	St. Hyacinthe, Canada	1960
90.	3:07:50	9th	Atlantic City, N.J.	1960
91.	3:09:26	12th	Cherry Tree	1961
92.	3:08:22	44th	Boston, Mass.	1961
93.	3:10:24	30th	Yonkers, N.Y.	1961
94.	3:39:05	11th	St. Hyacinthe, Canada	1961
95.	3:16:11	6th	Atlantic City, N.J.	1961
96.	3:17:14	5th	Philadelphia, Pa.	1962
97.	3:08:35	14th	Cherry Tree (Broke DeMar's Record 1962	
98.	3:09:30	60th	Boston, Mass.	1962
99.	3:05:49	31st	Yonkers, N.Y.	1962
100.	3:17:56	24th	St. Hyacinthe, Canada	1962
101.	3:56:20	73rd	Yonkers, N.Y.	1963
102.	3:35:56	48th	Holyoke, Mass.	1963
103.	3:48:32	16th	Bridgeport	1963
104.	3:58:01	33rd	Atlantic City, N.J.	1963
105.	3:54:48	33rd	Cherry Tree	1964
106.	3:52:30	-	Alley Pond Park, N.Y. (Run 1964	
			27 Miles on 40 Mile Race)	
107.	3:44:31	163rd	Boston, Mass. (Still running very slow)	1964
108.	4:15:27	40th	Yonkers, N.Y. (Slowest Marathon I have run, first time I took over 4 hours. It was over 95 degrees and humid.)	1964
109.	4:17:00	-	Alley Pond Park, N.Y. (29 Miles. Ran this in with 40 Mile race.)	1964
110.	3:24:19	36th	Holyoke, Mass. (I think course was 3/4 of mile short)	1964
111.	3:25:52	20th	Jr. Natl. Champ. Rochester, (This course was mostly through a park)	1964
112.	3:34:36	23rd	N. Am. Marathon, St Hyacinthe (This is a good race, 4 lap course, good prizes)	1964
113.	3:38:02	33rd	Atlantic City, N.J.	1964
114.	3:38:24	17th	Pearl Harbor Mar., S. Ozone Park (This was a 5 lap course, cold and very windy)	1964
115.	3:36:22	28th	Cherry Tree, Bronx, N.Y.	1965
116.	4:49:00	--	Alley Pond Park, N.Y.	1965 (32 Miles)
117.	3:30:20	167th	Boston, Mass.	1965
118.	5:15:32	7th	Peekskill to Yonkers	1965 (37.6 Miles)
119.	3:37:55	41st	Yonkers, N.Y. (Nats. Champs.)	1965
120.	3:31:49	43rd	Holyoke, Mass.	1965
121.	3:50:52	24th	St. Hyacinthe, Canada	1965

CROSS COUNTRY
 A fine individual and great team sport
 by
 M.E. "Bill" Easton
 Former Cross Country and Track Coach
 University of Kansas
 Lawrence, Kansas

(The following is an excerpt from an article by Coach Easton while at the University of Kansas)

This great fall outdoor sport of Cross Country develops in boys a sound basis for health, gives added strength, vitality, and endurance, and will enable him to go through competition on natural vitality with the power to recuperate quickly from his effort. This training is an individual program where, if "personal discipline" follows the pattern of clean living and regular habits, no physical injury will ever occur. Distance running is as old as history, and is a natural activity for all growing young men.

Size is no hindrance to the young fellow who wishes to run cross country. In fact, a large number of America's finest distance men, i.e., Herb Semper of Kansas, NCAA Champion 1950; Fred Feiler of Drake, NCAA Champion 1944 and 1945; Greg Rice of Notre Dame, Fred Wilt of Indiana, Don Gehrmann of Wisconsin and Jerry Thompson of Texas, have all been small men. Here is a sport that will give a great number of smaller boys the opportunity to compete and become letter award winners in their high school.

Here, also, is an activity that gives the small high school an equal opportunity (at a minimum of cost) to produce an individual state champion or to win a state team championship. This fall sport is an excellent activity to condition boys for a long, hard indoor season of basket-ball. A great number of the high school coaches in Indiana and Illinois condition their ball clubs by competing in a fall schedule of cross country. It really gets the job done.

Systematic work in the fall will also prepare boys for all events in the spring track program. Some of our best hurdlers, jumpers, as well as quarter men work easy cross country in the fall. Boys in the half mile and mile will find they are much stronger after a season of fall running.

The automobile has been a great hindrance in the building of distance men in the United States. The city boy who has a paper or mile route or the country boy who has done a great amount of walking will have a better base for performance than the boy who has used the automobile and neglected to strengthen his legs.

These few suggestions, if learned and followed, will help your boys win: First work out- easy jogging and walking for two (2) weeks in gym shoes will prevent shin splints. No sprint work. Never quit. Always finish a race regardless of how much it hurts. Break through "fatigue" and "have guts". Fatigue is of two kinds, mental and physical. Very few runners have physical fatigue. Tired men will droop, but this is not the way to recover. Winning will prevent this. Never fall into a set stride and stay there. This is a rut and leads to mental fatigue. Get out of this by sprinting out, break out of the rut set pattern and move to a higher, faster running level. Mental fatigue brings on long stride. Learn to punish yourself when the going is toughest. Do not be last. Always beat some one man in the opposition. Never fall on the ground at the finish of a race. It indicates either a show off or a boy who is not taking care of himself; hence, is not in condition.

Intend to be a leader, not a follower. Get up in front and stay there. Cross country is a team sport where the lowest score wins, so the closer to the front you can stay the lower your team score. You cannot win by running in the second wave.

Take an opponent along fast, if there is a weak spot in him you will find it. Never pass a man slowly. Pass him with some "zip". This is good psychology as your opponent will feel that you are fresh and have lots of stuff

left. You may be just as tired as he is, but this will often slow him down, cause him to give up and lag behind. Do not slow down immediately after passing a man. Hold this new pace as it will improve your time by getting you out of the rut, moving you into a higher, faster pace.

Learn "pace", (change of pace) try to constantly improve your time and position in each race. Study your race before hand and decide how you want to run each section. When you decrease the distance, you increase the pace speed. Change pace when running over the course. Don't run all the distance at the same rate of speed. Move out fast. This uses a different set of muscles and will place you on a higher level of speed. It will also be a relief from the grind of the pace. Make each hill or obstacle a challenge. On hills shorten your step, lean forward, keep your head down and use your arms well. Move out when you return to the flat, this will be hard, but will break your opponents will. Going downhill relax, allow your body to increase speed, but do not lose control. Keep elbows out for balance.

Keep alert. The changing terrain of a good cross country course involves thinking processes in action. It is the "alert mind" that wins. Keep thinking!

Training is a matter of self-discipline. The boy who really wants to be a fine cross country and track man must train for himself. The good athletes are men.

Diet is very important. Most distance men eat too much. It should be a matter of a well balanced diet by eating a good breakfast, a very light lunch and a good evening meal. Greasy foods should be especially avoided. Meat should be a definite part of the diet for the evening meal only. Green and yellow vegetables and all fruits should be a part of a base diet invaluable to proper functioning of the body. Eggs (soft boiled or poached) are an excellent part of a good training diet, eaten at breakfast, but NEVER EAT EGGS PREPARED IN ANY FASHION PRIOR TO A HARD PRACTICE OR ON THE DAY OF COMPETITION. They are composed of a sulphur base and cause gas to form causing illness, especially when a runner has a nervous stomach.

The food eaten immediately before the race (four or five hours prior) just relieves the hunger pangs. A diet of honey, baked potato, dry toast, buttered at meal and hot, weak tea with plenty of sugar serves the purpose in excellent fashion. These in very moderate portions should be sufficient to carry any runner in good shape.

Eating between meals is one of America's worst habits. A good athlete in training will limit himself to eating only at meal times. His system then is accustomed to a regulated diet at a regulated time, and hence will function properly. Do not eat before going to bed; if you must have something, eat an orange or apple. Candy may be eaten immediately following the evening meal, if the athlete has a "sweet tooth". Cake and pie in moderation will work in the diet except when the boy has a tendency to overdo the job. He should be particularly anxious to stay away from such food the latter part of the week and never eat excess at any time.

Regular hours of sleep. The amount of sleep varies with the individual, his age and daily activities. For the growing boy in athletics 9 hours is the sage rule to follow. Getting to bed by 9:30 or 10:00 o'clock is one of the most essential habits for an athlete to form. The boy who loses sleep, stays out late and insists that he is getting eight hours from 12AM to 8 AM is only fooling himself. Regularity in the time one sleeps, is just as important as the length one sleeps. Regularity establishes the body rhythm so the body system desires and expects certain things on schedule: food, workouts, toilet habits, sleep. Irregularities only lend to confusion in our body systems and PREVENT it from functioning at top efficiency. Thus, the reserve strength is depleted and he fails to have the "necessary something" (nervous energy) when the chips are down. "Nervous energy" is built up only in relaxed sleep and is especially necessary for a mechanism that requires proficient performance such as a boy in cross country and track work.

Smoking, or the use of tobacco in any other form, has no place in the life of a good athlete. Champions show this and don't use tobacco in any form.

Any boy in athletics who insists in using tobacco is not only fooling himself, but is sure to injure his heart.

From the angle of the top athlete the answer is simple, Nicotine (in tobacco) is a poisonous alkaloid. Taken, by smoking, into the thoracic canal and lungs, constricts the capillaries, slows and retards the blood flow to parts of the body. Hence, the oxygen supply is limited and oxidation in the body cells is hindered. Breathing is restricted and necessarily becomes more rapid as does the heart beat. Physical performance cannot be at its best under these circumstances. A bit of reading by anybody in doubt as to these statements will soon find plenty of literature to convince him.

THE END

PHYSIOLOGY OF DISTANCE RUNNING

by Bob Carman

(Reprinted from the PACIFIC COAST DISTANCE RUNNING REPORT Volume 3, numbers 4-5-6 - Aug.- Oct. 1962)

There are few competitors in the marathon who have not- or will not- experience these difficulties that I will describe to some degree. The following paragraphs have been written to help the distance runner to an understanding of these problems and to make available the latest advice on how to handle them.

PART I: Low Blood Sugar Level

Muscles, like any other engine, require fuel in order to perform useful work. The ultimate source of this fuel is the food we consume. In the blood this fuel is primarily glucose or "blood sugar", which constitutes about 0.1% of the blood under normal conditions. The normal range of blood sugar is between 80 and 110 mg. per 100 ml. (i.e., 80 to 110 milligrams of glucose in every 100 milliliters of blood) and this may rise briefly to 180 after a meal and drop to 65 between meals.

It is important for the proper functioning of the body that the blood sugar level be maintained and a number of mechanisms in the body are assigned to assure this. When the blood sugar level is too high, the pancreas secretes insulin into the blood stream which tends to lower the level. Under certain conditions (just before a race, for example) the adrenal glands may supply adrenaline which tends to raise the blood sugar level. Because the body maintains extensive stores of glycogen (which may be quickly converted to glucose when needed), there is little danger of the average individual lowering his blood sugar to dangerous levels. Normally, about $\frac{1}{2}$ pound of glycogen is stored in the liver and another pound stored in the muscles. No drop in the level is observed even after 30 to 40 minutes. If very violent exercise is prolonged to 1-3 hours, a drop may be observed.

A number of physiological and psychological changes have been observed to take place when the blood sugar level drops. The physiological symptoms are similar to those experienced in any fatigue situation, such as salivation and sweating. In addition, there is a slow up of the mental processes, orientation is disturbed, concentration becomes difficult, speech is slow and difficult, irritability increases, and finally, there is a decrease in intellectual connection with the physical surroundings.

If the blood sugar is allowed to drop further, muscle twitches and spasms develop, perception is disturbed, unconsciousness occurs, and ultimately the individual enters a coma-like state which terminates in death. It should be emphasized here that the normal individual, even under massive stresses of severe muscle exercise, will not be able to continue to lower his blood sugar to these very dangerous levels. Before the spasms develop, voluntary muscle activity will have stopped. It is extremely unlikely, if not totally impossible, for a normal individual to do himself permanent damage by voluntarily lowering his blood sugar by exercise.

Studies have been made of runners at the conclusion of marathon races, and it is usually found that the winner and top finishers have a normal level of blood sugar after the race. Runners whose level is below 50 however, are

certainly exhausted, and may be unconscious before the end of the race. At the recent Orange Show 20 mile run, the winner and second place finisher had normal levels of 108 and 111 respectively, while several runners who finished in distress had levels in the 80's. Their distress was obviously not due to low blood sugar levels, but to the high stress encountered during the race. Many runners find it helpful to take fruit or sugared drinks during the race. Because the digestive system is not functioning with anything like normal efficiency during such an ordeal, such food intakes may not be sufficient. That is certainly an individual matter and the runner himself must determine what, if any, food he will ingest, how much, when, etc. Studies have shown that a person who has been engaged in long distance running for several years develops an increased capacity for storing glycogen - both in the liver and in the muscles. Apparently, part of the job of training peculiar to the long distance runner, is that of increasing the body's ability to store glycogen. This is apparently best done by repeatedly subjection the body to the stress of long term vigorous exercise.

PART II: Heat Exhaustion

The essential function of a muscle is to use fuel (Glucose or blood sugar) to produce mechanical work. Like any other engine however, the muscle is not 100% efficient, and the fuel consumed is not entirely converted into useful work. In any working muscle a considerable amount of heat is produced and since the body must maintain an internal body temperature of about 98.6 degrees F., this heat must be removed from the muscles if they are to continue working.

Our bodies are possessed of a truly elegant method of cooling the working muscles. Blood circulates in the muscle, is warmed by the heat produced by the muscle, and the warm blood is transported to vessels near the skin surface. Here the heat is given up to the cooler external air. If external temperatures are too high, the warm blood near the skin may be cooled mainly by the evaporation of water (perspiration) from the skin. Every drop that evaporates requires a small amount of heat energy to convert it from liquid to water vapor. This heat energy comes from the skin and the surface blood vessels. One may think of this process as being similar to the removal of material from a mine. A continuous stream of ore cars (blood) moves the ore (heat) from the mine (muscles) to the mine entrance (skin). The ore is then picked up at the entrance by other workers (perspiration) and removed (evaporation) so that the ore cars can return for another load. When the muscles perform very severe work under high temperature conditions, the process is required to work with great speed and effectiveness in order to maintain a constant body temperature. An enormous quantity of water may be lost in this manner; and in order to keep the blood flowing rapidly, the heart must pump very large quantities of blood.

If plenty of water (for evaporation from the skin) is available, it is possible for humans to withstand very high temperatures. For example, in one experiment, a man was kept at 260 degrees F (a temperature above the boiling point of water) for eight minutes without harm. In this experiment the air was kept dry so the evaporation could take place easily. When the moisture content of the air is very high, evaporation is retarded and this cooling effect is much less efficient.

When a runner encounters high temperature and high humidity conditions, he will be unable to remove the heat from his muscles as rapidly as required; and in a short time his body temperature may rise above the normal 98.6 degrees, and the sweat may be dripping from the skin without evaporation. Under such conditions the heart rate will be found to rise to very high levels (180 or more for a runner) and collapse may soon occur. The limiting factor is this collapse seems to be the ability of the heart muscle to continue responding at high rates.

If the humidity is low so that the cooling effect of evaporation is unimpaired, the runner will have other problems. Since the temperature is high and the working muscles are producing much heat, the blood must circulate very rapidly. Therefore, the heart must work to pump great quantities of

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blood. It accomplishes this in two ways: 1. increasing the force of each pumping motion, 2. increasing the frequency of pumping. In our mining analogy, this is represented by increasing the load carried by each car, and increasing the speed with which the cars travel. Obviously, each of these has a limited effectiveness. An car can only carry so much: a given heart can only exert so much force. When the string of ore cars moves very rapidly, there is not enough time available to completely fill the car. At this speed or any higher speed you will be transporting less ore. Similarly, when the pulse rate reaches very high rates there is not sufficient time for the heart to fill with blood between strokes, and so the circulation will be reduced. Reduced circulation means body temperature will begin to increase, and again increasing body temperature leads to collapse. It should be noted here that the body temperature we have been speaking of is the internal or "core" temperature of the body, not the skin temperature or the temperature of the hands or feet. Cool skin or extremities for a runner in high temperatures may simply mean poor circulation in these areas, not a low body temperature.

PART III: Dehydration

Another source of difficulty arises since the amount of water available for evaporation is limited. If the race is short, one may easily be able to produce the fluid required for cooling; but in a prolonged race like a marathon under conditions of high humidity, considerable amounts of fluid may be lost. This fluid comes from three main sources:

1. the skin- very little fluid is normally available
2. the muscles- considerable fluid is available from these tissues and loss of fluid here (10-20%) seems to result in little difficulty providing both the fluid and the minerals (salt) lost at the conclusion of the exercise (the restoration of this fluid and minerals).
3. the blood- when other sources of fluid have been used, the body will begin to use water from the blood for evaporative cooling. This is known as dehydration or anhydremia.

This last action represents a very drastic action, for the removal of fluid from the blood reduces the amount of blood available to transport heat from the working muscles. In our analogy, it is like removing ore cars from the supply line. When this happens, the heart must work much harder to maintain the needed circulation and the eventual collapse is greatly hastened.

Also lost with the perspiration is a considerable amount of mineral salts. The excessive loss of salt will lead promptly to extreme and even fatal symptoms. Persons performing severe exercise in the heat are advised to maintain a high salt intake, both in their food and in supplementary salt tablets.

Unlike the dangers of low blood sugar, the potential danger to a runner of circulatory collapse as a result of performing his very strenuous activities in a hot environment, is very great. A strong-willed athlete who has taught himself to resist (or even ignore) the pain and suffering inherent to his task may drive himself into circulatory collapse resulting in death- if internal temperatures are high. It is unlikely that this would occur at reasonable temperatures. It is more likely that this would occur with a poorly-conditioned athlete. However, one must recall the 1954 collapse of Jim Peters, the world's best marathoner at that time. Peters ran a very fast marathon in the heat of an August day and despite being at the peak of his condition, he went into a very serious collapse that ended his career and almost ended his life.

There is little that can be done by the runner to prevent such an occurrence, but it is advised that the athlete:

1. Does not run under conditions of very high temperature and high humidity- unless he is properly trained for the race.
2. Maintain a pace that is somewhat less than the usual pace.
3. Do at least a small amount of training under the sun so as to take advantage of any acclimatizing that may be possible.
4. Take water during the run, both internally and externally, when the heat is severe.

probably the best preventative is an intelligent AAU official who will not allow a race to be run under such dangerous conditions. All too often a race is run in the heat of the day because of the desires of a meet sponsor or official who is more interested in personal convenience than the safety of the runners.

THE END

THE CUNNINGHAM TRADITION

The name "Cunningham" has long been a familiar name when the mile race is being discussed. Glenn Cunningham is known as the greatest American miler of his time. He was unbeatable from 1932 to 1940. His greatest track performance was a world record-breaking mile in the time of four minutes 4.4 seconds, a record which stood for more than a decade.

Glenn performed for the U.S. track team in the 1932 and 1936 Olympics. He placed second in the '36 Olympics in Germany. In 1933 he received the Sullivan Award as the outstanding athlete of the year.

Even more outstanding is the story of how Glenn Cunningham survived a boyhood disaster. At the age of eight, while attempting to rescue his brother from a blazing fire in the school, he was so seriously burned on both legs that doctors advised amputation. His parents decided against this, and were never sorry afterwards. After massaging his scarred legs for many months, life gradually returned. His first attempts were failures. The transverse arch was almost completely destroyed on his left foot and he was never able to get the drive from it which most athletes and coaches consider to be essential for successful running. Through courage, faith, and determination Glenn gradually started walking again. At first, he could stand only a few minutes, then he walked a few steps, and as his strength grew, he was seen running wherever he went.

While attending high school in Elkhart, Kansas, Glenn ran independently, since the school did not have a track team until his junior year. Cunningham started running in relays, but later switched to the mile run. When he was a senior, he won the mile race in the state meet.

Glenn enrolled at Kansas University, and there he made a name for himself in the mile event. At his retirement, he had run the mile under 4:10 more times than all other runners combined.

Glenn Cunningham now has three sons who are following in their father's footsteps. The three boys, Glenn Jr., Lynn, and Gene are attending high school at Leon, Kansas. Glenn Jr. is a senior this year, and like his father, makes the mile his speciality. In his freshman year his best time in the mile was 4:47. In his sophomore year, Glenn Jr. ran cross country in the fall. His best time in the two mile run was 10:06 and he placed seventh in the state cross country meet. Glenn Jr. worked on his speed during the spring, and dropped his time in the mile to 4:30. He placed third in the state meet only to be disqualified on an infraction on a curve. He took the disappointment very calmly and continued to work hard for a better performance the coming year.

During his junior year, Glenn Jr. was dealt a severe setback. He was running on the cross country team and playing football in the fall, when he broke his ankle during a football scrimmage. Out of action for about seven weeks he was determined to run in the regional cross country meet. Many an evening after school he was seen running the road between his home and the high school in his cast. The cast was removed five days before the regional meet.

Extreme pain prevented him from working out before the meet. Nevertheless, he led his team to a second place finish in the regional. He ran the race on guts and determination, after the race he was unconscious for a period of time because of conditioning and pain. The next week, still limping, he helped his team to finish third in the state meet. He finished eighth in a time of 10:36.

In the spring of his junior year Glenn Jr. found that he had to work even harder to regain his natural stride, because of the football injury. The injury may have prevented him from winning the mile in the state meet. Glenn broke the state class B mark in a time of 4:23:8, but the winning time was 4:23.6.

Glenn Jr., ran for the Wichita Track Club during the summer and concentrated on his speed. He cut his 880 time to 1:59. Glenn Jr., went undefeated in cross country during the fall, competing against "AA" schools. His best time in the two mile run was 9:28. Glenn and his brother, Gene, led Leon to the state class B championship.

In the future Glenn Jr. hopes to win the state mile event in the spring just as his father did when he was in high school. He ran several six mile federation races after the cross country season, his best time was 32:44. Glenn Jr., a good B student, hopes to continue his education but hasn't decided where he will attend college in the fall.

The two younger Cunningham's are also going to be heard of before they graduate from high school. Lynn is the largest of the three boys. He is about 5' 10" and weights 185 pounds. Lynn is a junior in high school. He played fullback on the football team and was a rugged linebacker on defense. Lynn was a second team all conference selection. Lynn runs the open half, and the half on the medley relay team. His best time in the half has been 2:04 as a sophomore, but should be running the half in 2:00 or under this spring.

Gene is a sophomore and like Glenn Jr. runs the mile. As a freshman, his best time was 4:54. He also runs on the cross country team, and has been instrumental in the high placings in the two past seasons. Gene's best time in the two mile run has been 10:16. He was sixth in the state cross country meet this past fall.

As the reader can see, the name "Cunningham" may soon again ring throughout the Cinder Circles of the land. All the boys are dedicated to carry out the proud tradition started by their father.

THE END

CROSS COUNTRY GOLF

by

M. Thomas Woodall, Ph.D.

Director or Research in

Physical Education

Assistant Cross-Country Coach

Former Cross-Country Coach

at South Dakota State Univ.

Variety in the workout of the distance runner is probably as important to his success as any other single ingredient. Coaches and runners are always looking for some means by which certain objectives can be achieved with minimum time involvement and discomfort. As the saying goes "There is more than one way to skin the cat".

Cross-Country Golf may provide an early season conditioning workout or aid in relief of late season staleness. It makes an excellent individual workout, but lends itself to intro-squad competition should the coach so desire.

As one would expect, the purpose of the game is to run from the first tee to the first green in as short a time as possible. The runner then plays (runs) the second hole and so forth until he has completed nine or 18 holes, depending on the objective of that days' workout.

Score cards can be made showing the hole number, yardage for each hole, and the number of strokes to be counted against each runner--according to the time it takes him to run the hole. Low score wins (as in regular golf) and strokes are assigned with consideration given to length and terrain of

each hole. In regular golf, hole length is the only factor that determines "par". A sample Cross-Country Golf score card is shown in Figure 1, at the end of the article.

Runners may race against each other or individually from the tee to the edge of each green. Times are recorded and a rest interval of one to three minutes, depending on the purpose of the game, is then observed. Referring to the score card, we see that a runner running the first hole in 63 seconds would be given four strokes. If he ran the second hole in 12.8 seconds he would be given five strokes. The strokes are then totaled after nine or 18 holes and compared with par, usually 36 for nine or 72 for 18 holes. Coaches or runners may suggest maximum strokes to be taken on any one hole. The score card shows six, indicating that the worst score a boy could take on any of the holes listed would be a six.

Cross-Country Golf provides interval work at a variety of distances with a smattering of speed and pace work. Nine holes of cross-country golf, depending on the difficulty of the course, length of the rest periods and ability of the runners may be enough for the first time out. Most 9 hole golf courses are approximately 3,000 to 3,600 yards.

Figure 2 illustrates a sample record chart that could be kept for each hole on the course. These records serve to motivate and challenge the runners. Two sets of records should be kept for each hole. One record should be kept for the best time recorded by a man running the entire 9 or 18 hole course. Another record board should be kept so that any runner might try to break the record on any given hole without having to run the entire nine or 18 holes.

FIGURE 1 Sample Score Card

Hole	Yds.	Strokes					
		1	2	3	4	5	6
1.	490	50-53	54-57	58-61	62-65	66-69	70 & over
2.	112	10.5-10.9	11.0-11.5	11.6-12.0	12.1-12.6	12.7-13.0	13.1 & over
3.	370	37-38	39-40	41-42	43-44	45-46	47 & over
Etc.							

FIGURE 2 Record Card

Hole	Name	Date	Time	Strokes	Record Established
1.	John Doe	10-13-65	:60.9	3	Individual Attempt
1.	Jim Buck	11- 7-65	:62.1	4	Entire Course Run
<hr/>					
2.	Jack Brown	9-29-65	:11.3	2	Individual Attempt
2.	Mike Wood	11-13-65	:11.5	2	Entire Course Run
Etc.					

THE END

TRAINING AND GENERAL INFORMATION ON TED CORBITT by Bob Anderson

NAME- Ted Corbitt AGE 45 DATE OF BIRTH- January 31, 1920
 PLACE OF BIRTH- Dunbarton, S. C. CLUB RUNNING FOR- New York Pioneer Club
 New York City

Personal records on cinders or grass track

100 Yard dash- 10.4 220 Yard dash- 23.5 440 Yard run- 50.7 880 Yd-2:07
 Mile run- 4:27 2-mile run- 9:06 (practice) 3-mile run- 16:44 6-mile -32:50
 10-mile run- 57:14 26 Miles 385 Yards-2:42:25 (American track record)

WEIGHT (now)-134 pounds HEIGHT (Now)-5'11½" MARRIED-Yes YEAR STARTED
 RUNNING-1933 REASON FOR STARTING- "Desire to compete" MAIN GOAL IN RUN-
 NING-"To record the best times as I can at each distance".
 RAN FIRST MARATHON - April 19, 1951

WORKOUTS

SUMMER - "I am not sure there is a "Typical" week. Here is what I did one week in the summer of 1961.

July 31, 1961 to August 4, 1961

MONDAY:

5 3/4 miles 63 minutes (Left achillen' tendon sore and right arch hurting)
 Later ran 1-mile to subway on way to work
 Later ran 1 1/4 miles

TUESDAY:

17 miles 2:11:05 in street clothes (Left achilles' tendon hampered speed)
 Later after work ran 7-miles in 63 minutes

WEDNESDAY:

5-miles to park- sprints - home
 Later 1-mile to subway on way to work

THURSDAY:

1-mile to subway on way to work
 Later 1 1/4 mile to subway on way home

FRIDAY:

11-miles 1:37:00 (Left Heel cord, Achilles' tendon, sore)
 Later 1 1/2 miles thru streets

SATURDAY:

30-miles 4:10:05 (Left achilles' tendon and friction burns on both thighs hampered effort.)
 Later 1-mile thru streets
 Later 1 1/8 miles thru streets

SUNDAY:

21 3/4 miles 3:19:00 (started out on 32 mile run but cut workout short and took subway home. Was running too slowly to benefit and bothered by friction burns on thighs.)
 Later 3/4 mile run thru streets in neighborhood.

WINTER

March 9, 1964 to March 15, 1964

MONDAY:

13-miles 1:35:05 (road)
 Later in day 2 1/2 miles thru streets.

TUESDAY:

15-miles 1:48:20 (Home to work) Raining (Suffering from leg problems)
 After work 15-miles 1:58:15 (work to home)

WEDNESDAY:

9.3 mile 1:10:05 (Road)
 Lunch hour: Weight training

THURSDAY:

1-mile thru streets (From school to subway, same night)
 18-miles 2:24:58 Home to work. Road wet, light snow falling.
 After work - 13-miles 1:51:18 work home. Road wet, snowing.
 (Not much desire to run. Bad cold)

FRIDAY:

15-miles 1:47:15 Home to work. Road long stretches of ice.
 After work 3 miles thru streets.

SATURDAY:

Morning- 1/4 mile thru streets
 Night- token run 1/8 mile (a rest day)

SUNDAY:

Morning 30-miles 4:31:55
 Night- 1/4 mile thru streets

WEEK BEFORE LONDON - BRIGHTON RACE

September 18, 1965 to September 24, 1965

SATURDAY:

22-miles in 3:11:52 Run from home to Park. Last hard workout before this year's London-Brighton race. Began 7 day count-down with this workout. Later in day: Token run of 1/8 mile.

SUNDAY:

Rode bicycle 5-miles. Ran 5-miles in street shoes. Walked one mile home.

Later in day: Jogged 2-miles in street clothes.

MONDAY:

13-miles 1:18:42 Home to work in street clothes. Heavy vehicular and pedestrian traffic encountered.

Later in day: Jogged 2½ miles during lunch hour. Pain in left metatarsal arch.

TUESDAY:

7-miles in 66:50 Home to Van Cortlandt Park track, 5 miles on track, run straights and jog curves. Ran park to home.

WEDNESDAY:

One mile run involving running exercises.

Later in day. In London, England: Token run of 1/8 mile after plane trip.

THURSDAY:

1½ mile easy running thru streets in London

Later in day ran 3 miles followed by 3 mile walk thru Balham and Clapham sections of London. All in street clothes.

FRIDAY:

One mile thru streets

1½ miles followed by 1½ mile walk thru streets

Each day did a few isometric exercises for trunk and arm muscles and some flexibility exercises.

LONDON-BRIGHTON RACE NEXT DAY

THE RACE: London, Sat., Sept. 25 - Ted Corbitt ran his 90th marathon today. He came close to not completing it, not due to lack of stamina, but to a painful foot injury he picked up in route. However, Ted Corbitt never lets an injury (or anything else) stand in the way of finishing. He finished a bang-up second in the famed London to Brighton 52-miler for the 2nd straight year as the great Bernard Gomersall chugged home in 5:40:11 for his 3rd straight victory in this event. Corbitt clocked 5:44:35 as against his 5:40:42 last year, when he finished just 58s behind Gomersall.

After the grind, Ted said, "Each time I run this course it seems different. The road seemed slower this year, that is the terrain did not appear to be as fast in the first 20 miles as I had previously thought. We ran into a good (fairly strong) headwind all the way and this helped produce slower times. I had put in three months of extensive preparations with the primary goal of bettering 5:40, and I think that I was ready to do so but for the injury. Actually, the running in the race didn't come easy, but I was hopeful that the feeling of easy running would come on. I was over 5 minutes behind Gomersall with 10 miles to go so I actually gained on him with all my problems. On two occasions I came to a near stop with pain. So, you can see I was lucky to finish and even luckier to have salvaged second place."

1. Bernard Gomersall, Leeds, Eng. 5:40:11
2. Ted Corbitt, N.Y. Pion. Club 5:44:35
3. G. Eadie, Scotland 5:49:45

(Information about the race is reprinted from The Long Distance Log, Number 119, Page 2.)

MARATHON RECORD OF TED CORBITT, New York Pioneer Club

22

		Place	Time
<u>1951</u>			
1.	Boston Marathon, Boston, Mass. April 19, 1951	15th	2:48:42
2.	Yonkers Marathon, Yonkers, NY May 27, 1951	13th	2:48:58
3.	Jr. Nat'l Marathon, Old Orchard Beach, Me., June 23, 1951	10th in Jr. Nat'l	2:47:28
4.	Baltimore Marathon, Baltimore, Md. Oct. 21, 1951	Open & 5th in 2nd	2:53:05
<u>1952</u>			
5.	Boston Marathon, Boston, April 19, 1952	6th	2:53:31
6.	Yonkers, Yonkers, NY May 18, 1952	3rd	2:43:23
	(2nd in Met. AAU held con- currently,		
7.	Olympic Marathon, Helsinki, Finland July 27, 1952	44th	2:51:09
8.	Baltimore Marathon, Baltimore, Oct. 19, 1952	6th	3:01:14 (injured)
<u>1953</u>			
9.	Yonkers Marathon, Yonkers, May 17, 1953	8th	3:01:11
	(2nd in Met. AAU)		
10.	Valley Forge Marathon, Philadelphia to Fairview Village, Pennsylvania Nov. 8, 1953. (courses cut short after race started due to snow)	2nd	2:26:28
<u>1954</u>			
11.	Shanahan CC Marathon, Philadelphia Jan. 31, 1954	1st	2:36:06
12.	Boston Marathon, Boston, Mass. April 19, 1954	11th	2:40:57
13.	Yonkers Marathon, Yonkers, NY May 16, 1954	1st	2:46:13.9
	(1st in Met. AAU)		
14.	Jr. Nat'l & Open Marathon, Detroit Oct. 17, 1954	1st	2:35:50
<u>1955</u>			
15.	Shanahan Marathon, Philadelphia, Jan. 30, 1955	2nd	2:31:40
16.	Boston Marathon, Boston, April 19, 1955	11th	2:32:27
17.	Fairmount Park Marathon, Philadelphia May 1, 1955	1st	2:38:20
18.	Yonkers Marathon, Yonkers, NY May 22, 1955	3rd	2:49:37
19.	Canadian Nat'l Marathon, Three Rivers, Quebec Canada, Aug. 20, 1955	1st	3:00:05
<u>1956</u>			
20.	Boston Marathon, Boston April 19, 1956	6th	2:28:06
21.	Track Marathon, Philadelphia May 19, 1956	2nd	2:42:25
	(Bettered American track mara- thon record.		
22.	Yonkers Marathon, Yonkers, NY Sept. 30, 1956	6th	2:39:30
	(2nd in Met. AAU)		
23.	Portchester Marathon, Portchester, NY Oct. 13, 1956	3rd	2:40:03
24.	Jr. Nat'l & Open Marathon, Queens, NY Dec. 9, 1956	5th	2:45:45
<u>1957</u>			
25.	Shanahan Marathon, Philadelphia Jan. 27, 1957	2nd	2:32:45
26.	Boston Marathon, Boston April 20, 1957	11th	2:48:14
27.	Yonkers Marathon, Yonkers, NY May 19, 1957	3rd	2:34:17
28.	Riverview Park Marathon, Riverview Park, NJ 5/25/57	2nd	2:35:10
29.	Metropolitan AAU Marathon, South Ozone Park Queens, NY Oct. 13, 1957	1st	2:38:44.2
<u>1958</u>			
30.	Shanahan Marathon, Philadelphia, Jan. 5, 1958	1st	2:26:44
31.	Macombs Dam Park 26.7 Mile Marathon, Bronx NY 3/16/58	1st	2:41:48.7

Marathon Record - Ted Corbitt (Continued)

		Place	Time
32. Boston Marathon, Boston	April 19, 1958	6th	2:43:47
(Unofficial finisher: failed to pass pre race physical exam)			
33. Yonkers Marathon, Yonkers, NY	May 18, 1958	3rd	2:35:44
(1st in Met. AAU Marathon)			
34. North American Marathon, St. Hyacinthe, Quebec Canada	Aug. 31, 1958	2nd	2:57:10.4
35. Jersey City Marathon, Jersey City, NJ	Oct. 11, 1958	3rd	2:33:53.5
36. Jr. Nat'l AAU & Open Marathon, Valley Forge	11/15/58	1st	2:34:41
<u>1959</u>			
37. Shanahan Marathon, Philadelphia, Pa.	Jan. 25, 1959	1st	2:29:43
38. Road Runners Club NY Assoc. Marathon (Initial "Cherry Tree Marathon")	Bronx, NY Feb. 22, 1959	1st	2:38:57
39. RRC 30 Mile Run, Bronx NY	March 8, 1959	1st	3:04:13.3
(Passed Marathon in 2:37:59)			
40. Boston Marathon, Boston	April 20, 1959	12th	2:38:05
41. Yonkers Marathon, Yonkers, NY	May 24, 1959	11th	2:44:42
(2nd in Met. AAU Marathon)			
<u>1960</u>			
42. Cherry Tree Marathon, Bronx, NY	Feb. 21, 1960	5th	2:35:52
43. Boston Marathon, Boston	April 19, 1960	15th	2:40:13
44. Yonkers Marathon, Yonkers	May 22, 1960	7th	2:36:07
(2nd in Met AAU Marathon)			
45. Atlantic City Marathon, Atlantic City	Oct. 16, 1960	2nd	2:43:15
<u>1961</u>			
46. Cherry Tree Marathon, Bronx, NY	Feb. 19, 1961	5th	2:45:28
47. Boston Marathon, Boston	April 19, 1961	12th	2:38:33
48. Yonkers Marathon, Yonkers, NY	May 21, 1961	12th	2:48:33
(1st in Met AAU Marathon)			
<u>1962</u>			
49. Shanahan Marathon, Philadelphia	Jan 28, 1962	1st	2:33:13.6
50. Cherry Tree Marathon, Bronx, NY	Feb 25, 1962	3rd	2:42:02
51. Boston Marathon, Boston	April 19, 1962	14th	2:37:42
52. Yonkers Marathon, Yonkers, NY	May 13, 1962	7th	2:41:05
(1st in Met. AAU Marathon)			
53. 52½ Mile London to Brighton Road Race, London, England,	Sept. 29, 1962	4th	5:53:37
54. RRC National Marathon, Atlantic City	Nov. 4, 1962	11th	2:25:49
(Course short: distance was checked by map at 24.75 mi.)			
55. AAU 30 Mile Handicap, Bronx, NY	Dec. 30, 1962	3rd	3:22:32
(Fast Time)			
<u>1963</u>			
56. AAU 30 Mile Handicap, Bronx-Manhattan	Jan. 20, 1963	2nd	3:13:40
(Fast Time)			
57. Shanahan Marathon, Philadelphia	Jan. 27, 1963	2nd	2:48:25
58. Cherry Tree Marathon, Bronx, NY	Feb. 24, 1963	4th	2:41
59. 33 Mile Handicap, Bethesda, Maryland	Mar. 17, 1963	2nd	3:57
(Fast Time)			
60. Boston Marathon, Boston,	April 19, 1963	20th	2:39:28
61. Yonkers Marathon, Yonkers	May 26, 1963	22nd	2:52:37
(9th in Met. AAU Marathon)			
62. New England Marathon, Holyoke, Mass.	June 16, 1963	15th	2:47:21
63. AAU 35 Mile Run, Bronx, NY	July 28, 1963	1st	4:34:45
64. RRC 44 Mile Run, Alexandria, Va.	Sept 8, 1963	1st	5:36:31.9
(London-Brighton Tryout)			

Marathon Record - Ted Corbitt (Continued)

	<u>Place</u>	<u>Time</u>
65.RRC Marathon Championship, Atlantic City, NJ Nov. 3, 1963	4th	2:34:19
66. <u>30 Mile</u> Run, Bronx-Dobbs Ferry, NY and return, Nov. 17, 1963	1st	3:13:56
<u>1964</u>		
67.RRC 37½ Mile Run, Bronx-Tarrytown, NY and return Jan. 11, 1964	1st	4:19:50
68.Shanahan Marathon, Philadelphia, Pa Jan. 26, 1964	2nd	2:32:30
69.AAU 40 Mile Run, Queens, NY Feb. 8, 1964	1st	4:53:51
70.Cherry Tree Marathon, Bronx, NY Feb.23, 1964	11th	2:43:42
71.RRC 40½ Mile Run, Queens, NY April 4, 1964	1st	4:29:57
72.Boston Marathon, Boston April 20, 1964	26th	2:38:01
73.Yonkers Marathon, Yonkers, NY May 24, 1964	12th	3:20:32
	(5th in Met.AAU Marathon)	
74.New England Open Marathon, Holyoke, June 14, 1964	6th	2:38:24
75.RRC 40½ Mile Run, Queens, NY July 11, 1964	1st	4:31:38
76. <u>52½ Mile</u> London-Brighton Race London, England Sept.26, 1964	2nd	5:40:42
77.RRC Marathon Championship, Atlantic City, NJ Nov. 1, 1964	3rd	2:35:03
78.RRC 40½ Mile Run, Queens, NY Nov. 14, 1964	1st	4:23:22
79.Winsland 26 Mile 385 Yard Marathon, Ozone Park, NY Dec. 6, 1964	6th	2:46:02
<u>1965</u>		
80.50 Kilometers, Alley Pond Park, Queens, NY Jan. 10, 1965	1st	3:39:57
81.Shanahan Marathon, Philadelphia Jan. 24, 1965	2nd	2:39:05
82.Cherry Tree Marathon, Bronx, NY Feb. 21, 1965	13th	2:50:04
83.RRC, NY Assn. 45 Mile London-Brighton Tryout #1, Alley Pond Park, Queens, NY March 21, 1965	1st	5:39:33
84.Boston Marathon, Boston, Mass April 19, 1965	39th	2:38:51
85.RRC, NY Assn. 37½ Mile Run, Peekskill to Yonkers, NY (Handicap Race) May 2, 1965	1st	3:57:40
86.USA and Met.AAU Marathon, Yonkers, NY May 23, 1965 (Yonkers Marathon)	12th	2:56:05
	(4th in Met AAU Marathon)	
87.Jr.USA and Open New England Marathon, Holyoke, Mass. June 13, 1965	4th	2:36:09
88.RRC, NY Assn. 45 Mile London-Brighton Tryout #2 Alley Pond Park, Queens, NY June 27, 1965	1st	5:06:37
89.RRC, NY Assn. 45 Mile London-Brighton Tryout #4 Bronx-Manhattan-Tappan-Zee Bridge & Return 8/8/65	1st	4:39:17
90.52½ Mile London-Brighton Race, London England Sept.25, 1965	2nd	5:44:35

This is my marathon record as of October, 1965. I had hoped to run in two more marathons this year; but at the moment, I have injuries to both feet, and so I don't know what I will do.

Ted Corbitt
Oct. 23, 1965

PRE-SEASON WINTER WEATHER CONDITIONING FOR DISTANCE RUNNING

by
Tom Neuberger

(I do not know when this article was written but at the time Neuberger was coach at North Dakota St. University)

When athletes in the northern states ask how they can get into condition for distance running, there's only one answer--"Go outside and run!" But they'll remonstrate, "Coach, it's below zero out there!"

That's the time to explain it makes little difference what the temperature is, as long as they dress warm and work hard while outside. A distance runner can go out in zero weather and come back with his T shirt wringing wet.

He must, of course, run hard while outside and have on two pairs of sweat clothes, a hood, gloves, stocking cap, and scarf around the neck. Regular tennis shoes will suffice for footwear, even if there's snow on the ground and the feet get wet. If the rest of the body is warm, the feet will also stay warm despite being wet. Usually the feet don't get wet in cold weather, because the snow doesn't melt unless it's warm enough.

Students always worry about the poor running conditions with so many clothes on and the deep snow to run through. Tell them this is a natural type of weight training. Nowadays we buy leg, wrist, and waist-weighted belts to add resistance to our running. Why not do the same thing with extra sweat clothes, etc? In fact, it may be a good idea to wear overshoes to add to the resistance.

Herb Elliot, the greatest distance runner in the world, trains in the loose sand of a desert. Running in the snow represents the same sort of thing. The athlete won't run as fast under these conditions, but he'll surely have to work hard to compensate for the extra weight of the clothes and push through the snow. This is what is needed in pre-season training to build strength and endurance.

Without this strength and stamina, a distance runner will never attain the speed and form with which he can win. After attaining these qualities, he can start adding the finer points of speed, form, etc.

Some people have the mistaken idea that cold air is hard on the lungs. Actually, the cold air never gets to the lungs. It's warmed by the nose, mouth, and throat before reaching the lungs. The air may be a little raw on the mouth and nose at first, but the runners will become conditioned to it. One technique that may eliminate this is to exhale straight out, letting the warm exhaled air warm the air that's breathed in.

In a recent issue of the Track and Field Observer, Fred Wilt told the Finns are training out of doors in 40 degree below zero. A few years back the Finns were the world's greatest distance runners as the Australians are today. They had to train outdoors in the extreme cold weather, because Finland is colder than our northern states and it doesn't have indoor tracks.

The most important aspect of pre-season winter training is running. Athletes should go outside and do some running even if they have an indoor track. The added work under such conditions is beneficial and can't be accomplished indoors without the added resistance.

Running under winter conditions also toughens the athlete mentally. After being conditioned on punishing workouts with excess clothing in deep snow, he'll think nothing of stripping down on a cool, probably rainy April day for a distance race in a track meet.

Distance runners can do many things indoors to supplement their pre-season conditioning, but they should substitute them for outdoor running. The boys should go outside first and run several miles, then come inside for more work.

Distance runners with fall cross-country experience have it all over the other distance men. They're mentally ready for any type of running after

their cross-country experiences on many cold, windy fall days.

Weight training is of great value for preseason training. Research has shown that a distance runner should work with relatively light weight and do a lot of repetitions. Weight lifting with maximum weights should be left to the sprinters, throwers, and jumpers who need maximum strength.

Distance runners need strength, but stamina is more of a premium. The distance man, therefore, should use weights that make him work fairly hard, but permit him to continue for a long time. This procedure will build some strength and stamina. The very heavy weights can be lifted only a few times. This will surely build strength, but not do much for stamina, the premium quality in distance running.

Running in place is another fine conditioner. If a trampoline is available, the athlete can run in place on it. This soft surface will place less stress on the legs. The way to do it is to run as fast as you can for 10 seconds, stop for 10 seconds, run for 10 seconds, stop for 10 seconds, etc. The athlete should do this as many times as he can.

Another plan is to do it 10 times, then rest for several minutes, and repeat 10 times doing numerous repetitions. A sprinter or jumper should do less repetitions, but as fast as he can to build up his leg power.

Extensive practicing of starts is a fine indoor conditioner for a distance runner. Although a good starting technique is of premium benefit to a distance runner, the main reason for doing a lot of them is to build up leg strength. To improve stamina, you can have the runners sprint out of the blocks as hard as they can for the gym, then jog back to the blocks and take another start right away. A series of 12-15 of these will have a boy huffing and puffing.

A little running around the gym floor won't hurt a bit either. Don't do too much of it, however, since a constant pounding of unconditioned legs on the hard gym floor can cause shin splints. Work into this gradually.

Running around a small area like this is also good competition on smaller indoor tracks. When running your boys around a small area, don't always have them go around the same way. This puts too much strain on the inside leg, causing soreness. Alternate directions and switch the strain to the other leg for awhile.

Running backwards when indoors is also a good conditioner and helps develop coordination. Running backwards affords a tough workout that improves the sense of balance, leg action, and arm carry.

Once a boy becomes proficient in a difficult skill, the more simple related skills become easier and smoother.

Hopping on one leg is a fine resistance exercise that builds leg strength. A leg must work much harder when it must carry the body weight by itself rather than with a helper. Hopping the length of a gym floor on one leg, back on the other, and keeping this up until the legs get a bit numb also is a great conditioner and a fine stamina builder. A boy will be well-winded after hopping up and down a 100-foot gym 20 times without stopping.

A coach can think of many things to do indoors. There's nothing wrong with wrestling, basketball, gymnastics, or any other sport as long as the track work isn't neglected.

THE END

TRAINING AND PERFORMANCE PROFILE OF NICK COSTES (1961)

by
Ted Corbitt

NICHOLAS GEORGE COSTES, Slippery Rock Teachers College, U.S. Army (in Germany).

AGE 34

BEST MARKS: 200 yards 25.8, 440 yards 56.0, Mile 4:26.0, Two Miles 9:36.0
5000 meters 15:36, Four Miles 20:20, Five Miles 25:20, 30 Kilometers 1:35:12
Marathon 2:18:01 (Boston course--then 1187 yards short).

BORN August 3, 1926 at Farrell, Pennsylvania, 5' 5 3/4" tall, 125 pounds,
started racing at age 23 as a junior in college.

WARMUP: Training--jogging 6 miles; Before Race--about 1 mile jogging
with 2-4 accelerations of 50-100 yards at a 63-65 seconds 440 pace.

PRE-COMPETITIVE (WINTER) SEASON TRAINING:

Trained 6 or 7 months before marathon season with one race within that
time.

MONDAY: 25x 440 in 68-70 seconds x 220 yards recovery jogging.

WEDNESDAY: 24-28 X220 in 33-35 seconds x 220 yards.

Other days "recuperative" running; to recover from previous day's work--
7 miles in AM and 8 miles in PM. Preparing for 1960 Olympic trials, he ran
a minimum of 15 miles in one workout. Now runs a variable distance, but
avoids exhaustion. Before the season opened, he built up speed and distan-
ce to 18-19 miles a day.

COMPETITIVE SEASON (SUMMER) TRAINING:

Training similar to pre-competitive running. Alternate workouts: 25 x 440,
in 66-67 seconds x 440 yards; or 40 x 110 (fast) x 110 yards.

Costes often ran without timing himself. He had three hard workouts a
week, covering 23 to 25 miles in two workouts per day. He was coached by
Ford Hess and Josy Barthel. He ran 2 cross-country races, 6 to 8 road races,
and 2 marathons a year. Costes trained twice a day with 7-8 miles at 5:50
AM followed by 8 miles at 4 PM. This routine was changed as needed. The
day before a race he jogged up to 2 miles or occasionally 5-8 miles. He
now feels that it is best to rest completely. His last meal was eaten 3-4
hours before a race. Costes' diet included a lot of raw vegetables, and
usually beer at supper. Racing strategy and tactics consisted of always
trying to "kick", no matter how tired. His shoes were light and flexible.
Unless out of contention, he did not drink liquids during a marathon.

Costes, 1955 US Marathon Champion, increased his weight training after
competing in the Melbourne Olympics. He found that weight training result-
ed in more vigorous leg action, a longer stride, and a straighter leg drive,
producing greater speed, as shown by his stop watch. In 1958 he was
operated on for hemorrhoids which had impeded him in 1956. He began a come-
back with weight training and running aimed at a 2:15 marathon. Typical
workouts were: 52 x 220 in 33-34 seconds x 110 yards, or 40-x 440 in 73-79
seconds x 220 yards (last 20 with 110 yards); or 80 x 110 in 14.5-15.5 sec-
onds x 110 yards. Costes uses a ratio of upper body to lower body exerci-
ses of 10:1. He feels that the athlete should avoid unilateral develop-
ment, by using a broad spectrum of exercises; that the runner can expect
to lose some "lifting strength" as he begins to emphasize speed training;

and that the 3-4 weight workouts a week can be reduced to 2 a week during the season to keep the body strong, if maximal loads are lifted. He Bench Presses 175 lbs. x 4 repetitions; Cheat Curls 130 lbs. x 10 reps; Standard Curls 100 lbs. x 1-8 reps; Clean and Jerks 135 lbs. He uses 30 reps per set for some exercises.

In the midst of pre-Olympic tryout training in late 1959, Costes was declared a professional. After shaking off the ensuing despondency, he found that in his "retirement" he loved running more than ever. He still runs 6-15 miles daily, experimenting and clarifying his thinking on conditioning. Typical current workouts: 3 x 440 averaging 60.7 seconds x 440; 3 x 880 in 2:06, with jogging and resting between runs; 3/4 mile in 3:15 and 10 minutes later 880 in 2:04.

FUTURE PLANS:

More and faster running; and possibly, marriage.

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2. Supplementary Communication, Feb. 1961.
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