

MASTERS AGE-GRADED TABLES



1989 EDITION

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1. ADD ALL SP, HH, DT COMBINATIONS

2. HURDLE CORRECTION IMPLIED IN AGE FACTORS

$$(110M \text{ TIME}) = 1.104 \times (100M \text{ TIME})$$

$$(110M \text{ TIME}) = 1.404 \times (80M \text{ TIME})$$

3. HURDLE HEIGHT DIFFERENCES (GIVEN BY RODNEY CHARNOCK)

$$\begin{aligned} \text{FACTOR TO GET BACK TO 42" HURDLES} &= \left[\frac{(42 - \text{HEIGHT RM})}{3} \times .025 \right] \\ &= 1 + \left[\frac{(42 - \text{HEIGHT RM})}{3} \times .025 \right] \end{aligned}$$

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On the cover: Start of the 800-meter run at the National Masters News Age-Graded Meet in Los Angeles. Mary Ames, 84, starts first, to be followed 20 seconds later by Bess James, 78. Others follow in order from oldest to youngest.

Photo by Gretchen Snyder



NATIONAL MASTERS NEWS



The official world and U.S. publication for Masters track & field, long distance running and race walking.

INTRODUCTION

WHAT ARE AGE-GRADED TABLES?

Age-graded tables are a series of age factors and age standards which can be used to compare performances at different ages in different athletics events.

Age-graded tables show how much a person's athletic performance declines as he or she ages. The decline varies by event. In this book, factors and standards are published for each age from 21 to 90 for both men and women for every common track & field, long distance running, and race walking event.

WHAT'S THE PURPOSE OF AGE-GRADED TABLES?

Age-graded tables can be used to:

- 1) Keep track of your progress over the years.
- 2) Compare your own performance in a given event.
- 3) Compare your own performance in different events.
- 4) Compare your progress in the current year.
- 5) Set goals for the current year and future years.
- 6) Estimate your performance in new events.
- 7) Compare performances of older and younger individuals in the same or different events.
- 8) Select the best performance in an event among all age groups.
- 9) Select the best overall performance in a meet or race.
- 10) Select outstanding athletes.
- 11) Give recognition to good performances in the upper age groups.
- 12) Enable athletes at the upper end of their age groups to compete on an equal level.
- 13) Make the competition more interesting and exciting.
- 14) Make awards more meaningful.
- 15) Establish medal standards.
- 16) Score multi-events (decathlon, pentathlon, etc.) using IAAF scoring tables.



WHY ARE AGE-GRADED TABLES NEEDED?

For years, masters meets and races have awarded prizes in 5- or 10-year age groups. That's fine when there are 500 or more competitors. But in smaller meets, there are usually so few participants in some events that several age-groups must be combined to avoid a one- or two-person walkover. If three awards are given in each age/sex group in every event in such a meet, they can become meaningless.

Using age-grading, full fields are virtually guaranteed in every event, because everyone can compete in the same "division." In a track meet, medals can be awarded for each event, rather than for each five-year age-division in each event. In a road race, medals and recognition can go to the best performers, regardless of age or sex. First place may go to a 41-year-old man or to a 76-year-old woman. Age-graded competition can also include open-class athletes.

WHAT'S IN THIS BOOK?

This book contains easy-to-follow procedures for using age-graded tables to:

- 1) conduct a track & field meet, road race or race walk;
- 2) chart your own performance progress.

The tables are easy to use. All you need is a hand calculator.

The age-graded tables are composed of:

- 1) age factors
- 2) age standards

Factors can compare performances in a single event. Standards can compare performances in a single event or in many events. Mathematically, factors and standards are identical.

WHO COMPILED THE TABLES?

The tables were researched and compiled by the National Masters News and by the World Association of Veteran Athletes (WAVA), the international governing body for masters (veterans) track & field, long distance running, and race walking.

The WAVA Committees were composed of Rodney Charnock, Peter Mundle, Charles Phillips, Gary Miller, Bob Fine, Rex Harvey, Phil Mulkey, Bob Stone, Mike Tymn, Christel Miller, Phil Raschker, and Al Sheahen, with the assistance of Phil Partridge, Ian Hume, Adolph Koch, Walter Fuchert, Wilhelm Koster, Victor Trkal, and others.

HOW TO CONDUCT AN AGE-GRADED TRACK & FIELD
MEET, ROAD RACE, OR RACE WALK

I. SUMMARY

AGE FACTORS

Age factors (pages 21-27) can be used to compare an individual's performance in a given event to what he/she did -- or might have done -- in his/her prime. The factor expresses the rate of decline based on age. It converts a performance to the equivalent performance by an open-class athlete.

Factors work well when you want to score men and women separately, and when you want to compare performances in only one event (such as a road race).

The factors require only one calculation to determine the places in an event. Simply multiply the factor for a person's age/event by his/her actual mark.

That gives you an "age-graded mark" or "equivalent open-class performance." The person with the best age-graded mark is the winner, regardless of age. All the men compete in one "division." All the women compete in a separate "division."

AGE STANDARDS

Age standards (pages 30-37) can be used to compare performances in a single event or in many events, among both sexes -- with only one calculation.

Standards work well when you want to score men and women together, or when you want to compare performances in several events (such as a track & field meet). But standards can also be used for single events, and to score men and women separately.

For running events, divide the "time standard" for a person's age/event by the time he/she ran. For field events, divide the person's actual throw or jump by the "distance standard" for his/her age/event.

That give you a "performance-level percentage." The person with the best percentage is the winner, regardless of age or sex.

A meet or race can be staged using individual age standards, or five-year age-group standards (pages 38-40), whichever you prefer.

TIME- AND DISTANCE-HANDICAP RACING

An age-graded meet, road race, or race walk can be made even more exciting by using distance handicaps in the 100, 200 and 400, and/or time handicaps in races from 800 meters up.

Refer to the "Handicap Racing" tables (pages 51-52) with the example. In the sprints, each runner gets a distance handicap. The first one to the finish line is the winner.

In the 800 up, the oldest runner starts first, followed seconds later by the next oldest and down to the youngest. Each participant runs the full distance. The first one to the finish line is the winner. As always, men and women can run together.

PERSONAL PERFORMANCE CHART

By using age-graded tables, you can keep track of your progress over the years, set goals, and estimate your performances in new events. The personal performance charts (pages 54-58) are self-explanatory.

II. HOW TO CONDUCT AN AGE-GRADED TRACK & FIELD MEET, ROAD RACE, OR RACE WALK USING AGE FACTORS

Age factors (pages 21-27) can be used to compare an individual's performance in a given event to what he/she did -- or might have done -- in his/her prime. The factor expresses the rate of decline based on age. It converts a performance to the equivalent performance by an open-class athlete.

Factors work well when you want to score men and women separately, and when you want to compare performances in only one event.

The factors require only one calculation to determine the places in an event. Simply multiply the factor for a person's age/event by his/her actual mark.

That gives you an "age-graded mark" or "equivalent open-class performance." The person with the best age-graded mark is the winner, regardless of age. All the men compete in one "division." All the women compete in a separate "division."

Example 1: A 40-year-old man runs 100 meters in 12.07 seconds.

- 1) Use the track age factors (page 21) to find the M40 factor for 100 meters.
- 2) The M40 factor for 100m is .9435. (That means a 40-year-old man will run the 100 about six percent slower than when he was 25.)
- 3) Multiply .9435 by 12.07 seconds = 11.39 seconds. That's his "age-graded time" or his "equivalent open-class performance."

Example 2: A 62-year-old man high jumps 4'8".

- 1) Convert to meters: 4'8" = 56" x .0254 = 1.42 meters.
- 2) Use the field-event age factors (page 23) to find the M62 factor for the high jump.
- 3) The M62 factor for the high jump is 1.4148.
- 4) Multiply 1.4148 by 1.42 meters = 2.01 meters.
- 5) To convert meters to inches, divide by .0254 (or use standard conversion tables). Thus, 2.01 divided by .0254 = 79" = 6'7". That's his "age-graded mark."

Example 3: A 53-year-old woman runs 10K in 45:18.

- 1) Use the long-distance running factors (pages 24-25) to find the W53 factor for 10K.
- 2) The W53 factor for 10K is .8450.
- 3) Convert 45:18 to seconds (45 x 60 = 2700 seconds + 18 seconds = 2718 seconds).
- 4) Multiply .8450 x 2718 seconds = 2297 seconds.
- 5) Convert 2297 seconds to minutes by dividing 2297 by 60 = 38.28 minutes.
- 6) Convert .28 minutes to seconds by multiplying .28 x 60 =

17 seconds.

7) Thus, 38:17 is her age-graded time.

Age-group factors can be used to score multi-events (decathlon, heptathlon, pentathlon, octathlon). WAVA and TAC multi-event championships are scored by this method.

Example 4: A 45-year-old decathlete runs 400 meters in 58.12 seconds.

- 1) Use the track age factors (page 21) to find the M45 factor for 400 meters.
- 2) The M45 factor for 400m is .8839.
- 3) Multiply $.8839 \times 58.12 = 51.38$. That's his age-graded time.
- 4) Look up 51.38 in the 1985 IAAF scoring tables, and find that $51.38 = 752$ points.
- 5) Do the same for all 10 decathlon events and get a total score. (Note: in WAVA and TAC multi-event championships, scoring is kept separately for each five-year age group.)

Even though the weight of the implement being thrown at older ages may vary, the age-graded mark reflects using the open-class implement (16-pound shot and hammer, 2kg discus, and 800g javelin for men and 4kg shot and hammer, 1kg discus, and 600g javelin for women). Likewise for hurdlers, even though hurdle heights at older ages may vary, the age-graded time reflects using the open-class (OC) hurdle distance and height (110H/42" and 400H/36" for men; and 100H/33" and 400H/30" for women).

- + For the men's 100H and 80H, the age factors are predicated on the men's 110H OC world record, and thus performances convert from the 100H and 80H to the equivalent 110H/42" OC performance for men.
- + For the women's 80H, the age factors are predicated on the women's 100H OC world record, and thus performances convert from the 80H to the equivalent 100H/33" OC performance for women.
- + Similarly, the men's 300H performances convert to the equivalent 400H/36" OC performance for men, and the women's 300H performances convert to the equivalent 400H/30" performance for women.
- + Similarly, the men's 2000SC performances convert to the equivalent 3000SC performance for men.

Example 5: A 42-year-old woman runs 80-meter hurdles in 12.33.

- 1) Use the hurdles age factors (page 22) to find the W42 factor for 80-meter hurdles.
- 2) The W42 factor for 80H is 1.1365.
- 3) Multiply $1.1365 \times 12.33 = 14.01$ seconds. That's her age-graded time for 100H/33".

Final note on age factors: age factors are mainly designed to compare performances of one sex in one event. However, after using the factors to determine the age-graded marks, you can compare both sexes in one or many events by one additional calculation: for running events, divide the open-class standard (OC) by the age-graded time; for field events, divide the age-graded distance/height by the open-class standard. That gives you a "performance level" percentage. 100% is potential world-record level. The person with the best percentage is the winner, regardless of age or sex.

III. HOW TO CONDUCT AN AGE-GRADED TRACK & FIELD MEET, ROAD RACE, OR RACE WALK USING AGE STANDARDS

Age standards can be used to compare performances in a single event or in many events, among both sexes -- with only one calculation.

Standards work well when you want to score men and women together, or when you want to compare performances in several events (such as a track & field meet). But standards can also be used for single events, and to score men and women separately.

For running events, divide the "time standard" for a person's age/event by the time he/she ran. For field events, divide the person's actual throw or jump by the "distance standard" for his/her age/event.

That gives you the "performance level percentage." 100% is potential world-record level. The person with the best percentage is the winner, regardless of age or sex.

Example 1: A 40-year-old man runs 100 meters in 12.07 seconds.

- 1) Use the men's track standards (page 31) to find the M40 standard for 100 meters.
- 2) The M40 standard for 100m is 10.44.
- 3) Divide 10.44 by 12.07 = .865, or 86.5%. His "performance level percentage (P.L.%) is 86.5%.

Example 2: A 62-year-old man high jumps 4'8".

- 1) Convert 4'8" to meters: $4'8" = 56" \times .0254 = 1.42$ meters.
- 2) Use the men's field event standards (page 33) to find the M62 standard for the high jump.
- 3) The M62 standard for the high jump is 1.71.
- 4) Divide 1.42 by 1.71 = .830, or 83.0%. His performance level is 83.0%.

Example 3: A 53-year-old woman runs 10K in 45:18.

- 1) Use the long-distance running standards (page 35) to find the W53 standard for 10K.
- 2) The 10K standard for W53 is 35:22.
- 3) Convert 45:18 into seconds ($45 \times 60 = 2700$ seconds + 18 seconds = 2718 seconds).
- 4) Convert 35:22 into seconds ($35 \times 60 + 22 = 2122$ seconds).
- 5) Divide 2122 by 2718 = .781, or 78.1%.

Example 4: A 45-year-old man runs 400 meters in 58.12 seconds.

- 1) Use the men's track standards (page 31) to find the M45 standard for 400 meters.
- 2) The 400-meter standard for M45 is 48.98.
- 3) Divide 48.98 by 58.12 = 84.3%.

Example 5: A 42-year-old woman runs 80-meter hurdles in 12.33.

- 1) Use the women's hurdle standards (page 32) to find the W42 standard for 80H.
- 2) The W42 standard for 80H is 10.78.
- 3) Divide 10.78 by 12.33 = 87.4%.

To pick an outstanding athlete among the five examples, select the one with the best performance percentage. In this case, it's the 42-year-old female hurdler (example #5) with an 87.4% performance.

Grade Levels: 90%+ = World Class
80%+ = National Class
70%+ = Regional Class
60%+ = Local Class

A meet or race can be staged using individual age standards, or five-year age-group standards (pages 38-40), whichever you prefer. The advantage of using single-age standards is that all performers compete equally, based on their ages. The advantage of using age-group standards is that you have less numbers to worry about.

Calculations must always be made in seconds or meters. So in the 1500, for example, 5:02.7 must be converted to 302.7 seconds before calculations begin.

Special note: you may find that the runners achieve generally higher percentages than the field-event performers -- especially the throwers. That's because field events are more technical than the running events; the best throw of the day may be substantially better than the fifth-best effort of the day (even in the Olympics, that's the case), whereas runners tend to be more bunched up at the finish. If this is the case, you may wish to divide the awards equally among the best 1) track, and 2) field performances.

The performance-level percentage can also be expressed as an age-graded mark, by either dividing (running events) or multiplying (field events) the open-class standard by the P.L. %.

On the following pages are:

- 1) Age factors for each age and event -- pages 21-29.
- 2) Age standards for each age and event -- pages 30-40.
- 3) Sample of completed heat sheets of mythical competitions, using the age factors -- pages 41-44.
- 4) Samples of completed heat sheets of mythical competitions, using the age standards -- pages 45-47.
- 5) Blank heat sheets which can be copied for use in meets and races -- pages 48-50.

IV. HOW TO USE THE HEAT SHEETS USING AGE FACTORS

The sample heat sheets of mythical competitions (pages 41-44) show how an age-graded meet or race works using age factors.

Factors work well when you want to score men and women separately, and when you want to compare performances in only one event (such as a road race).

In the 100 meter example, there are nine entrants -- six men and three women -- of all ages. List each sex separately, on one or more heat sheets, depending on the number of entrants. You can have one race for men and one for women; or combine everyone into one race.

Assign lanes (column 1), list the name (column 2), club or affiliation (column 3), and sex and age (column 4). Write the age factor for each runner (on page 21) in column 5.

Each person runs 100 meters. Their finishing times go in column 6. To determine the age-graded winner, multiply the age factor (column 5) by the actual time (column 6). Thus, Jack, M40, whose age factor is .9435, ran 12.07. Multiply $.9435 \times 12.07 = 11.39$, his age-graded time, which you write in column 7. Do the same with the other men. Bill, M55, has an age-graded time of 10.73, the best. So he wins. List the places in column 8.

Do the same with the women. Jane, W35, has an age-graded time of 12.62, the best of the three women. So she wins.

As an additional piece of information (but not necessary to determining the winners), you may wish to find out the "performance-level percentage" of each runner. The higher the P.L.%, the better the performance. In Jack's case, divide the open-class (OC) men's standard (9.85) by his age-graded time (11.39) and get .865, or 86.5%. List that in column 9. The age-graded times and P.L. percentages are perfectly related, so the best age-graded time will always produce the best P.L. percentage.

Do the same for the women, except divide the women's OC standard (10.78) by their age-graded times. Jane's 85.4% is, therefore, 85.4% of the potential world-record level for her age.

Now, if you want to combine both men's and women's performance-level percentages to determine an overall winner, you can easily do so. Bill, with a 91.8%, is the overall best; Bob's 86.9% is second; Jack's 86.5% is third and Jane's 85.4% is fourth.

In the short hurdle example, it works the same, but a couple of columns have been added for convenience, since masters run different distances over different heights. Thus, Harry, who runs 100 meters over 33" barriers, wins the men's race in an age-graded time of 14.91. Philippa wins the women's division in an age-graded time of 14.01.

If you want to combine the men's and women's divisions to see who's best overall, Philippa's 87.4% is first; Harry's 86.5% is second; and Roger's 86.3% is third.

In the shot put example, use column 1 to list the weight of the implement to be thrown, since masters shot putters use five different weights, depending on sex and age. Note the extra four columns -- assuming each participant will get four throws. (If your meet allows six throws, you can use the margins or make up your own heat sheets.)

In column 6, list the actual throw in meters and, for convenience to athletes who tend to think in terms of feet and inches, divide meters by .0254 to get inches; or multiply meters by 3.2808 to get feet/inches (or use conversion tables).

Multiply, as in the other examples, the age factor (column 5) by the actual mark in meters (column 6) to get the age-graded throw (column 7). Thus, Dave, M67, whose age factor is 1.4135, threw 12.03 meters. So, $1.4135 \times 12.03 = 17.01$ meters, his age-graded throw. (Converting to feet/inches, it's 55'9½".) In the example, Doc, with a 17.60 (57'9"), wins.

If you want to find the performance-level percentages, just reverse the process from the running events. Divide the age-graded mark by the open-class standard, instead of the other way around. Thus, for Dave, divide 17.01 by 20.40 = .834, or 83.4%.

Now, if you want to give a prize or recognition to the best performance of the meet (a four-event meet, in this example), you find the best percentage from all four events. Bill's 91.8% in the 100 is the best; second goes to Philippa's 87.4% in the hurdles; third is George's 87.2% in the high jump. Any meet can be handled the same way, no matter how big or small.

Use the same heat sheet for a road race or race walk as for the track running events. The calculations are exactly the same. Remember to convert all times into seconds.

In the road race example, the actual times of the winners of each five-year age-division in the 1988 Paramount, Calif. 10K are listed.

Whereas Steve Ferraz, M40, and Gail Scott, W40, were the overall male and female masters winners, the best age-graded time was turned in by Steve Lester, M45, with a 28:51. Gina Faust led the women with an age-graded time of 33:08.

If you combine the men and women, Lester's 93.3% is the best, followed by Orlo Kenniston (M60, 90.5%), Ferraz (M40, 90.5%), and Faust (W50, 90.2%).

Note that it was simpler, in this example, to use the age-group factors, rather than the single-age factors. However, a computer program could easily do the single-age calculations, if exact ages were known.

V. HOW TO USE THE HEAT SHEETS USING AGE STANDARDS

The sample heat sheets of mythical competitions (pages 45-47) show how an age-graded meet or race works using age standards.

Standards work well when you want to score men and women together, or when you want to compare performances in several events (such as a track & field meet). But standards can also be used for single events, and to score men and women separately.

In the 100-meter example, there are the same nine entrants as in the age-factor example. For award purposes, you can separate the men and women, as with the factor example, or you can combine both sexes together. In this example, men and women are combined.

The heat sheet is essentially the same sheet as in the factor example, but a few column headings have been changed. Assign lanes (column 1), list the name (column 2), club or affiliation (column 3), and sex and age (column 4). Write the age standard for each runner (found in the yellow tables) in column 5.

Each person runs 100 meters. Their finishing times go in column 6. To determine the "performance-level percentage" winner, divide the age standard (column 5) by the actual time (column 6). Thus, Jack, M40, whose age standard is 10.44, ran 12.07. Divide 10.44 by 12.07 = .865, or 86.5% (column 7). Do the same with the others. Bill, 55, has a 91.8%, the best. So he wins. List the places in column 8.

As an additional piece of information (but not necessary to determine the winners), you may wish to find out the age-graded time of each runner -- what he/she would theoretically have run in their prime. In Jack's case, divide the men's open-class standard (9.85) by his performance level (86.5%) and get 11.39. List that in column 9. To get Mary's age-graded time, divide the open-class women's standard (10.78) by her performance level (84.0%) and get 12.83. The age-graded times and P.L. percentages are perfectly related, so the best age-graded time will always produce the best P.L. percentage.

In the short hurdle example, it works the same. Each hurdler can run his/her proper distance and height, and be compared to others of all ages and sexes. Thus, Philippa, 42, who runs 80 meters over 30" barriers, wins with an 87.4%. Larry, 33, who runs 110 meters over 39" obstacles, places 6th in 82.8%.

The field events work in reverse. You divide the athlete's best mark by his age standard. Thus, to get John's high jump percentage, divide his jump (1.83 meters) by the standard for age 37 (2.23 meters) and get 82.4%. If you want to get his age-graded leap, multiply the open-class standard (2.42) by his P.L. (82.1%) and get 1.99 meters (6'6").

Now, if you want to give a prize or recognition to the best performance of the meet (a four-event meet, in the example), you find the best percentage from all four events. Bill's 91.8% in the 100 is the best; second goes to Philippa's 87.4% in the hurdles; third best is George's 87.1% in the high jump.

Any meet can be handled the same way, no matter how big or small.

Use the same heat sheet for a road race or race walk as for the track running events. The calculations are exactly the same. Remember to convert all times into seconds.

Whereas Steve Ferraz, M40, and Gail Scott, W40, were the overall male and female masters winners, the best age-graded performance was turned in by Steve Lester, M45, with a 93.3%. Next was Orlo Kenniston (M60, 90.5%). Ferraz was third (90.5%); Gina Faust (W50, 90.2%) was fourth.

Again, as with the factor example, age-group standards, rather than single-age standards, were used. You may use whichever you prefer. The single-age standards/factors enable an athlete at the upper end of his/her age group to compete equally with one who has entered a new five-year age division. But using the age-group standards means you have less numbers to deal with.

As with the track running events, you can find each runner's age-graded time -- what he/she would theoretically run in their prime. In Lester's case, divide the open-class men's standard (26:55) by his P.L. (93.3%) and get 28:51. To get Faust's age-graded time, divide the open-class women's standard (29:53) by her P.L. (90.2%) and get 33:08.

VI. HOW TO CONDUCT MEETS AND RACES
USING TIME AND DISTANCE HANDICAPS

An age-graded meet, road race, or race walk can be made even more exciting by using distance handicaps in the 100, 200 and 400; and/or time handicaps in races from 800 up. (The hurdles and field events do not easily lend themselves to these variations.)

Example: As in the sample 100-meter heat sheet (page 52), list the sex and age in column 4. (You can easily run men and women together, or you can split them up, as you choose.) It is not necessary to list an age factor.

Refer to the "Handicap Racing" tables (page 51). Find the "handicapped start" in meters for each runner and write it in column 5. (For information purposes, you may also list the actual distance to be run in column 6).

Ben, 25, starts from "scratch" and runs the full 100 meters. Bob, 61, gets a 15.1-meter handicap and runs 84.9 meters. Bess, 78, gets a 33.9-meter head start, and runs 66.1 meters. The first one to the finish line wins.

Although it's not necessary, you can determine a performance-level percentage by dividing the men's open-class standard (OC) by the actual time. Heats and semifinals can be run, if necessary.

The 200 and 400 work the same way. It's not difficult to get the starting points on the track by using a measuring tape and/or the existing line marks on the track. (For specific helpful hints, contact the National Masters News).

* * * * *

For races of 800 meters or more, a time handicap, or Portsmouth Start, may be used. The oldest runner generally starts first, followed seconds later by the next oldest and down to the youngest. Each participant runs the full distance. As always, men and women can run together.

Example: As in the sample 800-meter sheet (page 52);

- 1) List the ages (column 1) and names (column 4).
- 2) List the time standard (from page 31) in column 2.
- 3) Convert the time standard to seconds in column 3.
- 4) Determine and list the time handicap (in seconds) for each runner (in column 6) by subtracting the men's open-class (OC) time standard from each runner's time standard. (e.g. Tim's time standard is 131 seconds. The OC standard is 102 seconds. Thus, 131 - 102 = 29 seconds. Write 29 in column 6.)

- 5) In column 7, list the "start delay." Jane, with a 45-second handicap, will start first. Tim, with a 29-second handicap, will start next -- 16 seconds after Jane. And so on down to John, 25, who starts 45 seconds after Jane.
- 6) Assemble the runners at the starting line in a column with Jane, 60, first in line; Tim, 62, second in line; Mary, 39, third in line, etc.
- 7) Simultaneously, the starter fires his gun, the timers start their watches, and Jane begins to run.
- 8) The waiting line of runners moves up as the timer calls the elapsed time. When 16 seconds is called, Tim, the 62-year-old man now at the head of the line, starts. The line again moves up and, at 25 seconds, Mary starts. And so on.
- 9) The first runner to the finish line is the winner. Each runner is timed as he/she crosses the finish line.
- 10) Write the total time (from the timer's watch) in column 8 for each runner.
- 11) Write the place, based on total time, in column 9.
- 12) Individual runners want to know what their actual time was, so subtract the runner's start-delay from their total time and write it in column 10. Thus, Mary, with a total time of 3:07 less a 25-second start-delay, actually ran the distance in 2:42.

If you want to get a performance percentage for each runner, divide column 2 (the time standard) by column 10 (the actual time). (Note: the performance percentage rankings may not always correspond to the actual placings. To help minimize this aberation, increase the start-delay by dividing the handicap (column 6) by the general class of the field. If it's a world-class field, divide column 6 by 95%; if a national class field, by 85%, etc. This is admittedly a complicated area, but the adjustment does make the final placings more accurate. For further info, contact NMN.)

HOW TO USE THE AGE-GRADED TABLES
TO KEEP TRACK OF YOUR OWN PERSONAL PROGRESS

By using the age-graded tables, you can keep track of your progress over the years, set goals for the current year and future years, compare your performances in different events, chart your current progress, and estimate your performances in new events.

On pages 54 through 57 are sample "personal performance charts" which you can use as a guide to charting your own progress.

For simplicity, in all the examples we've used a mythical athlete named John who turns 51 in 1990.

Chart 1: Keep Track of Your Progress Over the Years and Set Goals for the Current Year and Future Years

John's progress is charted in four representative events -- 100, 800, 10K, and long jump -- at six arbitrary points in his athletic career:

- 1) In 1960, as a 21-year-old college senior
- 2) In 1979, at age 40
- 3) In 1984, at age 45
- 4) In 1989, at age 50
- 5) In 1990, at age 51
- 6) In 2009, at age 70

Starting from the left, list the year, age, event and open-class standard (OC). You may list the age standard in column 4, but it's not necessary.

In column 5, list the age factor for each age (from the pink tables), just as in the age-factor examples, explained earlier.

In column 6, list the actual mark. Multiply column 5 x column 6 to get the age-graded mark (column 7). Divide the OC standard (column 3) by the age-graded mark (column 7) to get the performance-level percentage (column 9).

At age 21, John ran the 100 in 11.6. Multiply 11.6 by his age-21 factor (1.0000) and get his age-graded time, 11.60. Divide the OC (9.85) by 11.60 and get 84.9% -- his P.L.%.

At age 40, John ran the 100 in 12.07. Multiply 12.07 by his age-40 factor (.9435) and get an age-graded time of 11.39 and a P.L. of 86.5%. So even though John has slowed in 19 years from 11.6 to 12.07, he's actually running faster for his age than he did in college (11.60 to 11.39).

At age 45, John runs the 100 in 12.31, which gives him an age-graded time of 11.35, the best of his career. His P.L. is a comparable 86.8%.

At age 50, John runs 12.85, for an age-graded time of 11.55, his slowest since he was 21.

So he decides that when he turns 51, he wants to run as fast, on an age-graded basis, as he did at his best -- when he was 45. So he has to run an age-graded time of 11.35, or a P.L. of 86.8%.

What time does he have to run at age 51 to achieve an age-graded time of 11.35 (P.L. 86.8%).

Easy. Just divide the desired age-graded time (11.35 in column 7) by the age-51 factor (.8940 in column 5) and get 12.70 (column 8). So he has to run 12.70 at age 51 to equal his age-graded best of 11.35 at age 45.

How about when he turns 70? Divide 11.35 by .7832 = 14.49. So if John stays healthy and continues to train, he should be able to run 14.49 when he turns 70.

So, now he knows that he's the equivalent of an 11.35 open-class sprinter, or a 14.49 age-70 sprinter. He can scan the results pages and see how he stacks up against people in other age divisions. If he sees a 70-year-old in the next meet running, say, 14.40, he may develop new respect for the Oldster.

The formulas at the top of each column show the mathematical relationship of each of the categories, and enable you to experiment with the equations. (Note: due to rounding, there may occasionally be a fractional difference in mathematically identical figures).

For example, to find John's goal (column 8) at age 51 in the 100, you can also divide his age standard (11.02 in column 4) by his desired P.L. (86.8% in column 9). You get 12.70, the same time as when you divided column 7 by column 5.

All the other running events work the same way. For the field events, note that some of the formulas require multiplication instead of division -- the same as in our previous examples. R=running events; F=field events.

In the 10K example, assume John didn't run the distance until he was age 40, when he ran 36:15 -- an age-graded 34:12. He did his best at age 45 when he ran 34:21 -- an age-graded 31:20 and a P.L. of 85.9%. That means that if he had run a 10K in his prime, he likely would have run about 31:20.

To run an age-graded 31:20 at age 51, divide 31:20 by the age-51 factor for 10K (.8735 in column 5) and get 35:52 (column 8). So he has to run 35:52 at age 51 to equal his age-graded best of 31:20 at age 45.

For yet another piece of information, column 10 allows you to fill in the respective IAAF points. You find these in the 1985 IAAF scoring tables. The IAAF tables are designed for multi-event competition, and only assign points to certain events. But for those events, it's interesting information. You can buy the IAAF scoring tables from the National Masters News, Track and Field News, TAC, the IAAF, or other sources.

Chart 2: Compare Your Performances in Different Events

Which are your best events? Looking at John's best marks in his best year -- at age 45 -- scan column 9 and see he scored 86.8% in the 100, 87.3% in the 800, 85.9% in the 10K, and 79.2% in the long jump. So his 800 performance was best.

Caution: the P.L. percentages in the field events -- particularly in the throwing events -- may be generally lower than in the running events. This is due to the technical difficulty of the throwing events, as mentioned earlier. Thus, a P.L. of 86% in the 100 may not necessarily be better than an 85% in the javelin. But you can generally compare the same family of events with great accuracy, such as the 100, 200 and 400; the 800, 1500 and mile; the long jump and triple jump; the shot and discus; etc.

Chart 3: Chart Your Progress in the Current Year

Assume John's goal at age 51 is 2:15.47 in the 800 (from chart 1). List that in the first line in column 8. On May 15, in a time trial, he runs 2:25.10. That's an age-graded time of 2:04.82 (his goal is an age-graded 1:56.53) and a P.L. of 81.5% (his goal is 87.3%).

On June 10, he races to a 2:22.25, or 83.1%. On July 1, he clocks 2:20.14 -- 84.4%. On July 22, he runs 2:17.50, 86.0%. And on August 2, he reaches his goal with a 2:15.46 -- 87.3%.

Chart 4: Chart Your Workout Progress in the Current Year

Assume John does interval workouts starting in February. On February 15, he does 4 x 200 at an average of 40 seconds each. That's a P.L. of 56.5%. On March 3, he runs 3 x 400 at an average of 90 -- a P.L. of 57.1%. He progresses during the year until, on June 29, he runs 3 x 400 at an average of 68 seconds -- a P.L. of 75.6%.

Assume he trains for longer distances. He runs a mile on February 22 in 8:00 -- a 54.5%. On March 10, he clocks 26:00 for 5K -- 57.1%. He progresses to July 5, when he runs the 5K in 20:00 -- 74.1%.

Chart 5: Estimate Your Performance in New Events

Assume John runs the 100 in 12.70 at age 51, which gives him a P.L. of 86.8%. What should he run the 200, 400 and 800 to give him the same P.L. percentage?

List all the data in columns 3, 4, 5 and 9 for each event. To find the goal (column 8) for the 200, divide the age-51 200 standard (22.60 in column 4) by the desired P.L. (86.8% in column 9) and get 26.04 seconds (column 8). So John's goal at age 51 is to run the 200 in 26.04 -- the equivalent of a 100 in 12.70.

Do the same for the 400, assuming John puts in a bit of distance training. Do the same for any event, but that assumes specific training for each separate event.

The most realistic way of estimating your performance in new events is to stay in the same family of events. Thus, if John runs the 1500 in 4:53.06 (82.7%), he should expect to run the mile in 5:16.21 and the 5000 in 17:56.

Similarly, if he throws the shot 14.17 (46'6", or 80.6%), he should expect to throw the discus 49.16 (161'3"), the hammer 51.37 (168'6"), and the javelin 52.14 (171'0").

If he can walk a mile in 7:58.50 (81.4%), he should walk the 5K in 26:04 and the 20K in 1:48:12.

If you'd like a personalized performance progress chart prepared for you, send your marks for up to five years and two events along with \$10 to National Masters News, P.O. Box 2372, Van Nuys CA 91404. For 10 years and two events, send \$20; for 5 years and 4 events, send \$20; for 10 years and 4 events, send \$40, etc. Your personalized chart will be sent to you within two weeks.

MEN'S TRACK RUNNING EVENT AGE-FACTORS

WOMEN'S TRACK RUNNING EVENT AGE-FACTOR

AGE	100 M	200 M	400 M	800 M	1500 M	1 MILE	3000 M	5000 M
OC	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
30	0.9850	0.9839	0.9829	0.9850	0.9894	0.9900	0.9950	1.0000
31	0.9809	0.9787	0.9766	0.9796	0.9840	0.9846	0.9901	0.9946
32	0.9769	0.9735	0.9702	0.9742	0.9786	0.9792	0.9851	0.9892
33	0.9728	0.9683	0.9638	0.9687	0.9731	0.9737	0.9799	0.9837
34	0.9686	0.9630	0.9574	0.9631	0.9675	0.9681	0.9746	0.9781
35	0.9645	0.9577	0.9509	0.9575	0.9619	0.9625	0.9691	0.9724
36	0.9604	0.9524	0.9444	0.9518	0.9561	0.9567	0.9633	0.9666
37	0.9562	0.9470	0.9378	0.9460	0.9503	0.9509	0.9575	0.9608
38	0.9520	0.9416	0.9312	0.9402	0.9445	0.9451	0.9516	0.9549
39	0.9478	0.9362	0.9246	0.9344	0.9386	0.9392	0.9457	0.9490
40	0.9435	0.9307	0.9179	0.9285	0.9327	0.9333	0.9397	0.9430
41	0.9392	0.9252	0.9112	0.9226	0.9268	0.9274	0.9338	0.9370
42	0.9349	0.9197	0.9044	0.9167	0.9209	0.9214	0.9277	0.9310
43	0.9306	0.9141	0.8976	0.9107	0.9148	0.9154	0.9217	0.9249
44	0.9262	0.9085	0.8908	0.9046	0.9088	0.9093	0.9155	0.9187
45	0.9217	0.9028	0.8839	0.8985	0.9026	0.9031	0.9093	0.9125
46	0.9172	0.8971	0.8770	0.8926	0.8966	0.8971	0.9033	0.9064
47	0.9127	0.8914	0.8700	0.8865	0.8905	0.8910	0.8971	0.9002
48	0.9081	0.8856	0.8630	0.8801	0.8841	0.8846	0.8907	0.8938
49	0.9034	0.8797	0.8560	0.8737	0.8776	0.8781	0.8841	0.8872
50	0.8987	0.8738	0.8489	0.8670	0.8709	0.8714	0.8774	0.8804
51	0.8940	0.8679	0.8418	0.8602	0.8641	0.8646	0.8705	0.8735
52	0.8891	0.8619	0.8346	0.8532	0.8571	0.8576	0.8634	0.8664
53	0.8842	0.8558	0.8274	0.8460	0.8499	0.8504	0.8562	0.8591
54	0.8791	0.8496	0.8201	0.8387	0.8425	0.8430	0.8488	0.8517
55	0.8740	0.8434	0.8128	0.8312	0.8350	0.8355	0.8412	0.8441
56	0.8689	0.8372	0.8055	0.8234	0.8271	0.8276	0.8333	0.8362
57	0.8636	0.8308	0.7981	0.8155	0.8192	0.8197	0.8254	0.8282
58	0.8582	0.8244	0.7906	0.8076	0.8112	0.8117	0.8173	0.8201
59	0.8527	0.8179	0.7831	0.7996	0.8032	0.8037	0.8092	0.8120
60	0.8470	0.8113	0.7756	0.7915	0.7951	0.7956	0.8011	0.8038
61	0.8413	0.8047	0.7680	0.7834	0.7870	0.7875	0.7929	0.7956
62	0.8355	0.7980	0.7604	0.7753	0.7788	0.7793	0.7847	0.7874
63	0.8295	0.7911	0.7527	0.7671	0.7705	0.7711	0.7764	0.7790
64	0.8233	0.7842	0.7450	0.7588	0.7623	0.7628	0.7680	0.7706
65	0.8170	0.7771	0.7372	0.7505	0.7539	0.7544	0.7596	0.7622
66	0.8106	0.7700	0.7294	0.7421	0.7455	0.7460	0.7511	0.7537
67	0.8041	0.7628	0.7215	0.7337	0.7371	0.7375	0.7426	0.7451
68	0.7973	0.7554	0.7136	0.7253	0.7286	0.7290	0.7340	0.7365
69	0.7903	0.7479	0.7056	0.7168	0.7200	0.7205	0.7254	0.7279
70	0.7832	0.7403	0.6975	0.7083	0.7115	0.7119	0.7168	0.7192
71	0.7760	0.7327	0.6894	0.6998	0.7029	0.7033	0.7082	0.7106
72	0.7686	0.7249	0.6813	0.6913	0.6943	0.6947	0.6995	0.7019
73	0.7609	0.7169	0.6731	0.6827	0.6857	0.6861	0.6908	0.6932
74	0.7530	0.7088	0.6648	0.6741	0.6771	0.6775	0.6821	0.6844
75	0.7449	0.7006	0.6564	0.6655	0.6684	0.6688	0.6734	0.6757
76	0.7367	0.6923	0.6480	0.6569	0.6598	0.6602	0.6647	0.6670
77	0.7283	0.6839	0.6396	0.6483	0.6511	0.6515	0.6560	0.6582
78	0.7196	0.6753	0.6311	0.6396	0.6424	0.6429	0.6473	0.6495
79	0.7107	0.6665	0.6225	0.6309	0.6337	0.6341	0.6385	0.6406
80	0.7015	0.6576	0.6138	0.6222	0.6250	0.6254	0.6297	0.6318
81	0.6923	0.6486	0.6051	0.6135	0.6163	0.6166	0.6209	0.6230
82	0.6828	0.6394	0.5962	0.6048	0.6075	0.6079	0.6120	0.6141
83	0.6729	0.6301	0.5874	0.5960	0.5987	0.5991	0.6032	0.6052
84	0.6628	0.6206	0.5785	0.5873	0.5899	0.5902	0.5943	0.5963
85	0.6525	0.6110	0.5696	0.5785	0.5811	0.5814	0.5854	0.5874
86	0.6419	0.6012	0.5607	0.5697	0.5723	0.5726	0.5765	0.5785
87	0.6311	0.5914	0.5517	0.5609	0.5634	0.5637	0.5676	0.5695
88	0.6201	0.5814	0.5427	0.5521	0.5546	0.5549	0.5587	0.5606
89	0.6089	0.5713	0.5337	0.5433	0.5457	0.5460	0.5498	0.5516
90	0.5975	0.5611	0.5247	0.5345	0.5369	0.5372	0.5409	0.5427

AGE	100 M	200 M	400 M	800 M	1500 M	1 MILE	3000 M	5000 M
OC	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
30	0.9835	0.9823	0.9812	0.9835	0.9883	0.9890	0.9945	1.0000
31	0.9791	0.9766	0.9743	0.9776	0.9824	0.9831	0.9891	0.9941
32	0.9746	0.9709	0.9673	0.9716	0.9765	0.9771	0.9836	0.9881
33	0.9701	0.9651	0.9602	0.9655	0.9704	0.9710	0.9779	0.9820
34	0.9656	0.9593	0.9531	0.9594	0.9643	0.9649	0.9720	0.9758
35	0.9610	0.9535	0.9460	0.9532	0.9581	0.9587	0.9660	0.9696
36	0.9565	0.9476	0.9388	0.9469	0.9518	0.9524	0.9596	0.9633
37	0.9519	0.9418	0.9316	0.9406	0.9454	0.9460	0.9532	0.9568
38	0.9473	0.9358	0.9244	0.9342	0.9390	0.9396	0.9468	0.9504
39	0.9426	0.9298	0.9171	0.9278	0.9325	0.9331	0.9403	0.9439
40	0.9379	0.9238	0.9097	0.9213	0.9260	0.9266	0.9337	0.9373
41	0.9332	0.9178	0.9023	0.9148	0.9195	0.9201	0.9271	0.9307
42	0.9284	0.9117	0.8949	0.9083	0.9130	0.9135	0.9205	0.9241
43	0.9236	0.9055	0.8874	0.9017	0.9064	0.9069	0.9138	0.9174
44	0.9188	0.8993	0.8799	0.8950	0.8997	0.9002	0.9070	0.9106
45	0.9139	0.8931	0.8723	0.8883	0.8929	0.8934	0.9002	0.9037
46	0.9091	0.8869	0.8647	0.8818	0.8863	0.8868	0.8936	0.8970
47	0.9042	0.8805	0.8571	0.8751	0.8795	0.8800	0.8868	0.8902
48	0.8992	0.8742	0.8494	0.8682	0.8726	0.8731	0.8797	0.8831
49	0.8941	0.8677	0.8416	0.8610	0.8654	0.8659	0.8725	0.8759
50	0.8889	0.8612	0.8338	0.8537	0.8580	0.8585	0.8651	0.8684
51	0.8836	0.8547	0.8260	0.8462	0.8505	0.8510	0.8575	0.8608
52	0.8782	0.8480	0.8181	0.8385	0.8428	0.8433	0.8498	0.8530
53	0.8727	0.8413	0.8101	0.8306	0.8349	0.8354	0.8418	0.8450
54	0.8671	0.8346	0.8021	0.8226	0.8268	0.8273	0.8336	0.8369
55	0.8614	0.8277	0.7941	0.8143	0.8185	0.8190	0.8253	0.8285
56	0.8557	0.8208	0.7861	0.8057	0.8099	0.8104	0.8166	0.8198
57	0.8499	0.8139	0.7779	0.7970	0.8011	0.8017	0.8079	0.8110
58	0.8440	0.8068	0.7698	0.7883	0.7924	0.7929	0.7991	0.8021
59	0.8379	0.7997	0.7615	0.7795	0.7835	0.7841	0.7902	0.7932
60	0.8317	0.7924	0.7532	0.7706	0.7746	0.7752	0.7812	0.7842
61	0.8255	0.7851	0.7449	0.7617	0.7657	0.7663	0.7722	0.7752
62	0.8190	0.7778	0.7365	0.7528	0.7567	0.7572	0.7631	0.7661
63	0.8124	0.7702	0.7280	0.7437	0.7476	0.7482	0.7540	0.7569
64	0.8057	0.7626	0.7195	0.7346	0.7385	0.7390	0.7448	0.7477
65	0.7987	0.7548	0.7109	0.7255	0.7293	0.7298	0.7355	0.7384
66	0.7917	0.7470	0.7023	0.7163	0.7200	0.7205	0.7262	0.7290
67	0.7845	0.7390	0.6936	0.7071	0.7107	0.7112	0.7168	0.7196
68	0.7770	0.7309	0.6849	0.6978	0.7014	0.7019	0.7074	0.7101
69	0.7694	0.7227	0.6761	0.6885	0.6920	0.6925	0.6980	0.7006
70	0.7615	0.7143	0.6672	0.6791	0.6826	0.6831	0.6885	0.6911
71	0.7536	0.7059	0.6583	0.6698	0.6732	0.6737	0.6790	0.6816
72	0.7454	0.6974	0.6494	0.6604	0.6637	0.6642	0.6694	0.6721
73	0.7370	0.6886	0.6403	0.6509	0.6542	0.6547	0.6599	0.6625
74	0.7283	0.6798	0.6312	0.6415	0.6447	0.6452	0.6503	0.6529
75	0.7194	0.6707	0.6220	0.6320	0.6352	0.6357	0.6407	0.6433
76	0.7105	0.6616	0.6129	0.6226	0.6257	0.6262	0.6312	0.6337
77	0.7012	0.6524	0.6036	0.6131	0.6162	0.6167	0.6217	0.6241
78	0.6916	0.6429	0.5943	0.6035	0.6067	0.6071	0.6120	0.6144
79	0.6818	0.6332	0.5848	0.5940	0.5971	0.5975	0.6024	0.6047
80	0.6717	0.6234	0.5752	0.5844	0.5875	0.5879	0.5927	0.5950
81	0.6616	0.6135	0.5654	0.5748	0.5779	0.5783	0.5830	0.5853
82	0.6511	0.6034	0.5555	0.5653	0.5683	0.5686	0.5732	0.5755
83	0.6402	0.5932	0.5457	0.5556	0.5586	0.5589	0.5635	0.5657
84	0.6291	0.5827	0.5358	0.5460	0.5489	0.5492	0.5537	0.5559
85	0.6177	0.5721	0.5260	0.5363	0.5392	0.5395	0.5439	0.5461
86	0.6060	0.5613	0.5162	0.5266	0.5295	0.5298	0.5341	0.5363

MEN'S HURDLES AND STEEPLECHASE AGE-FACTORS WOMEN'S HURDLES AND STEEPLECHASE

AGE	110 H	100 H	80 H	400 H	300 H	3000 SC	2000 SC	AGE	100 H	80 H	400 H	300 H	2000 SC	FACTORS
	1.067m/42"			.914m/36"					.840m/33"		.762m/30"			
OC	1.0000			1.0000	1.3990	1.0000		OC	1.0000	0.0000	1.0000	1.4020	1.0000	
	.991m/39"													
30	0.9923			0.9812	1.3740	0.9841		30*	0.9792		0.9738	1.3730	0.9939	
31	0.9890			0.9744	1.3647	0.9793		31	0.9732		0.9664	1.3624	0.9852	
32	0.9852			0.9675	1.3552	0.9743		32	0.9672		0.9589	1.3517	0.9762	
33	0.9811			0.9606	1.3456	0.9690		33	0.9613		0.9513	1.3406	0.9668	
34	0.9764			0.9535	1.3359	0.9635		34	0.9554		0.9436	1.3294	0.9571	
35	0.9714			0.9464	1.3260	0.9577		35	0.9496		0.9358	1.3180	0.9471	
36	0.9659			0.9394	1.3162	0.9519		36	0.9438		0.9281	1.3055	0.9362	
37	0.9600			0.9322	1.3063	0.9458		37	0.9381		0.9203	1.2932	0.9253	
38	0.9537			0.9249	1.2960	0.9394		38	0.9324		0.9122	1.2812	0.9144	
39	0.9471			0.9174	1.2856	0.9326		39	0.9267		0.9041	1.2695	0.9035	
40	0.9401			0.9098	1.2750	0.9256			.762m/30"					
41	0.9328			0.9020	1.2642	0.9183		40	0.9169	*1.1600	0.8957	1.2580	0.8926	
42	0.9251			0.8941	1.2532	0.9107		41	0.9078	1.1480	0.8872	1.2487	0.8817	
43	0.9171			0.8861	1.2419	0.9029		42	0.8988	1.1365	0.8785	1.2386	0.8708	
44	0.9088			0.8779	1.2306	0.8947		43	0.8900	1.1253	0.8697	1.2278	0.8600	
45	0.9002			0.8696	1.2190	0.8863		44	0.8812	1.1144	0.8608	1.2163	0.8493	
46	0.8913			0.8612	1.2073	0.8775		45	0.8725	1.1040	0.8517	1.2040	0.8386	
47	0.8821			0.8526	1.1954	0.8685		46	0.8639	1.0945	0.8425	1.1892	0.8281	
48	0.8726			0.8440	1.1833	0.8594		47	0.8554	1.0851	0.8332	1.1747	0.8176	
49	0.8629			0.8353	1.1712	0.8501		48	0.8470	1.0757	0.8237	1.1605	0.8071	
	.914m/36"			.840m/33"				49	0.8387	1.0663	0.8142	1.1466	0.7965	
50	0.8681	0.9583		0.8442	1.1840	0.8406		50		*1.0570		1.1330	0.7860	
51	0.8574	0.9465		0.8357	1.1724	0.8310		51		1.0482		1.1204	0.7754	
52	0.8468	0.9348		0.8273	1.1609	0.8212		52		1.0393		1.1077	0.7648	
53	0.8364	0.9233		0.8189	1.1495	0.8113		53		1.0301		1.0949	0.7543	
54	0.8261	0.9120		0.8107	1.1382	0.8013		54		1.0206		1.0820	0.7438	
55	0.8159	0.9008		0.8025	1.1270	0.7911		55		1.0110		1.0690	0.7333	
56	0.8059	0.8898		0.7944	1.1159	0.7808		56		1.0010		1.0559	0.7228	
57	0.7959	0.8789		0.7864	1.1049	0.7705		57		0.9909		1.0428	0.7124	
58	0.7861	0.8681		0.7785	1.0940	0.7600		58		0.9807		1.0296	0.7021	
59	0.7765	0.8575		0.7707	1.0832	0.7494		59		0.9704		1.0163	0.6919	
	.840m/33"			.762m/30"				60		0.9600		1.0030	0.6817	
60	0.7832	0.8640		0.7684	1.0820	1.1441		61		0.9497		0.9898	0.6716	
61	0.7734	0.8533		0.7588	1.0689	1.1271		62		0.9392		0.9765	0.6616	
62	0.7638	0.8428		0.7488	1.0553	1.1101		63		0.9286		0.9631	0.6517	
63	0.7542	0.8323		0.7385	1.0413	1.0931		64		0.9179		0.9496	0.6418	
64	0.7448	0.8220		0.7279	1.0269	1.0761		65		0.9070		0.9360	0.6320	
65	0.7355	0.8118		0.7169	1.0120	1.0590		66		0.8962		0.9223	0.6224	
66	0.7263	0.8017		0.7045	0.9950	1.0418		67		0.8852		0.9086	0.6128	
67	0.7172	0.7917		0.6924	0.9786	1.0247		68		0.8740		0.8948	0.6032	
68	0.7082	0.7818		0.6806	0.9627	1.0077		69		0.8626		0.8809	0.5936	
69	0.6994	0.7721		0.6691	0.9473	0.9907		70		0.8510		0.8670	0.5841	
	.762m/30"			.762m/30"				71		0.8393		0.8531	0.5746	
70	0.7042	0.7776	0.9877	0.6580	0.9324	0.9739		72		0.8275		0.8392	0.5651	
71	0.6950	0.7522	0.9754	0.6477	0.9187	0.9571		73		0.8154		0.8252	0.5557	
72	0.6860	0.7351	0.9631	0.6374	0.9051	0.9405		74		0.8033		0.8111	0.5463	
73	0.6771	0.7258	0.9509	0.6272	0.8916	0.9240		75		0.7910		0.7970	0.5369	
74	0.6684	0.7240	0.9388	0.6169	0.8781	0.9076		76		0.7788		0.7831		
75			0.9267	0.6066	0.8647	0.8914		77		0.7664		0.7690		
76			0.9150	0.5965	0.8515	0.8753		78		0.7538		0.7548		
77			0.9032	0.5863	0.8383	0.8594		79		0.7410		0.7404		
78			0.8914	0.5761	0.8251	0.8437		80		0.7280		0.7260		
79			0.8795	0.5658	0.8120	0.8280		81		0.7150		0.7117		
80			0.8675	0.5555	0.7988	0.8126		82		0.7017		0.6972		
81			0.8550	0.5454	0.7858			83		0.6883		0.6826		
82			0.8428	0.5351	0.7728			84		0.6747		0.6678		
83			0.8307	0.5248	0.7597			85		0.6610		0.6530		
84			0.8189	0.5143	0.7466			86		0.6472		0.6381		
85			0.8072	0.5038	0.7334			87		0.6332		0.6231		
86			0.7957	0.4932	0.7202			88		0.6192		0.6081		
87			0.7844	0.4826	0.7069			89		0.6051		0.5930		
88			0.7734	0.4719	0.6937			90		0.5910		0.5780		
89			0.7624	0.4612	0.6804									
90			0.7517	0.4505	0.6672									

MEN'S FIELD EVENT AGE-FACTORS

WOMEN'S FIELD EVENT AGE-FACTORS

AGE	HIGH JUMP	POLE VAULT	LONG JUMP	TRIPLE JUMP	SP 16 ♀	DT 2 KG	HT 16 ♀	JT 800 G
OC	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
30	1.0210	1.0250	1.0210	1.0220	1.0120	1.0010	1.0120	1.0600
31	1.0296	1.0343	1.0305	1.0317	1.0224	1.0114	1.0224	1.0740
32	1.0384	1.0439	1.0404	1.0418	1.0330	1.0219	1.0330	1.0880
33	1.0474	1.0539	1.0506	1.0522	1.0438	1.0324	1.0438	1.1020
34	1.0566	1.0642	1.0611	1.0629	1.0548	1.0432	1.0548	1.1160
35	1.0660	1.0750	1.0720	1.0740	1.0660	1.0540	1.0660	1.1300
36	1.0755	1.0863	1.0833	1.0855	1.0773	1.0642	1.0773	1.1440
37	1.0853	1.0979	1.0950	1.0974	1.0889	1.0748	1.0889	1.1580
38	1.0953	1.1099	1.1070	1.1096	1.1007	1.0860	1.1007	1.1720
39	1.1055	1.1222	1.1193	1.1221	1.1127	1.0977	1.1127	1.1860
40	1.1160	1.1350	1.1320	1.1350	1.1250	1.1100	1.1250	1.2000
41	1.1267	1.1483	1.1451	1.1483	1.1375	1.1228	1.1375	1.2118
42	1.1376	1.1619	1.1586	1.1619	1.1502	1.1362	1.1502	1.2247
43	1.1488	1.1759	1.1724	1.1759	1.1632	1.1502	1.1632	1.2387
44	1.1603	1.1902	1.1865	1.1902	1.1765	1.1648	1.1765	1.2538
45	1.1720	1.2050	1.2010	1.2050	1.1900	1.1800	1.1900	1.2700
46	1.1841	1.2203	1.2159	1.2202	1.2038	1.1959	1.2038	1.2852
47	1.1964	1.2359	1.2311	1.2358	1.2178	1.2124	1.2178	1.3026
48	1.2090	1.2519	1.2467	1.2518	1.2321	1.2296	1.2321	1.3225
49	1.2219	1.2682	1.2626	1.2682	1.2468	1.2476	1.2468	1.3450
50	1.2350	1.2850	1.2790	1.2850	1.1450	1.1250	1.1900	1.3700
51	1.2485	1.3023	1.2959	1.3025	1.1596	1.1396	1.2056	1.3978
52	1.2622	1.3199	1.3131	1.3204	1.1744	1.1544	1.2214	1.4285
53	1.2762	1.3379	1.3307	1.3386	1.1894	1.1694	1.2374	1.4624
54	1.2905	1.3562	1.3486	1.3571	1.2046	1.1846	1.2536	1.4994
55	1.3050	1.3750	1.3670	1.3760	1.2200	1.2000	1.2700	1.5400
56	1.3199	1.3943	1.3858	1.3951	1.2356	1.2156	1.2866	1.5843
57	1.3350	1.4139	1.4050	1.4147	1.2514	1.2314	1.3035	1.6325
58	1.3504	1.4339	1.4246	1.4346	1.2675	1.2473	1.3206	1.6849
59	1.3661	1.4542	1.4446	1.4551	1.2837	1.2635	1.3379	1.7420
60	1.3820	1.4750	1.4650	1.4760	1.2350	1.1200	1.2800	1.5200
61	1.3983	1.4959	1.4860	1.4975	1.2590	1.1399	1.3050	1.5479
62	1.4148	1.5173	1.5074	1.5194	1.2835	1.1608	1.3305	1.5768
63	1.4316	1.5393	1.5291	1.5418	1.3085	1.1828	1.3565	1.6067
64	1.4487	1.5619	1.5514	1.5647	1.3340	1.2058	1.3830	1.6378
65	1.4660	1.5850	1.5740	1.5880	1.3600	1.2300	1.4100	1.6700
66	1.4837	1.6085	1.5971	1.6118	1.3865	1.2552	1.4376	1.7025
67	1.5016	1.6328	1.6206	1.6361	1.4135	1.2818	1.4657	1.7367
68	1.5198	1.6578	1.6446	1.6609	1.4411	1.3097	1.4944	1.7726
69	1.5383	1.6835	1.6691	1.6862	1.4692	1.3391	1.5237	1.8104
70	1.5570	1.7100	1.6940	1.7120	1.3700	1.3700	1.4200	1.8500
71	1.5761	1.7372	1.7195	1.7384	1.4032	1.4038	1.4567	1.8925
72	1.5954	1.7653	1.7454	1.7653	1.4377	1.4387	1.4959	1.9367
73	1.6150	1.7942	1.7718	1.7927	1.4737	1.4747	1.5377	1.9826
74	1.6349	1.8241	1.7987	1.8206	1.5111	1.5118	1.5824	2.0303
75	1.6550	1.8550	1.8260	1.8490	1.5500	1.5500	1.6300	2.0800
76	1.6755	1.8868	1.8524	1.8765	1.5899	1.5885	1.6826	2.1324
77	1.6962	1.9197	1.8800	1.9052	1.6317	1.6287	1.7377	2.1866
78	1.7172	1.9537	1.9088	1.9352	1.6756	1.6706	1.7956	2.2425
79	1.7385	1.9888	1.9387	1.9664	1.7217	1.7144	1.8563	2.3003
80	1.7600	2.0250	1.9700	1.9990	1.7700	1.7600	1.9200	2.3600
81	1.7819	2.0625	2.0057	2.0363	1.8218	1.8078	1.9855	2.4205
82	1.8040	2.1012	2.0413	2.0735	1.8756	1.8577	2.0550	2.4836
83	1.8264	2.1411	2.0767	2.1105	1.9315	1.9096	2.1287	2.5494
84	1.8491	2.1824	2.1120	2.1474	1.9896	1.9636	2.2069	2.6182
85	1.8720	2.2250	2.1470	2.1840	2.0500	2.0200	2.2900	2.6900
86	1.8952	2.2690	2.1818	2.2204	2.1128	2.0787	2.3782	2.7650
87	1.9187	2.3145	2.2163	2.2565	2.1781	2.1400	2.4719	2.8433
88	1.9425	2.3614	2.2506	2.2924	2.2459	2.2039	2.5715	2.9251
89	1.9666	2.4099	2.2845	2.3279	2.3165	2.2705	2.6774	3.0106
90	1.9910	2.4600	2.3180	2.3630	2.3900	2.3400	2.7900	3.1000

AGE	HIGH JUMP	POLE VAULT	LONG JUMP	TRIPLE JUMP	SP 4 KG	DT 1 KG	HT 4 KG	JT 600 G
OC	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
30	1.0260	1.0310	1.0230	1.0240	1.0400	1.0010	1.0400	1.0900
31	1.0367	1.0427	1.0335	1.0347	1.0447	1.0136	1.0447	1.1112
32	1.0476	1.0549	1.0443	1.0457	1.0510	1.0262	1.0510	1.1328
33	1.0588	1.0675	1.0555	1.0571	1.0590	1.0390	1.0590	1.1548
34	1.0703	1.0805	1.0670	1.0688	1.0686	1.0520	1.0686	1.1772
35	1.0820	1.0940	1.0790	1.0810	1.0800	1.0650	1.0800	1.2000
36	1.0941	1.1081	1.0915	1.0937	1.0956	1.0776	1.0956	1.2222
37	1.1064	1.1227	1.1043	1.1067	1.1118	1.0906	1.1118	1.2453
38	1.1190	1.1377	1.1175	1.1201	1.1288	1.1040	1.1288	1.2693
39	1.1319	1.1531	1.1310	1.1338	1.1465	1.1178	1.1465	1.2942
40	1.1450	1.1690	1.1450	1.1480	1.1650	1.1320	1.1650	1.3200
41	1.1583	1.1854	1.1595	1.1626	1.1843	1.1460	1.1843	1.3468
42	1.1719	1.2024	1.1743	1.1776	1.2044	1.1608	1.2044	1.3747
43	1.1859	1.2197	1.1895	1.1930	1.2254	1.1764	1.2254	1.4037
44	1.2002	1.2376	1.2050	1.2088	1.2472	1.1928	1.2472	1.4338
45	1.2150	1.2560	1.2210	1.2250	1.2700	1.2100	1.2700	1.4650
46	1.2305	1.2750	1.2374	1.2416	1.2937	1.2286	1.2937	1.4975
47	1.2463	1.2945	1.2542	1.2588	1.3185	1.2478	1.3185	1.5312
48	1.2623	1.3145	1.2714	1.2763	1.3443	1.2678	1.3443	1.5662
49	1.2785	1.3350	1.2890	1.2944	1.3711	1.2885	1.3711	1.6026
50	1.2950	1.3560	1.3070	1.3130	1.2300	1.3100	1.2700	1.5000
51	1.3115	1.3777	1.3257	1.3326	1.2545	1.3326	1.2965	1.5319
52	1.3283	1.3998	1.3447	1.3525	1.2798	1.3558	1.3238	1.5647
53	1.3455	1.4224	1.3641	1.3727	1.3058	1.3798	1.3518	1.5987
54	1.3630	1.4455	1.3838	1.3932	1.3325	1.4045	1.3805	1.6338
55	1.3810	1.4690	1.4040	1.4140	1.3600	1.4300	1.4100	1.6700
56	1.3995	1.4931	1.4244	1.4347	1.3885	1.4565	1.4405	1.7078
57	1.4184	1.5176	1.4453	1.4559	1.4178	1.4838	1.4718	1.7467
58	1.4376	1.5426	1.4667	1.4777	1.4478	1.5118	1.5037	1.7867
59	1.4571	1.5681	1.4886	1.5001	1.4785	1.5405	1.5365	1.8277
60	1.4770	1.5940	1.5110	1.5230	1.5100	1.5700	1.5700	1.8700
61	1.4973	1.6200	1.5341	1.5469	1.5425	1.6005	1.6038	1.9138
62	1.5180	1.6467	1.5576	1.5712	1.5757	1.6318	1.6387	1.9586
63	1.5390	1.6741	1.5816	1.5960	1.6097	1.6637	1.6747	2.0046
64	1.5603	1.7022	1.6061	1.6213	1.6445	1.6965	1.7118	2.0517
65	1.5820	1.7310	1.6310	1.6470	1.6800	1.7300	1.7500	2.1000
66	1.6041	1.7603	1.6564	1.6731	1.7165	1.7645	1.7905	2.1497
67	1.6266	1.7905	1.6822	1.6997	1.7537	1.7997	1.8317	2.2006
68	1.6494	1.8217	1.7086	1.7269	1.7917	1.8357	1.8737	2.2526
69	1.6725	1.8539	1.7355	1.7547	1.8305	1.8725	1.9164	2.3057
70	1.6960	1.8870	1.7630	1.7830	1.8700	1.9100	1.9600	2.3600
71	1.7200	1.9212	1.7913	1.8121	1.9105	1.9485	2.0044	2.4157
72	1.7443	1.9565	1.8200	1.8418	1.9517	1.9877	2.0497	2.4725
73	1.7689	1.9929	1.8492	1.8720	1.9937	2.0277	2.0956	2.5305
74	1.7938	2.0304	1.8789	1.9027	2.0364	2.0685	2.1424	2.5897
75	1.8190	2.0690	1.9090	1.9340	2.0800	2.1100	2.1900	2.6500
76	1.8445	2.1087	1.9380	1.9643	2.1179	2.1525	2.2319	2.7117
77	1.8704	2.1497	1.9682	1.9959	2.1597	2.1957	2.2777	2.7745
78	1.8966	2.1920	1.9997	2.0288	2.2055	2.2397	2.3275	2.8385
79	1.9231	2.2358	2.0327	2.0632	2.2555	2.2844	2.3815	2.9037
80	1.9500	2.2810	2.0670	2.0990	2.3100	2.3300	2.4400	2.9700
81	1.9773	2.3278	2.1063	2.1398	2.3846	2.3765	2.5185	3.0312
82	2.0050	2.3762	2.1456	2.1805	2.4572	2.4237	2.5951	3.0965
83	2.0329	2.4262	2.1846	2.2212	2.5275	2.4717	2.6694	3.1663
84	2.0613	2.4777	2.2234	2.2617	2.5952	2.5204	2.7412	3.2407
85	2.0900	2.5310	2.2620	2.3020	2.6600	2.5700	2.8100	3.3200
86	2.1191	2.5860	2.3003	2.3421	2.7216	2.6204	2.875	

MEN'S LONG DISTANCE RUNNING EVENT AGE-FACTORS

AGE	5 KM	8 KM	10 KM	15 KM	10 MILE	20 KM	21097	25 KM	30 KM	42195
OC	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
35	0.9724	0.9724	0.9724	0.9724	0.9724	0.9724	0.9724	0.9724	0.9742	0.9859
36	0.9666	0.9666	0.9666	0.9666	0.9666	0.9666	0.9666	0.9666	0.9684	0.9800
37	0.9608	0.9608	0.9608	0.9608	0.9608	0.9608	0.9608	0.9608	0.9625	0.9741
38	0.9549	0.9549	0.9549	0.9549	0.9549	0.9549	0.9549	0.9549	0.9566	0.9681
39	0.9490	0.9490	0.9490	0.9490	0.9490	0.9490	0.9490	0.9490	0.9506	0.9621
40	0.9430	0.9430	0.9430	0.9430	0.9430	0.9430	0.9430	0.9430	0.9446	0.9560
41	0.9370	0.9370	0.9370	0.9370	0.9370	0.9370	0.9370	0.9370	0.9386	0.9500
42	0.9310	0.9310	0.9310	0.9310	0.9310	0.9310	0.9310	0.9310	0.9326	0.9438
43	0.9249	0.9249	0.9249	0.9249	0.9249	0.9249	0.9249	0.9249	0.9265	0.9377
44	0.9187	0.9187	0.9187	0.9187	0.9187	0.9187	0.9187	0.9187	0.9203	0.9314
45	0.9125	0.9125	0.9125	0.9125	0.9125	0.9125	0.9125	0.9125	0.9141	0.9251
46	0.9064	0.9064	0.9064	0.9064	0.9064	0.9064	0.9064	0.9064	0.9081	0.9190
47	0.9002	0.9002	0.9002	0.9002	0.9002	0.9002	0.9002	0.9002	0.9018	0.9127
48	0.8938	0.8938	0.8938	0.8938	0.8938	0.8938	0.8938	0.8938	0.8954	0.9061
49	0.8872	0.8872	0.8872	0.8872	0.8872	0.8872	0.8872	0.8872	0.8888	0.8995
50	0.8804	0.8804	0.8804	0.8804	0.8804	0.8804	0.8804	0.8804	0.8820	0.8926
51	0.8735	0.8735	0.8735	0.8735	0.8735	0.8735	0.8735	0.8735	0.8751	0.8856
52	0.8664	0.8664	0.8664	0.8664	0.8664	0.8664	0.8664	0.8664	0.8680	0.8784
53	0.8591	0.8591	0.8591	0.8591	0.8591	0.8591	0.8591	0.8591	0.8607	0.8710
54	0.8517	0.8517	0.8517	0.8517	0.8517	0.8517	0.8517	0.8517	0.8532	0.8635
55	0.8441	0.8441	0.8441	0.8441	0.8441	0.8441	0.8441	0.8441	0.8456	0.8558
56	0.8362	0.8362	0.8362	0.8362	0.8362	0.8362	0.8362	0.8362	0.8377	0.8478
57	0.8282	0.8282	0.8282	0.8282	0.8282	0.8282	0.8282	0.8282	0.8297	0.8397
58	0.8201	0.8201	0.8201	0.8201	0.8201	0.8201	0.8201	0.8201	0.8216	0.8315
59	0.8120	0.8120	0.8120	0.8120	0.8120	0.8120	0.8120	0.8120	0.8135	0.8233
60	0.8038	0.8038	0.8038	0.8038	0.8038	0.8038	0.8038	0.8038	0.8053	0.8150
61	0.7956	0.7956	0.7956	0.7956	0.7956	0.7956	0.7956	0.7956	0.7971	0.8067
62	0.7874	0.7874	0.7874	0.7874	0.7874	0.7874	0.7874	0.7874	0.7888	0.7983
63	0.7790	0.7790	0.7790	0.7790	0.7790	0.7790	0.7790	0.7790	0.7805	0.7899
64	0.7706	0.7706	0.7706	0.7706	0.7706	0.7706	0.7706	0.7706	0.7721	0.7814
65	0.7622	0.7622	0.7622	0.7622	0.7622	0.7622	0.7622	0.7622	0.7636	0.7728
66	0.7537	0.7537	0.7537	0.7537	0.7537	0.7537	0.7537	0.7537	0.7550	0.7641
67	0.7451	0.7451	0.7451	0.7451	0.7451	0.7451	0.7451	0.7451	0.7464	0.7554
68	0.7365	0.7365	0.7365	0.7365	0.7365	0.7365	0.7365	0.7365	0.7378	0.7467
69	0.7279	0.7279	0.7279	0.7279	0.7279	0.7279	0.7279	0.7279	0.7292	0.7380
70	0.7192	0.7192	0.7192	0.7192	0.7192	0.7192	0.7192	0.7192	0.7205	0.7292
71	0.7106	0.7106	0.7106	0.7106	0.7106	0.7106	0.7106	0.7106	0.7118	0.7204
72	0.7019	0.7019	0.7019	0.7019	0.7019	0.7019	0.7019	0.7019	0.7031	0.7116
73	0.6932	0.6932	0.6932	0.6932	0.6932	0.6932	0.6932	0.6932	0.6944	0.7028
74	0.6844	0.6844	0.6844	0.6844	0.6844	0.6844	0.6844	0.6844	0.6857	0.6940
75	0.6757	0.6757	0.6757	0.6757	0.6757	0.6757	0.6757	0.6757	0.6769	0.6851
76	0.6670	0.6670	0.6670	0.6670	0.6670	0.6670	0.6670	0.6670	0.6682	0.6763
77	0.6582	0.6582	0.6582	0.6582	0.6582	0.6582	0.6582	0.6582	0.6594	0.6674
78	0.6495	0.6495	0.6495	0.6495	0.6495	0.6495	0.6495	0.6495	0.6507	0.6585
79	0.6406	0.6406	0.6406	0.6406	0.6406	0.6406	0.6406	0.6406	0.6418	0.6496
80	0.6318	0.6318	0.6318	0.6318	0.6318	0.6318	0.6318	0.6318	0.6330	0.6406
81	0.6230	0.6230	0.6230	0.6230	0.6230	0.6230	0.6230	0.6230	0.6242	0.6316
82	0.6141	0.6141	0.6141	0.6141	0.6141	0.6141	0.6141	0.6141	0.6153	0.6226
83	0.6052	0.6052	0.6052	0.6052	0.6052	0.6052	0.6052	0.6052	0.6064	0.6136
84	0.5963	0.5963	0.5963	0.5963	0.5963	0.5963	0.5963	0.5963	0.5974	0.6045
85	0.5874	0.5874	0.5874	0.5874	0.5874	0.5874	0.5874	0.5874	0.5885	0.5955
86	0.5785	0.5785	0.5785	0.5785	0.5785	0.5785	0.5785	0.5785	0.5795	0.5865
87	0.5695	0.5695	0.5695	0.5695	0.5695	0.5695	0.5695	0.5695	0.5706	0.5774
88	0.5606	0.5606	0.5606	0.5606	0.5606	0.5606	0.5606	0.5606	0.5616	0.5684
89	0.5516	0.5516	0.5516	0.5516	0.5516	0.5516	0.5516	0.5516	0.5527	0.5593
90	0.5427	0.5427	0.5427	0.5427	0.5427	0.5427	0.5427	0.5427	0.5437	0.5503

WOMEN'S LONG DISTANCE RUNNING EVENT AGE-FACTORS

AGE	5 KM	8 KM	10 KM	15 KM	10 MILE	20 KM	21097	25 KM	30 KM	42195
OC	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
35	0.9696	0.9696	0.9696	0.9696	0.9696	0.9696	0.9696	0.9696	0.9716	0.9845
36	0.9633	0.9633	0.9633	0.9633	0.9633	0.9633	0.9633	0.9633	0.9652	0.9780
37	0.9568	0.9568	0.9568	0.9568	0.9568	0.9568	0.9568	0.9568	0.9587	0.9715
38	0.9504	0.9504	0.9504	0.9504	0.9504	0.9504	0.9504	0.9504	0.9522	0.9649
39	0.9439	0.9439	0.9439	0.9439	0.9439	0.9439	0.9439	0.9439	0.9457	0.9583
40	0.9373	0.9373	0.9373	0.9373	0.9373	0.9373	0.9373	0.9373	0.9391	0.9516
41	0.9307	0.9307	0.9307	0.9307	0.9307	0.9307	0.9307	0.9307	0.9325	0.9450
42	0.9241	0.9241	0.9241	0.9241	0.9241	0.9241	0.9241	0.9241	0.9259	0.9382
43	0.9174	0.9174	0.9174	0.9174	0.9174	0.9174	0.9174	0.9174	0.9192	0.9314
44	0.9106	0.9106	0.9106	0.9106	0.9106	0.9106	0.9106	0.9106	0.9124	0.9245
45	0.9037	0.9037	0.9037	0.9037	0.9037	0.9037	0.9037	0.9037	0.9055	0.9176
46	0.8970	0.8970	0.8970	0.8970	0.8970	0.8970	0.8970	0.8970	0.8989	0.9109
47	0.8902	0.8902	0.8902	0.8902	0.8902	0.8902	0.8902	0.8902	0.8920	0.9039
48	0.8831	0.8831	0.8831	0.8831	0.8831	0.8831	0.8831	0.8831	0.8849	0.8968
49	0.8759	0.8759	0.8759	0.8759	0.8759	0.8759	0.8759	0.8759	0.8777	0.8894
50	0.8684	0.8684	0.8684	0.8684	0.8684	0.8684	0.8684	0.8684	0.8702	0.8819
51	0.8608	0.8608	0.8608	0.8608	0.8608	0.8608	0.8608	0.8608	0.8626	0.8742
52	0.8530	0.8530	0.8530	0.8530	0.8530	0.8530	0.8530	0.8530	0.8548	0.8663
53	0.8450	0.8450	0.8450	0.8450	0.8450	0.8450	0.8450	0.8450	0.8468	0.8582
54	0.8369	0.8369	0.8369	0.8369	0.8369	0.8369	0.8369	0.8369	0.8386	0.8499
55	0.8285	0.8285	0.8285	0.8285	0.8285	0.8285	0.8285	0.8285	0.8302	0.8414
56	0.8198	0.8198	0.8198	0.8198	0.8198	0.8198	0.8198	0.8198	0.8215	0.8326
57	0.8110	0.8110	0.8110	0.8110	0.8110	0.8110	0.8110	0.8110	0.8126	0.8237
58	0.8021	0.8021	0.8021	0.8021	0.8021	0.8021	0.8021	0.8021	0.8038	0.8147
59	0.7932	0.7932	0.7932	0.7932	0.7932	0.7932	0.7932	0.7932	0.7948	0.8056
60	0.7842	0.7842	0.7842	0.7842	0.7842	0.7842	0.7842	0.7842	0.7858	0.7965
61	0.7752	0.7752	0.7752	0.7752	0.7752	0.7752	0.7752	0.7752	0.7768	0.7874
62	0.7661	0.7661	0.7661	0.7661	0.7661	0.7661	0.7661	0.7661	0.7677	0.7782
63	0.7569	0.7569	0.7569	0.7569	0.7569	0.7569	0.7569	0.7569	0.7586	0.7689
64	0.7477	0.7477	0.7477	0.7477	0.7477	0.7477	0.7477	0.7477	0.7493	0.7595
65	0.7384	0.7384	0.7384	0.7384	0.7384	0.7384	0.7384	0.7384	0.7400	0.7501
66	0.7290	0.7290	0.7290	0.7290	0.7290	0.7290	0.7290	0.7290	0.7306	0.7406
67	0.7196	0.7196	0.7196	0.7196	0.7196	0.7196	0.7196	0.7196	0.7211	0.7310
68	0.7101	0.7101	0.7101	0.7101	0.7101	0.7101	0.7101	0.7101	0.7116	0.7214
69	0.7006	0.7006	0.7006	0.7006	0.7006	0.7006	0.7006	0.7006	0.7020	0.7118
70	0.6911	0.6911	0.6911	0.6911	0.6911	0.6911	0.6911	0.6911	0.6925	0.7021
71	0.6816	0.6816	0.6816	0.6816	0.6816	0.6816	0.6816	0.6816	0.6830	0.6925
72	0.6721	0.6721	0.6721	0.6721	0.6721	0.6721	0.6721	0.6721	0.6734	0.6828
73	0.6625	0.6625	0.6625	0.6625	0.6625	0.6625	0.6625	0.6625	0.6638	0.6731
74	0.6529	0.6529	0.6529	0.6529	0.6529	0.6529	0.6529	0.6529	0.6542	0.6634
75	0.6433	0.6433	0.6433	0.6433	0.6433	0.6433	0.6433	0.6433	0.6446	0.6536
76	0.6337	0.6337	0.6337	0.6337	0.6337	0.6337	0.6337	0.6337	0.6350	0.6439
77	0.6241	0.6241	0.6241	0.6241	0.6241	0.6241	0.6241	0.6241	0.6254	0.6342
78	0.6144	0.6144	0.6144	0.6144	0.6144	0.6144	0.6144	0.6144	0.6158	0.6244
79	0.6047	0.6047	0.6047	0.6047	0.6047	0.6047	0.6047	0.6047	0.6060	0.6146
80	0.5950	0.5950	0.5950	0.5950	0.5950	0.5950	0.5950	0.5950	0.5963	0.6047
81	0.5853	0.5853	0.5853	0.5853	0.5853	0.5853	0.5853	0.5853	0.5866	0.5948
82	0.5755	0.5755	0.5755	0.5755	0.5755	0.5755	0.5755	0.5755	0.5768	0.5849
83	0.5657	0.5657	0.5657	0.5657	0.5657	0.5657	0.5657	0.5657	0.5670	0.5749
84	0.5559	0.5559	0.5559	0.5559	0.5559	0.5559	0.5559	0.5559	0.5571	0.5650
85	0.5461	0.5461	0.5461	0.5461	0.5461	0.5461	0.5461	0.5461	0.5473	0.5550
86	0.5363	0.5363	0.5363	0.5363	0.5363	0.5363	0.5363	0.5363	0.5374	0.5450
87	0.5264	0.5264	0.5264	0.5264	0.5264	0.5264	0.5264	0.5264	0.5276	0.5351
88	0.5166	0.5166	0.5166	0.5166	0.5166	0.5166	0.5166	0.5166	0.5178	0.5251
89	0.5068	0.5068	0.5068	0.5068	0.5068	0.5068	0.5068	0.5068	0.5079	0.5152
90	0.4970	0.4970	0.4970	0.4970	0.4970	0.4970	0.4970	0.4970	0.4981	0.5053

MEN'S RACE WALKING EVENT AGE-FACTORS

AGE	1500 M	1 MILE	3 KM	2 MILE	5 KM	8 KM	10 KM	15 KM	20 KM	30 KM	40 KM	50 KM
OC	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
30	0.9958	0.9958	0.9958	0.9958	0.9979	0.9979	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
31	0.9900	0.9900	0.9900	0.9900	0.9930	0.9930	0.9961	0.9961	0.9961	0.9961	0.9961	0.9961
32	0.9843	0.9843	0.9843	0.9843	0.9881	0.9881	0.9920	0.9920	0.9920	0.9920	0.9920	0.9920
33	0.9787	0.9787	0.9787	0.9787	0.9832	0.9832	0.9878	0.9878	0.9878	0.9878	0.9878	0.9878
34	0.9733	0.9733	0.9733	0.9733	0.9784	0.9784	0.9834	0.9834	0.9834	0.9834	0.9834	0.9834
35	0.9681	0.9681	0.9681	0.9681	0.9735	0.9735	0.9789	0.9789	0.9789	0.9789	0.9789	0.9789
36	0.9635	0.9635	0.9635	0.9635	0.9688	0.9688	0.9742	0.9742	0.9742	0.9742	0.9742	0.9742
37	0.9587	0.9587	0.9587	0.9587	0.9640	0.9640	0.9694	0.9694	0.9694	0.9694	0.9694	0.9694
38	0.9539	0.9539	0.9539	0.9539	0.9592	0.9592	0.9645	0.9645	0.9645	0.9645	0.9645	0.9645
39	0.9490	0.9490	0.9490	0.9490	0.9542	0.9542	0.9596	0.9596	0.9596	0.9596	0.9596	0.9596
40	0.9440	0.9440	0.9440	0.9440	0.9492	0.9492	0.9545	0.9545	0.9545	0.9545	0.9545	0.9545
41	0.9389	0.9389	0.9389	0.9389	0.9441	0.9441	0.9494	0.9494	0.9494	0.9494	0.9494	0.9494
42	0.9338	0.9338	0.9338	0.9338	0.9389	0.9389	0.9441	0.9441	0.9441	0.9441	0.9441	0.9441
43	0.9285	0.9285	0.9285	0.9285	0.9337	0.9337	0.9388	0.9388	0.9388	0.9388	0.9388	0.9388
44	0.9231	0.9231	0.9231	0.9231	0.9283	0.9283	0.9334	0.9334	0.9334	0.9334	0.9334	0.9334
45	0.9177	0.9177	0.9177	0.9177	0.9228	0.9228	0.9279	0.9279	0.9279	0.9279	0.9279	0.9279
46	0.9122	0.9122	0.9122	0.9122	0.9172	0.9172	0.9223	0.9223	0.9223	0.9223	0.9223	0.9223
47	0.9066	0.9066	0.9066	0.9066	0.9116	0.9116	0.9167	0.9167	0.9167	0.9167	0.9167	0.9167
48	0.9009	0.9009	0.9009	0.9009	0.9058	0.9058	0.9109	0.9109	0.9109	0.9109	0.9109	0.9109
49	0.8951	0.8951	0.8951	0.8951	0.9000	0.9000	0.9050	0.9050	0.9050	0.9050	0.9050	0.9050
50	0.8892	0.8892	0.8892	0.8892	0.8941	0.8941	0.8991	0.8991	0.8991	0.8991	0.8991	0.8991
51	0.8832	0.8832	0.8832	0.8832	0.8881	0.8881	0.8931	0.8931	0.8931	0.8931	0.8931	0.8931
52	0.8772	0.8772	0.8772	0.8772	0.8821	0.8821	0.8870	0.8870	0.8870	0.8870	0.8870	0.8870
53	0.8710	0.8710	0.8710	0.8710	0.8759	0.8759	0.8808	0.8808	0.8808	0.8808	0.8808	0.8808
54	0.8648	0.8648	0.8648	0.8648	0.8696	0.8696	0.8745	0.8745	0.8745	0.8745	0.8745	0.8745
55	0.8585	0.8585	0.8585	0.8585	0.8633	0.8633	0.8681	0.8681	0.8681	0.8681	0.8681	0.8681
56	0.8521	0.8521	0.8521	0.8521	0.8569	0.8569	0.8617	0.8617	0.8617	0.8617	0.8617	0.8617
57	0.8457	0.8457	0.8457	0.8457	0.8504	0.8504	0.8551	0.8551	0.8551	0.8551	0.8551	0.8551
58	0.8391	0.8391	0.8391	0.8391	0.8438	0.8438	0.8485	0.8485	0.8485	0.8485	0.8485	0.8485
59	0.8324	0.8324	0.8324	0.8324	0.8371	0.8371	0.8417	0.8417	0.8417	0.8417	0.8417	0.8417
60	0.8257	0.8257	0.8257	0.8257	0.8303	0.8303	0.8349	0.8349	0.8349	0.8349	0.8349	0.8349
61	0.8189	0.8189	0.8189	0.8189	0.8235	0.8235	0.8280	0.8280	0.8280	0.8280	0.8280	0.8280
62	0.8121	0.8121	0.8121	0.8121	0.8165	0.8165	0.8210	0.8210	0.8210	0.8210	0.8210	0.8210
63	0.8051	0.8051	0.8051	0.8051	0.8095	0.8095	0.8139	0.8139	0.8139	0.8139	0.8139	0.8139
64	0.7980	0.7980	0.7980	0.7980	0.8023	0.8023	0.8068	0.8068	0.8068	0.8068	0.8068	0.8068
65	0.7908	0.7908	0.7908	0.7908	0.7951	0.7951	0.7995	0.7995	0.7995	0.7995	0.7995	0.7995
66	0.7835	0.7835	0.7835	0.7835	0.7878	0.7878	0.7922	0.7922	0.7922	0.7922	0.7922	0.7922
67	0.7762	0.7762	0.7762	0.7762	0.7804	0.7804	0.7848	0.7848	0.7848	0.7848	0.7848	0.7848
68	0.7687	0.7687	0.7687	0.7687	0.7730	0.7730	0.7772	0.7772	0.7772	0.7772	0.7772	0.7772
69	0.7611	0.7611	0.7611	0.7611	0.7654	0.7654	0.7696	0.7696	0.7696	0.7696	0.7696	0.7696
70	0.7535	0.7535	0.7535	0.7535	0.7577	0.7577	0.7619	0.7619	0.7619	0.7619	0.7619	0.7619
71	0.7459	0.7459	0.7459	0.7459	0.7500	0.7500	0.7541	0.7541	0.7541	0.7541	0.7541	0.7541
72	0.7381	0.7381	0.7381	0.7381	0.7422	0.7422	0.7463	0.7463	0.7463	0.7463	0.7463	0.7463
73	0.7302	0.7302	0.7302	0.7302	0.7342	0.7342	0.7383	0.7383	0.7383	0.7383	0.7383	0.7383
74	0.7223	0.7223	0.7223	0.7223	0.7262	0.7262	0.7303	0.7303	0.7303	0.7303	0.7303	0.7303
75	0.7142	0.7142	0.7142	0.7142	0.7181	0.7181	0.7221	0.7221	0.7221	0.7221	0.7221	0.7221
76	0.7061	0.7061	0.7061	0.7061	0.7099	0.7099	0.7139	0.7139	0.7139	0.7139	0.7139	0.7139
77	0.6979	0.6979	0.6979	0.6979	0.7017	0.7017	0.7056	0.7056	0.7056	0.7056	0.7056	0.7056
78	0.6895	0.6895	0.6895	0.6895	0.6933	0.6933	0.6972	0.6972	0.6972	0.6972	0.6972	0.6972
79	0.6811	0.6811	0.6811	0.6811	0.6849	0.6849	0.6887	0.6887	0.6887	0.6887	0.6887	0.6887
80	0.6726	0.6726	0.6726	0.6726	0.6763	0.6763	0.6801	0.6801	0.6801	0.6801	0.6801	0.6801
81	0.6641	0.6641	0.6641	0.6641	0.6677	0.6677	0.6715	0.6715	0.6715	0.6715	0.6715	0.6715
82	0.6554	0.6554	0.6554	0.6554	0.6591	0.6591	0.6627	0.6627	0.6627	0.6627	0.6627	0.6627
83	0.6467	0.6467	0.6467	0.6467	0.6503	0.6503	0.6539	0.6539	0.6539	0.6539	0.6539	0.6539
84	0.6378	0.6378	0.6378	0.6378	0.6414	0.6414	0.6449	0.6449	0.6449	0.6449	0.6449	0.6449
85	0.6289	0.6289	0.6289	0.6289	0.6324	0.6324	0.6359	0.6359	0.6359	0.6359	0.6359	0.6359
86	0.6199	0.6199	0.6199	0.6199	0.6233	0.6233	0.6268	0.6268	0.6268	0.6268	0.6268	0.6268
87	0.6108	0.6108	0.6108	0.6108	0.6141	0.6141	0.6176	0.6176	0.6176	0.6176	0.6176	0.6176
88	0.6016	0.6016	0.6016	0.6016	0.6049	0.6049	0.6083	0.6083	0.6083	0.6083	0.6083	0.6083
89	0.5923	0.5923	0.5923	0.5923	0.5956	0.5956	0.5989	0.5989	0.5989	0.5989	0.5989	0.5989
90	0.5830	0.5830	0.5830	0.5830	0.5862	0.5862	0.5895	0.5895	0.5895	0.5895	0.5895	0.5895

WOMEN'S RACE WALKING EVENT AGE-FACTORS

AGE	1500 M	1 MILE	3 KM	2 MILE	5 KM	8 KM	10 KM	15 KM	20 KM	30 KM	40 KM	50 KM
OC	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
30	0.9954	0.9954	0.9954	0.9954	0.9977	0.9977	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
31	0.9890	0.9890	0.9890	0.9890	0.9923	0.9923	0.9957	0.9957	0.9957	0.9957	0.9957	0.9957
32	0.9827	0.9827	0.9827	0.9827	0.9869	0.9869	0.9912	0.9912	0.9912	0.9912	0.9912	0.9912
33	0.9766	0.9766	0.9766	0.9766	0.9815	0.9815	0.9865	0.9865	0.9865	0.9865	0.9865	0.9865
34	0.9707	0.9707	0.9707	0.9707	0.9762	0.9762	0.9817	0.9817	0.9817	0.9817	0.9817	0.9817
35	0.9649	0.9649	0.9649	0.9649	0.9708	0.9708	0.9768	0.9768	0.9768	0.9768	0.9768	0.9768
36	0.9598	0.9598	0.9598	0.9598	0.9657	0.9657	0.9717	0.9717	0.9717	0.9717	0.9717	0.9717
37	0.9546	0.9546	0.9546	0.9546	0.9605	0.9605	0.9664	0.9664	0.9664	0.9664	0.9664	0.9664
38	0.9493	0.9493	0.9493	0.9493	0.9552	0.9552	0.9610	0.9610	0.9610	0.9610	0.9610	0.9610
39	0.9439	0.9439	0.9439	0.9439	0.9497	0.9497	0.9556	0.9556	0.9556	0.9556	0.9556	0.9556
40	0.9384	0.9384	0.9384	0.9384	0.9442	0.9442	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
41	0.9328	0.9328	0.9328	0.9328	0.9386	0.9386	0.9443	0.9443	0.9443	0.9443	0.9443	0.9443
42	0.9272	0.9272	0.9272	0.9272	0.9329	0.9329	0.9386	0.9386	0.9386	0.9386	0.9386	0.9386
43	0.9214	0.9214	0.9214	0.9214	0.9271	0.9271	0.9327	0.9327	0.9327	0.9327	0.9327	0.9327
44	0.9155	0.9155	0.9155	0.9155	0.9211	0.9211	0.9268	0.9268	0.9268	0.9268	0.9268	0.9268
45	0.9095	0.9095	0.9095	0.9095	0.9151	0.9151	0.9207	0.9207	0.9207	0.9207	0.9207	0.9207
46	0.9034	0.9034	0.9034	0.9034	0.9090	0.9090	0.9146	0.9146	0.9146	0.9146	0.9146	0.9146
47	0.8973	0.8973	0.8973	0.8973	0.9028	0.9028	0.9083	0.9083	0.9083	0.9083	0.9083	0.9083
48	0.8910	0.8910	0.8910	0.8910	0.8964	0.8964	0.9020	0.9020	0.9020	0.9020	0.9020	0.9020
49	0.8846	0.8846	0.8846	0.8846	0.8900	0.8900	0.8955	0.8955	0.8955	0.8955	0.8955	0.8955
50	0.8781	0.8781	0.8781	0.8781	0.8835	0.8835	0.8890	0.8890	0.8890	0.8890	0.8890	0.8890
51	0.8715	0.8715	0.8715	0.8715	0.8769	0.8769	0.8824	0.8824	0.8824	0.8824	0.8824	0.8824
52	0.8649	0.8649	0.8649	0.8649	0.8703	0.8703	0.8757	0.8757	0.8757	0.8757	0.8757	0.8757
53	0.8581	0.8581	0.8581	0.8581	0.8635	0.8635	0.8689	0.8689	0.8689	0.8689	0.8689	0.8689
54	0.8512	0.8512	0.8512	0.8512	0.8566	0.8566	0.8619	0.8619	0.8619	0.8619	0.8619	0.8619
55	0.8443	0.8443	0.8443	0.8443	0.8496	0.8496	0.8549	0.8549	0.8549	0.8549	0.8549	0.8549
56	0.8373	0.8373	0.8373	0.8373	0.8425	0.8425	0.8478	0.8478	0.8478	0.8478	0.8478	0.8478
57	0.8302	0.8302	0.8302	0.8302	0.8354	0.8354	0.8406	0.8406	0.8406	0.8406	0.8406	0.8406
58	0.8230	0.8230	0.8230	0.8230	0.8281	0.8281	0.8333	0.8333	0.8333	0.8333	0.8333	0.8333
59	0.8157	0.8157	0.8157	0.8157	0.8208	0.8208	0.8259	0.8259	0.8259	0.8259	0.8259	0.8259
60	0.8083	0.8083	0.8083	0.8083	0.8133	0.8133	0.8184	0.8184	0.8184	0.8184	0.8184	0.8184
61	0.8009	0.8009	0.8009	0.8009	0.8058	0.8058	0.8108	0.8108	0.8108	0.8108	0.8108	0.8108
62	0.7933	0.7933	0.7933	0.7933	0.7982	0.7982	0.8032	0.8032	0.8032	0.8032	0.8032	0.8032
63	0.7856	0.7856	0.7856	0.7856	0.7905	0.7905	0.7954	0.7954	0.7954	0.7954	0.7954	0.7954
64	0.7778	0.7778	0.7778	0.7778	0.7827	0.7827	0.7875	0.7875	0.7875	0.7875	0.7875	0.7875
65	0.7699	0.7699	0.7699	0.7699	0.7747	0.7747	0.7795	0.7795	0.7795	0.7795	0.7795	0.7795
66	0.7619	0.7619	0.7619	0.7619	0.7666	0.7666	0.7714	0.7714	0.7714	0.7714	0.7714	0.7714
67	0.7538	0.7538	0.7538	0.7538	0.7585	0.7585	0.7633	0.7633	0.7633	0.7633	0.7633	0.7633
68	0.7455	0.7455	0.7455	0.7455	0.7502	0.7502	0.7550	0.7550	0.7550	0.7550	0.7550	0.7550
69	0.7372	0.7372	0.7372	0.7372	0.7419	0.7419	0.7466	0.7466	0.7466	0.7466	0.7466	0.7466
70	0.7288	0.7288	0.7288	0.7288	0.7334	0.7334	0.7381	0.7381	0.7381	0.7381	0.7381	0.7381
71	0.7204	0.7204	0.7204	0.7204	0.7249	0.7249	0.7296	0.7296	0.7296	0.7296	0.7296	0.7296
72	0.7119	0.7119	0.7119	0.7119	0.7163	0.7163	0.7209	0.7209	0.7209	0.7209	0.7209	0.7209
73	0.7032	0.7032	0.7032	0.7032	0.7076	0.7076	0.7122	0.7122	0.7122	0.7122	0.7122	0.7122
74	0.6945	0.6945	0.6945	0.6945	0.6988	0.6988	0.7033	0.7033	0.7033	0.7033	0.7033	0.7033
75	0.6856	0.6856	0.6856	0.6856	0.6899	0.6899	0.6943	0.6943	0.6943	0.6943	0.6943	0.6943
76	0.6767	0.6767	0.6767	0.6767	0.6810	0.6810	0.6853	0.6853	0.6853	0.6853	0.6853	0.6853
77	0.6677	0.6677	0.6677	0.6677	0.6719	0.6719	0.6762	0.6762	0.6762	0.6762	0.6762	0.6762
78	0.6585	0.6585	0.6585	0.6585	0.6627	0.6627	0.6669	0.6669	0.6669	0.6669	0.6669	0.6669
79	0.6493	0.6493	0.6493	0.6493	0.6534	0.6534	0.6576	0.6576	0.6576	0.6576	0.6576	0.6576
80	0.6399	0.6399	0.6399	0.6399	0.6440	0.6440	0.6481	0.6481	0.6481	0.6481	0.6481	0.6481
81	0.6305	0.6305	0.6305	0.6305	0.6346	0.6346	0.6386	0.6386	0.6386	0.6386	0.6386	0.6386
82	0.6210	0.6210	0.6210	0.6210	0.6250	0.6250	0.6290	0.6290	0.6290	0.6290	0.6290	0.6290
83	0.6114	0.6114	0.6114	0.6114	0.6153	0.6153	0.6193	0.6193	0.6193	0.6193	0.6193	0.6193
84	0.6017	0.6017	0.6017	0.6017	0.6055	0.6055	0.6095	0.6095	0.6095	0.6095	0.6095	0.6095
85	0.5918	0.5918	0.5918	0.5918	0.5956	0.5956	0.5995	0.5995	0.5995	0.5995	0.5995	0.5995
86	0.5819	0.5819	0.5819	0.5819	0.5856	0.5856	0.5895	0.5895	0.5895	0.5895	0.5895	0.5895
87	0.5718	0.5718	0.5718	0.5718	0.5755	0.5755	0.5793	0.5793	0.5793	0.5793	0.5793	0.5793
88	0.5617	0.5617	0.5617	0.5617	0.5654	0.5654	0.5691	0.5691	0.5691	0.5691	0.5691	0.5691
89	0.5515	0.5515	0.5515	0.5515	0.5552	0.5552	0.5588	0.5588	0.5588	0.5588	0.5588	0.5588
90	0.5413	0.5413	0.5413	0.5413	0.5449	0.5449	0.5485	0.5485	0.5485	0.5485	0.5485	0.5485

TRACK AGE FACTORS - 1989

	100	200	400	800	1500	MILE	3000	5000
OC	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
M30	.9850	.9839	.9829	.9850	.9894	.9900	.9950	1.0000
M35	.9645	.9577	.9509	.9575	.9619	.9625	.9691	.9724
M40	.9435	.9307	.9179	.9285	.9327	.9333	.9397	.9430
M45	.9217	.9028	.8839	.8985	.9026	.9031	.9093	.9125
M50	.8987	.8738	.8489	.8670	.8709	.8714	.8774	.8804
M55	.8740	.8434	.8128	.8312	.8350	.8355	.8412	.8441
M60	.8470	.8113	.7756	.7915	.7951	.7956	.8011	.8038
M65	.8170	.7771	.7372	.7505	.7539	.7544	.7596	.7622
M70	.7832	.7403	.6975	.7083	.7115	.7119	.7168	.7192
M75	.7449	.7006	.6564	.6655	.6684	.6688	.6734	.6757
M80	.7015	.6576	.6138	.6222	.6250	.6254	.6297	.6318
M85	.6525	.6110	.5696	.5785	.5811	.5814	.5854	.5874
M90	.5975	.5611	.5247	.5345	.5369	.5372	.5409	.5427
WOC	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
W30	.9835	.9823	.9812	.9835	.9883	.9890	.9945	1.0000
W35	.9610	.9535	.9460	.9532	.9581	.9587	.9660	.9696
W40	.9379	.9238	.9097	.9213	.9260	.9266	.9337	.9373
W45	.9139	.8931	.8723	.8883	.8929	.8934	.9002	.9037
W50	.8889	.8612	.8338	.8537	.8580	.8585	.8651	.8684
W55	.8614	.8277	.7941	.8143	.8185	.8190	.8253	.8285
W60	.8317	.7924	.7532	.7706	.7746	.7752	.7812	.7842
W65	.7987	.7548	.7109	.7255	.7293	.7298	.7355	.7384
W70	.7615	.7143	.6672	.6791	.6826	.6831	.6885	.6911
W75	.7194	.6707	.6220	.6320	.6352	.6357	.6407	.6433
W80	.6717	.6234	.5752	.5844	.5875	.5879	.5927	.5950
W85	.6177	.5721	.5260	.5363	.5392	.5395	.5439	.5461
W90	.5572	.5172	.4772	.4879	.4906	.4909	.4950	.4970

HURDLES AND STEEPLECHASE AGE FACTORS - 1989

	110H	100H	80H	400H	300H	3000SC	2000SC
OC	1.067m/42"			.914m/36"			
	1.0000			1.0000	1.399	1.0000	
M30	.991m/39"			.9812	1.374	.9841	
M35	.9923			.9464	1.326	.9577	
M40	.9714			.9098	1.275	.9256	
M45	.9401			.8696	1.219	.8863	
M50	.9002						
M50	.914m/36"			.840m/33"			
M55	.8681	.9583		.8442	1.184	.8406	
M55	.8159	.9008		.8025	1.127	.7911	
M60	.840m/33"			.762m/30"			
M60	.7832	.8640		.7684	1.082		1.1441
M65	.7355	.8118		.7169	1.012		1.0590
M70		.762m/30"					
M70	.7042	.7776	.9877	.6580	.9324		.9739
M75			.9267	.6066	.8647		.8914
M80			.8675	.5555	.7988		.8126
M85			.8072	.5038	.7334		
M90			.7517	.4505	.6672		
WOC		100H	80H	400H	300H		
		.840m/33"		.762m/30"			
WOC		1.0000		1.0000	1.402		1.0000
W30		.9792		.9738	1.373		.9939
W35		.9496		.9358	1.318		.9471
W40		.762m/30"					
W40		.9169	1.160	.8957	1.258		.8926
W45		.8725	1.104	.8517	1.204		.8386
W50			1.057		1.133		.7860
W55			1.011		1.069		.7333
W60			.960		1.003		.6817
W65			.907		.936		.6320
W70			.851		.867		.5841
W75			.791		.797		.5369
W80			.728		.726		
W85			.661		.653		
W90			.591		.578		

MEN'S TRACK RUNNING EVENT STANDARDS

WOMEN'S TRACK RUNNING EVENT STANDARDS

MEN'S TRACK RUNNING EVENT STANDARDS									WOMEN'S TRACK RUNNING EVENT STANDARDS								
AGE	100 M	200 M	400 M	800 M	1500 M	1 MILE	3000 M	5000 M	AGE	100 M	200 M	400 M	800 M	1500 M	1 MILE	3000 M	5000 M
OC	9.85	19.62	43.29	1:41.73	3:29.46	3:46.09	7:32.0	12:57.0	OC	10.78	21.58	47.83	1:52.92	3:52.50	4:10.96	8:21.7	14:22.
30	10.00	19.94	44.04	1:43.28	3:31.70	3:48.37	7:34.3	12:57.0	30	10.96	21.97	48.75	1:54.81	3:55.25	4:13.75	8:24.5	14:22.1
31	10.04	20.05	44.33	1:43.84	3:32.85	3:49.61	7:36.5	13:01.2	31	11.01	22.10	49.10	1:55.50	3:56.66	4:15.27	8:27.3	14:27.1
32	10.08	20.16	44.62	1:44.42	3:34.04	3:50.89	7:38.9	13:05.5	32	11.06	22.23	49.45	1:56.22	3:58.10	4:16.84	8:30.1	14:32.1
33	10.12	20.27	44.92	1:45.01	3:35.25	3:52.19	7:41.3	13:09.9	33	11.11	22.36	49.81	1:56.95	3:59.59	4:18.44	8:33.1	14:37.1
34	10.17	20.38	45.22	1:45.62	3:36.49	3:53.53	7:43.8	13:14.4	34	11.17	22.49	50.18	1:57.69	4:01.11	4:20.08	8:36.2	14:43.1
35	10.21	20.49	45.53	1:46.24	3:37.76	3:54.90	7:46.4	13:19.0	35	11.22	22.63	50.56	1:58.46	4:02.67	4:21.77	8:39.4	14:49.1
36	10.25	20.60	45.84	1:46.88	3:39.07	3:56.31	7:49.2	13:23.8	36	11.27	22.77	50.95	1:59.25	4:04.28	4:23.51	8:42.8	14:54.1
37	10.30	20.72	46.16	1:47.53	3:40.41	3:57.75	7:52.1	13:28.7	37	11.32	22.91	51.34	2:00.05	4:05.93	4:25.28	8:46.3	15:01.1
38	10.35	20.84	46.49	1:48.19	3:41.77	3:59.21	7:54.1	13:33.7	38	11.38	23.06	51.75	2:00.88	4:07.61	4:27.10	8:49.9	15:07.1
39	10.39	20.96	46.82	1:48.87	3:43.16	4:00.71	7:57.1	13:38.8	39	11.43	23.21	52.16	2:01.71	4:09.33	4:28.95	8:53.6	15:13.1
40	10.44	21.08	47.16	1:49.56	3:44.57	4:02.24	8:01.0	13:44.0	40	11.49	23.36	52.58	2:02.57	4:11.08	4:30.84	8:57.3	15:20.1
41	10.49	21.20	47.51	1:50.26	3:45.99	4:03.79	8:04.1	13:49.4	41	11.55	23.51	53.01	2:03.43	4:12.85	4:32.75	9:01.1	15:26.4
42	10.54	21.33	47.87	1:50.97	3:47.46	4:05.37	8:07.2	13:54.9	42	11.61	23.67	53.45	2:04.32	4:14.66	4:34.71	9:05.0	15:33.1
43	10.59	21.46	48.23	1:51.70	3:48.95	4:06.99	8:10.4	14:00.5	43	11.67	23.83	53.90	2:05.23	4:16.52	4:36.72	9:09.0	15:39.1
44	10.64	21.59	48.60	1:52.45	3:50.49	4:08.65	8:13.7	14:06.2	44	11.74	23.99	54.36	2:06.16	4:18.43	4:38.78	9:13.1	15:46.1
45	10.69	21.73	48.98	1:53.22	3:52.06	4:10.35	8:17.1	14:12.0	45	11.80	24.16	54.83	2:07.12	4:20.39	4:40.90	9:17.3	15:54.1
46	10.74	21.87	49.37	1:53.97	3:53.61	4:12.02	8:20.4	14:17.7	46	11.86	24.33	55.31	2:08.06	4:22.32	4:42.98	9:21.4	16:01.2
47	10.79	22.01	49.76	1:54.76	3:55.23	4:13.76	8:23.9	14:23.6	47	11.93	24.51	55.80	2:09.04	4:24.34	4:45.17	9:25.7	16:08.7
48	10.85	22.15	50.16	1:55.59	3:56.91	4:15.58	8:27.5	14:29.8	48	11.99	24.69	56.31	2:10.07	4:26.46	4:47.45	9:30.2	16:16.5
49	10.90	22.30	50.58	1:56.44	3:58.67	4:17.48	8:31.3	14:36.3	49	12.06	24.87	56.83	2:11.14	4:28.67	4:49.83	9:34.1	16:24.6
50	10.96	22.45	51.00	1:57.34	4:00.51	4:19.46	8:35.2	14:43.0	50	12.13	25.06	57.36	2:12.27	4:30.98	4:52.32	9:39.9	16:33.0
51	11.02	22.60	51.43	1:58.27	4:02.41	4:21.51	8:39.3	14:50.0	51	12.20	25.25	57.90	2:13.44	4:33.37	4:54.90	9:45.0	16:41.5
52	11.08	22.76	51.87	1:59.24	4:04.39	4:23.64	8:43.5	14:57.3	52	12.27	25.45	58.46	2:14.67	4:35.87	4:57.60	9:50.4	16:50.5
53	11.14	22.92	52.32	2:00.25	4:06.46	4:25.87	8:47.9	15:04.9	53	12.35	25.65	59.04	2:15.95	4:38.49	5:00.42	9:55.1	16:59.8
54	11.20	23.09	52.79	2:01.30	4:08.61	4:28.19	8:52.5	15:12.8	54	12.43	25.86	59.63	2:17.28	4:41.22	5:03.36	10:01.8	17:09.7
55	11.27	23.26	53.26	2:02.39	4:10.85	4:30.60	8:57.3	15:21.0	55	12.51	26.07	1:00.23	2:18.67	4:44.06	5:06.42	10:07.9	17:20.0
56	11.34	23.43	53.74	2:03.55	4:13.23	4:33.17	9:02.4	15:29.8	56	12.59	26.29	1:00.85	2:20.15	4:47.09	5:09.67	10:14.3	17:31.1
57	11.41	23.61	54.24	2:04.75	4:15.68	4:35.81	9:07.6	15:38.7	57	12.68	26.51	1:01.48	2:21.67	4:50.21	5:13.03	10:20.1	17:42.6
58	11.48	23.80	54.75	2:05.97	4:18.20	4:38.53	9:12.1	15:47.9	58	12.77	26.74	1:02.13	2:23.24	4:53.42	5:16.49	10:27.8	17:54.4
59	11.55	23.99	55.27	2:07.23	4:20.78	4:41.32	9:18.5	15:57.3	59	12.86	26.98	1:02.81	2:24.86	4:56.74	5:20.05	10:34.9	18:06.5
60	11.63	24.18	55.81	2:08.53	4:23.44	4:44.18	9:24.2	16:07.0	60	12.96	27.23	1:03.50	2:26.53	5:00.15	5:23.73	10:42.2	18:19.0
61	11.71	24.38	56.36	2:09.86	4:26.16	4:47.11	9:30.0	16:16.7	61	13.06	27.48	1:04.21	2:28.24	5:03.65	5:27.51	10:49.7	18:31.7
62	11.79	24.58	56.93	2:11.22	4:28.96	4:50.12	9:36.0	16:26.8	62	13.16	27.74	1:04.94	2:30.00	5:07.26	5:31.42	10:57.4	18:44.9
63	11.88	24.79	57.51	2:12.62	4:31.84	4:53.22	9:42.2	16:37.2	63	13.27	28.02	1:05.70	2:31.82	5:10.98	5:35.44	11:05.4	18:58.5
64	11.97	25.01	58.11	2:14.07	4:34.80	4:56.42	9:48.6	16:47.9	64	13.38	28.30	1:06.48	2:33.70	5:14.83	5:39.60	11:13.6	19:12.5
65	12.06	25.24	58.72	2:15.55	4:37.84	4:59.70	9:55.1	16:59.0	65	13.50	28.59	1:07.28	2:35.64	5:18.80	5:43.88	11:22.1	19:27.0
66	12.16	25.47	59.35	2:17.08	4:40.97	5:03.09	10:01.8	17:10.5	66	13.62	28.89	1:08.10	2:37.64	5:22.90	5:48.29	11:30.9	19:42.0
67	12.25	25.72	59.99	2:18.65	4:44.19	5:06.57	10:08.7	17:22.4	67	13.75	29.20	1:08.96	2:39.70	5:27.12	5:52.85	11:39.9	19:57.6
68	12.36	25.97	1:00.66	2:20.27	4:47.49	5:10.14	10:15.8	17:34.6	68	13.88	29.52	1:09.84	2:41.83	5:31.48	5:57.54	11:49.2	20:13.5
69	12.47	26.23	1:01.35	2:21.93	4:50.89	5:13.82	10:23.1	17:47.1	69	14.02	29.86	1:10.75	2:44.02	5:35.98	6:02.39	11:58.8	20:30.0
70	12.58	26.50	1:02.06	2:23.63	4:54.39	5:17.59	10:30.6	18:00.0	70	14.16	30.21	1:11.69	2:46.28	5:40.61	6:07.38	12:08.7	20:47.0
71	12.69	26.78	1:02.79	2:25.37	4:57.98	5:21.46	10:38.3	18:13.3	71	14.31	30.57	1:12.66	2:48.60	5:45.38	6:12.52	12:18.9	21:01.7
72	12.82	27.06	1:03.54	2:27.16	5:01.68	5:25.44	10:46.2	18:26.9	72	14.46	30.95	1:13.66	2:50.10	5:50.30	6:17.82	12:29.4	21:18.2
73	12.94	27.36	1:04.32	2:29.01	5:05.47	5:29.53	10:54.3	18:40.9	73	14.62	31.34	1:14.70	2:53.47	5:55.38	6:23.30	12:40.3	21:36.8
74	13.08	27.67	1:05.12	2:30.91	5:09.37	5:33.73	11:02.6	18:55.2	74	14.80	31.75	1:15.78	2:56.03	6:00.62	6:28.95	12:51.4	21:57.3
75	13.22	28.00	1:05.95	2:32.86	5:13.38	5:38.05	11:11.2	19:10.0	75	14.98	32.18	1:16.90	2:58.67	6:06.03	6:34.78	13:03.0	22:20.0
76	13.37	28.34	1:06.80	2:34.86	5:17.47	5:42.46	11:19.1	19:25.1	76	15.17	32.62	1:18.05	3:01.38	6:11.56	6:40.75	13:14.8	22:53.8
77	13.52	28.69	1:07.68	2:36.93	5:21.69	5:47.00	11:28.1	19:40.7	77	15.37	33.08	1:19.24	3:04.19	6:17.29	6:46.94	13:27.0	23:25.7
78	13.69	29.06	1:08.60	2:39.05	5:26.04	5:51.69	11:38.3	19:56.7	78	15.59	33.57	1:20.49	3:07.09	6:23.22	6:53.35	13:39.7	23:55.6
79	13.86	29.44	1:09.55	2:41.24	5:30.52	5:56.52	11:47.9	20:13.1	79	15.81	34.08	1:21.79	3:10.10	6:29.37	6:59.10	13:52.9	24:23.5
80	14.04	29.84	1:10.53	2:43.50	5:35.14	6:01.51	11:57.8	20:30.0	80	16.05	34.62	1:23.15	3:13.22	6:35.74	7:06.88	14:06.5	24:49.0
81	14.23	30.25	1:11.55	2:45.81	5:39.88	6:06.64	12:07.1	20:44.3	81	16.29	35.18	1:24.56	3:16.43	6:42.31	7:13.98	14:20.6	25:02.0
82	14.43	30.68	1:12.60	2:48.20	5:44.78	6:11.94	12:18.5	21:00.6	82	16.56	35.76	1:26.04	3:19.77	6:49.13	7:21.35	14:35.2	25:17.4
83	14.64	31.14	1:13.70	2:50.67	5:49.84	6:17.41	12:29.4	21:18.1	83	16.84	36.38	1:27.57	3:23.23	6:			

MEN'S HURDLES AND STEEPLECHASE STANDARDS

WOMEN'S HURDLES AND STEEPLECHASE

AGE 110 H 100 H 80 H 400 H 300 H 3000 SC 2000 SC

AGE 100 H 80 H 400 H 300 H 2000 SC

STDS

AGE	110 H	100 H	80 H	400 H	300 H	3000 SC	2000 SC
	1.067m/42"			.914m/36"			
OC	12.90			47.02	33.60	8:05.0	
	.991m/39"						
30	13.00			47.92	34.23	8:12.8	
31	13.04			48.25	34.47	8:15.2	
32	13.09			48.60	34.71	8:17.8	
33	13.15			48.95	34.95	8:20.5	
34	13.21			49.31	35.21	8:23.4	
35	13.28			49.68	35.47	8:26.4	
36	13.35			50.05	35.73	8:29.5	
37	13.43			50.44	36.00	8:32.8	
38	13.52			50.84	36.29	8:36.3	
39	13.61			51.25	36.58	8:40.1	
40	13.71			51.68	36.88	8:44.0	
41	13.82			52.13	37.19	8:48.1	
42	13.93			52.59	37.52	8:52.5	
43	14.06			53.06	37.85	8:57.2	
44	14.19			53.56	38.20	9:02.1	
45	14.33			54.07	38.56	9:07.2	
46	14.48			54.60	38.93	9:12.7	
47	14.64			55.15	39.31	9:18.4	
48	14.80			55.71	39.71	9:24.4	
49	14.98			56.29	40.12	9:30.6	
	.914m/36"			.840m/33"			
50	14.86	13.46	1.104	55.70	39.70	9:37.0	
51	15.05	13.63		56.27	40.10	9:43.7	
52	15.23	13.80		56.84	40.50	9:50.6	
53	15.42	13.97		57.42	40.90	9:57.8	
54	15.62	14.14		58.00	41.31	10:05.3	
55	15.81	14.32	1.104	58.59	41.72	10:13.1	
56	16.01	14.50		59.18	42.14	10:21.2	
57	16.21	14.68		59.78	42.56	10:29.5	
58	16.41	14.86		1:00.38	42.98	10:38.2	
59	16.61	15.04	1.104	1:00.99	43.41	10:47.2	
	.840m/33"			.762m/30"			
60	16.47	14.92	1.104	1:01.19	43.46		7:03.9
61	16.68	15.11		1:01.96	43.99		7:10.3
62	16.89	15.30		1:02.79	44.55		7:16.9
63	17.10	15.49		1:03.67	45.15		7:23.7
64	17.32	15.69		1:04.60	45.79		7:30.7
65	17.54	15.89	1.104	1:05.59	46.46		7:38.0
66	17.76	16.09		1:06.75	47.25		7:45.6
67	17.99	16.29		1:07.91	48.05		7:53.3
68	18.22	16.50		1:09.09	48.84		8:01.3
69	18.45	16.71		1:10.27	49.64		8:09.5
	.762m/30"			.762m/30"			
70	18.32	16.59	1.104	1:11.46	50.43		8:18.0
71	18.56	16.80	1.104	1:12.59	51.18		8:26.7
72	18.80	17.02	1.104	1:13.76	51.95		8:35.7
73	19.05	17.23	1.104	1:14.97	52.74		8:44.9
74	19.30	17.46	1.104	1:16.22	53.55		8:54.4
75			13.92	1:17.51	54.38		9:04.1
76			14.10	1:18.83	55.22		9:14.1
77			14.28	1:20.20	56.09		9:24.3
78			14.47	1:21.63	56.98		9:34.9
79			14.67	1:23.11	57.91		9:45.7
80			14.87	1:24.65	58.86		9:56.8
81			15.08	1:26.22	59.83		
82			15.29	1:27.87	1:00.84		
83			15.51	1:29.60	1:01.89		
84			15.73	1:31.42	1:02.98		
85			15.96	1:33.33	1:04.11		
86			16.19	1:35.33	1:05.29		
87			16.43	1:37.43	1:06.51		
88			16.67	1:39.64	1:07.78		
89			16.91	1:41.95	1:09.10		
90			17.16	1:44.37	1:10.47		

AGE	100 H	80 H	400 H	300 H	2000 SC
	.840m/33"		.762m/30"		
OC	12.25	9.68	52.94	37.77	6:00.0
30	12.51		54.36	38.57	6:02.2
31	12.59		54.78	38.86	6:05.4
32	12.66		55.21	39.17	6:08.8
33	12.74		55.65	39.49	6:12.3
34	12.82		56.10	39.82	6:16.1
35	12.90		56.57	40.16	6:20.1
36	12.98		57.04	40.54	6:24.5
37	13.06		57.52	40.92	6:29.1
38	13.14		58.03	41.31	6:33.7
39	13.22		58.55	41.69	6:38.4
	.762m/30"				
40	13.36	10.56	59.10	42.07	6:43.3
41	13.49	10.67	59.67	42.39	6:48.3
42	13.63	10.78	1:00.26	42.74	6:53.4
43	13.76	10.89	1:00.87	43.12	6:58.6
44	13.90	10.10	1:01.50	43.54	7:03.9
45	14.04	11.10	1:02.16	43.98	7:09.3
46	14.18	11.19	1:02.84	44.52	7:14.7
47	14.32	11.29	1:03.55	45.06	7:20.3
48	14.46	11.38	1:04.28	45.61	7:26.0
49	14.61	11.48	1:05.04	46.16	7:31.9
50		11.58		46.71	7:38.0
51		11.68		47.24	7:44.3
52		11.78		47.79	7:50.7
53		11.89		48.35	7:57.3
54		12.00		48.93	8:03.1
55		12.12		49.53	8:10.9
56		12.24		50.14	8:18.0
57		12.36		50.77	8:25.3
58		12.49		51.42	8:32.7
59		12.62		52.09	8:40.3
60		12.76		52.78	8:48.1
61		12.90		53.49	8:56.0
62		13.04		54.22	9:04.1
63		13.19		54.98	9:12.4
64		13.35		55.77	9:20.9
65		13.51		56.58	9:29.6
66		13.67		57.41	9:38.4
67		13.85		58.27	9:47.4
68		14.02		59.17	9:56.8
69		14.21		1:00.10	10:06.4
70		14.40		1:01.06	10:16.3
71		14.60		1:02.05	10:26.5
72		14.80		1:03.08	10:37.0
73		15.02		1:04.15	10:47.9
74		15.24		1:05.27	10:59.1
75		15.48		1:06.43	11:10.6
76		15.72		1:07.62	
77		15.98		1:08.87	
78		16.24		1:10.18	
79		16.53		1:11.54	
80		16.82		1:12.97	
81		17.12		1:14.44	
82		17.44		1:15.99	
83		17.78		1:17.62	
84		18.14		1:19.33	
85		18.52		1:21.12	
86		18.92		1:23.01	
87		19.34		1:24.98	
88		19.78		1:27.06	
89		20.25		1:29.25	
90		20.74		1:31.54	

MEN'S FIELD EVENT STANDARDS

WOMEN'S FIELD EVENT STANDARDS

AGE	HIGH JUMP	POLE VAULT	LONG JUMP	TRIPLE JUMP	SP 16 #	DT 2 KG	HT 16 #	JT 800 G	AGE	HIGH JUMP	POLE VAULT	LONG JUMP	TRIPLE JUMP	SP 4 KG	DT 1 KG	HT 4 KG	JT 600 G
OC	2.42	6.03	8.79	17.97	20.40	69.50	76.85	90.42	OC	2.09	3.63	7.45	14.90	19.58	66.00	60.00	66.12
30	2.37	5.88	8.61	17.58	20.16	69.43	75.94	85.30	30	2.04	3.52	7.28	14.55	18.83	65.93	57.69	60.66
31	2.35	5.83	8.53	17.41	19.96	68.72	75.16	84.19	31	2.02	3.48	7.20	14.40	18.74	65.11	57.43	59.50
32	2.33	5.78	8.45	17.25	19.75	68.01	74.39	83.11	32	1.99	3.44	7.13	14.25	18.63	64.31	57.09	58.37
33	2.31	5.72	8.37	17.08	19.55	67.32	73.62	82.05	33	1.97	3.40	7.05	14.09	18.49	63.52	56.66	57.25
34	2.29	5.67	8.28	16.90	19.34	66.62	72.85	81.02	34	1.95	3.36	6.98	13.94	18.32	62.74	56.15	56.17
35	2.27	5.61	8.20	16.73	19.14	65.94	72.09	80.02	35	1.93	3.32	6.90	13.78	18.13	61.97	55.56	55.10
36	2.25	5.55	8.11	16.55	18.94	65.31	71.33	79.04	36	1.91	3.28	6.82	13.62	17.87	61.24	54.77	54.10
37	2.23	5.49	8.02	16.37	18.73	64.66	70.57	78.09	37	1.89	3.24	6.75	13.46	17.61	60.51	53.97	53.10
38	2.21	5.43	7.94	16.19	18.53	63.99	69.82	77.15	38	1.87	3.20	6.67	13.30	17.35	59.78	53.15	52.09
39	2.19	5.37	7.85	16.01	18.33	63.31	69.06	76.24	39	1.85	3.15	6.59	13.14	17.08	59.04	52.33	51.09
40	2.17	5.31	7.76	15.83	18.13	62.61	68.31	75.35	40	1.83	3.11	6.51	12.98	16.81	58.30	51.50	50.09
41	2.15	5.25	7.67	15.65	17.93	61.90	67.56	74.62	41	1.81	3.07	6.43	12.82	16.54	57.59	50.66	49.09
42	2.12	5.19	7.59	15.46	17.73	61.17	66.81	73.83	42	1.79	3.02	6.34	12.65	16.26	56.86	49.81	48.10
43	2.10	5.12	7.50	15.28	17.53	60.42	66.07	72.10	43	1.76	2.98	6.26	12.49	15.98	56.11	48.96	47.10
44	2.08	5.06	7.41	15.10	17.34	59.67	65.32	72.12	44	1.74	2.93	6.18	12.32	15.70	55.34	48.10	46.11
45	2.06	5.00	7.32	14.91	17.14	58.90	64.58	71.20	45	1.72	2.89	6.10	12.16	15.42	54.55	47.24	45.13
46	2.04	4.94	7.23	14.72	16.94	58.12	63.84	70.36	46	1.70	2.85	6.02	11.10	15.14	53.72	46.37	44.15
47	2.02	4.87	7.14	14.54	16.75	57.33	63.11	69.41	47	1.67	2.81	5.94	11.84	14.85	52.89	45.50	43.18
48	2.00	4.81	7.05	14.35	16.56	56.53	62.37	68.37	48	1.65	2.76	5.86	11.67	14.57	52.06	44.63	42.21
49	1.98	4.75	6.96	14.17	16.36	55.72	61.64	67.23	49	1.63	2.72	5.78	11.51	14.28	51.22	43.76	41.25
50	1.96	4.69	6.87	13.98	17.82	61.78	64.58	66.00	50	1.61	2.68	5.70	11.35	15.92	50.38	47.24	44.08
51	1.94	4.63	6.78	13.79	17.59	60.99	63.74	64.69	51	1.59	2.63	5.62	11.18	15.61	49.53	46.27	43.16
52	1.91	4.57	6.69	13.61	17.37	60.21	62.92	63.29	52	1.57	2.58	5.54	11.02	15.30	48.68	45.32	42.25
53	1.89	4.51	6.60	13.42	17.15	59.43	62.11	61.83	53	1.55	2.54	5.46	10.86	14.10	47.83	44.38	41.36
54	1.87	4.45	6.52	13.24	16.93	58.67	61.30	60.30	54	1.53	2.50	5.39	10.70	14.70	46.99	43.46	40.47
55	1.85	4.39	6.43	13.06	16.72	57.92	60.51	58.71	55	1.51	2.47	5.31	10.54	14.40	46.15	42.55	39.59
56	1.83	4.33	6.34	12.88	16.51	57.18	59.73	57.07	56	1.49	2.46	5.23	10.39	14.11	45.31	41.65	38.71
57	1.81	4.27	6.26	12.70	16.30	56.44	58.96	55.38	57	1.48	2.44	5.16	10.23	13.81	44.48	40.77	37.85
58	1.79	4.21	6.17	12.52	16.09	55.72	58.19	53.66	58	1.46	2.42	5.08	10.08	13.53	43.66	39.90	37.01
59	1.77	4.15	6.09	12.34	15.89	55.01	57.44	51.90	59	1.44	2.39	5.00	9.93	13.25	42.84	39.05	36.18
60	1.75	4.09	6.00	12.17	16.52	62.05	60.04	59.48	60	1.42	2.35	4.93	9.78	12.97	42.04	38.22	35.36
61	1.73	4.03	5.91	11.10	16.20	60.97	58.89	58.41	61	1.40	2.29	4.86	9.63	12.69	41.24	37.41	34.55
62	1.71	3.97	5.83	11.83	15.89	59.87	57.76	57.34	62	1.38	2.24	4.78	9.48	12.42	40.45	36.62	33.76
63	1.69	3.91	5.74	11.66	15.59	58.76	56.65	56.27	63	1.36	2.19	4.71	9.34	12.16	39.67	35.83	32.99
64	1.67	3.86	5.66	11.49	15.29	57.63	55.57	55.20	64	1.34	2.14	4.64	9.19	11.90	38.90	35.06	32.23
65	1.65	3.80	5.58	11.32	15.00	56.50	54.50	54.14	65	1.32	2.10	4.57	9.05	11.65	38.15	34.29	31.49
66	1.63	3.75	5.50	11.15	14.71	55.37	53.45	53.11	66	1.30	2.06	4.50	8.91	11.40	37.40	33.51	30.76
67	1.61	3.69	5.42	10.99	14.43	54.22	52.43	52.07	67	1.28	2.03	4.43	8.77	11.16	36.67	32.76	30.05
68	1.59	3.64	5.34	10.82	14.16	53.06	51.42	51.01	68	1.26	1.99	4.36	8.63	10.93	35.95	32.02	29.36
69	1.57	3.58	5.27	10.66	13.89	51.90	50.44	49.95	69	1.25	1.96	4.30	8.50	10.70	35.24	31.31	28.68
70	1.55	3.53	5.19	10.50	14.89	50.73	54.12	48.88	70	1.23	1.92	4.23	8.36	10.47	34.55	30.61	28.02
71	1.53	3.47	5.11	10.34	14.54	49.51	52.76	47.78	71	1.21	1.89	4.16	8.22	10.25	33.87	29.93	27.37
72	1.51	3.42	5.03	10.18	14.19	48.31	51.38	46.69	72	1.20	1.85	4.09	8.09	10.03	33.20	29.27	26.74
73	1.50	3.36	4.96	10.03	13.84	47.13	49.98	45.61	73	1.18	1.82	4.03	7.96	9.82	32.55	28.63	26.13
74	1.48	3.31	4.88	9.87	13.50	45.97	48.57	44.53	74	1.17	1.78	3.96	7.83	9.61	31.91	28.01	25.53
75	1.46	3.25	4.81	9.72	13.16	44.84	47.15	43.47	75	1.15	1.75	3.90	7.70	9.41	31.28	27.40	24.95
76	1.44	3.20	4.74	9.58	12.83	43.75	45.68	42.40	76	1.13	1.72	3.84	7.58	9.24	30.66	26.88	24.38
77	1.42	3.14	4.67	9.43	12.50	42.67	44.23	41.35	77	1.12	1.69	3.78	7.46	9.07	30.06	26.34	23.83
78	1.40	3.09	4.60	9.29	12.18	41.60	42.80	40.32	78	1.10	1.65	3.72	7.34	8.88	29.47	25.78	23.29
79	1.39	3.03	4.53	9.14	11.85	40.54	41.40	39.30	79	1.09	1.62	3.66	7.22	8.68	28.89	25.19	22.77
80	1.37	2.98	4.46	8.99	11.53	39.49	40.03	38.31	80	1.07	1.59	3.60	7.10	8.48	28.33	24.59	22.26
81	1.35	2.93	4.38	8.83	11.20	38.45	38.71	37.35	81	1.06	1.56	3.53	6.96	8.21	27.77	23.82	21.81
82	1.34	2.87	4.30	8.67	10.88	37.42	37.40	36.40	82	1.04	1.52	3.47	6.83	7.97	27.23	23.12	21.35
83	1.32	2.82	4.23	8.52	10.56	36.40	36.10	35.46	83	1.03	1.49	3.41	6.71	7.75	26.70	22.48	20.89
84	1.31	2.76	4.16	8.37	10.25	35.40	34.82	34.53	84	1.01	1.46	3.35	6.59	7.54	26.19	21.89	20.41
85	1.29	2.71	4.09	8.23	9.95	34.41	33.56	33.61	85	1.00	1.43	3.29	6.47	7.36	25.68	21.35	19.92
86	1.28	2.66	4.02	8.09	9.65	33.44	32.31	32.70	86	0.99	1.40	3.24	6.36	7.19	25.19	20.86	19.43
87	1.26	2.60	3.96	7.96	9.37	32.48	31.09	31.80	87	0.97	1.37	3.18	6.25	7.04	24.70	20.42	18.93
88	1.25	2.55	3.90	7.84	9.08	31.54	29.88	30.91	88	0.96	1.34	3.13	6.15	6.91	24.23	20.02	18.42
89	1.23	2.50	3.84	7.72	8.81	30.61	28.70	30.03	89	0.94	1.31	3.09	6.05	6.79	23.77	19.67	17.91
90	1.22	2.45	3.79	7.60	8.54	29.70	27.54	29.17	90	0.93	1.28	3.04	5.96	6.68	23.32	19.35	17.40

MEN'S LONG DISTANCE RUNNING EVENT STANDARDS

AGE	5 KM	8 KM	10 KM	15 KM	10 MILE	20 KM	21097	25 KM	30 KM	42195
OC	12:57	21:18	26:55	41:17	44:29	56:02	59:25	1:11:09	1:26:27	2:04:20
35	13:19	21:54	27:41	42:27	45:45	57:37	1:01:06	1:13:10	1:28:44	2:06:06
36	13:24	22:02	27:51	42:42	46:01	57:58	1:01:28	1:13:36	1:29:16	2:06:52
37	13:29	22:10	28:01	42:58	46:18	58:19	1:01:50	1:14:03	1:29:49	2:07:38
38	13:34	22:18	28:12	43:14	46:35	58:41	1:02:13	1:14:31	1:30:22	2:08:25
39	13:39	22:26	28:22	43:30	46:52	59:03	1:02:36	1:14:59	1:30:56	2:09:14
40	13:44	22:35	28:33	43:47	47:10	59:25	1:03:00	1:15:27	1:31:31	2:10:03
41	13:49	22:44	28:44	44:04	47:28	59:48	1:03:24	1:15:56	1:32:06	2:10:53
42	13:55	22:53	28:55	44:21	47:47	1:00:11	1:03:49	1:16:25	1:32:41	2:11:44
43	14:00	23:02	29:06	44:39	48:06	1:00:35	1:04:14	1:16:55	1:33:18	2:12:36
44	14:06	23:11	29:18	44:57	48:25	1:00:59	1:04:40	1:17:26	1:33:56	2:13:29
45	14:12	23:21	29:30	45:15	48:45	1:01:24	1:05:07	1:17:58	1:34:34	2:14:24
46	14:18	23:30	29:42	45:33	49:05	1:01:49	1:05:33	1:18:29	1:35:12	2:15:18
47	14:24	23:40	29:54	45:52	49:25	1:02:15	1:06:00	1:19:02	1:35:52	2:16:14
48	14:30	23:50	30:07	46:11	49:47	1:02:42	1:06:29	1:19:36	1:36:33	2:17:12
49	14:36	24:01	30:20	46:32	50:09	1:03:10	1:06:58	1:20:12	1:37:16	2:18:13
50	14:43	24:12	30:34	46:53	50:32	1:03:39	1:07:29	1:20:49	1:38:01	2:19:17
51	14:50	24:23	30:49	47:15	50:56	1:04:09	1:08:01	1:21:27	1:38:48	2:20:23
52	14:57	24:35	31:04	47:38	51:21	1:04:41	1:08:34	1:22:07	1:39:36	2:21:32
53	15:05	24:48	31:19	48:03	51:47	1:05:13	1:09:09	1:22:49	1:40:27	2:22:44
54	15:13	25:01	31:36	48:28	52:14	1:05:47	1:09:45	1:23:32	1:41:19	2:23:59
55	15:21	25:14	31:53	48:54	52:42	1:06:23	1:10:23	1:24:17	1:42:14	2:25:17
56	15:30	25:28	32:11	49:22	53:12	1:07:01	1:11:03	1:25:05	1:43:12	2:26:39
57	15:39	25:43	32:30	49:51	53:42	1:07:40	1:11:44	1:25:55	1:44:12	2:28:04
58	15:48	25:58	32:49	50:21	54:14	1:08:20	1:12:27	1:26:45	1:45:13	2:29:31
59	15:57	26:13	33:09	50:51	54:47	1:09:01	1:13:10	1:27:37	1:46:16	2:31:01
60	16:07	26:29	33:29	51:22	55:20	1:09:43	1:13:55	1:28:31	1:47:21	2:32:33
61	16:17	26:45	33:49	51:53	55:54	1:10:26	1:14:41	1:29:26	1:48:27	2:34:07
62	16:27	27:02	34:11	52:26	56:30	1:11:10	1:15:28	1:30:22	1:49:36	2:35:44
63	16:37	27:20	34:32	52:59	57:06	1:11:56	1:16:16	1:31:20	1:50:46	2:37:24
64	16:48	27:38	34:55	53:33	57:44	1:12:43	1:17:06	1:32:20	1:51:58	2:39:07
65	16:59	27:56	35:18	54:09	58:22	1:13:31	1:17:57	1:33:21	1:53:13	2:40:53
66	17:11	28:15	35:42	54:46	59:02	1:14:21	1:18:50	1:34:25	1:54:30	2:42:42
67	17:22	28:34	36:07	55:24	59:42	1:15:12	1:19:45	1:35:30	1:55:49	2:44:35
68	17:35	28:54	36:32	56:03	1:00:24	1:16:05	1:20:41	1:36:37	1:57:10	2:46:30
69	17:47	29:15	36:58	56:43	1:01:07	1:16:59	1:21:38	1:37:45	1:58:33	2:48:28
70	18:00	29:36	37:25	57:24	1:01:51	1:17:55	1:22:37	1:38:56	1:59:59	2:50:30
71	18:13	29:58	37:52	58:06	1:02:36	1:18:52	1:23:37	1:40:08	2:01:27	2:52:42
72	18:27	30:20	38:21	58:49	1:03:23	1:19:50	1:24:39	1:41:22	2:02:57	2:54:54
73	18:41	30:43	38:50	59:34	1:04:10	1:20:51	1:25:43	1:42:39	2:04:30	2:57:06
74	18:55	31:07	39:19	1:00:19	1:04:60	1:21:52	1:26:49	1:43:57	2:06:05	2:59:18
75	19:10	31:31	39:50	1:01:06	1:05:50	1:22:56	1:27:56	1:45:18	2:07:43	3:01:29
76	19:25	31:56	40:21	1:01:54	1:06:41	1:24:01	1:29:05	1:46:41	2:09:23	3:03:14
77	19:41	32:21	40:53	1:02:43	1:07:35	1:25:08	1:30:16	1:48:06	2:11:06	3:05:11
78	19:57	32:47	41:27	1:03:34	1:08:29	1:26:17	1:31:30	1:49:33	2:12:52	3:07:20
79	20:13	33:14	42:01	1:04:26	1:09:26	1:27:28	1:32:45	1:51:04	2:14:41	3:09:42
80	20:30	33:42	42:36	1:05:20	1:10:24	1:28:41	1:34:03	1:52:37	2:16:34	3:12:17
81	20:44	34:11	43:12	1:06:13	1:11:24	1:29:57	1:35:23	1:54:13	2:18:30	3:15:32
82	21:01	34:41	43:50	1:07:09	1:12:26	1:31:15	1:36:45	1:55:52	2:20:30	3:18:48
83	21:19	35:12	44:28	1:08:09	1:13:30	1:32:35	1:38:10	1:57:34	2:22:34	3:22:06
84	21:39	35:43	45:08	1:09:11	1:14:36	1:33:58	1:39:38	1:59:19	2:24:42	3:25:26
85	22:02	36:16	45:49	1:10:17	1:15:44	1:35:24	1:41:09	2:01:08	2:26:54	3:28:47
86	22:27	36:50	46:31	1:11:26	1:16:54	1:36:52	1:42:43	2:03:00	2:29:10	3:32:10
87	22:54	37:24	47:15	1:12:39	1:18:07	1:38:24	1:44:19	2:04:56	2:31:31	3:35:34
88	23:24	38:00	48:00	1:13:56	1:19:21	1:39:58	1:45:59	2:06:55	2:33:56	3:38:60
89	23:57	38:37	48:47	1:15:17	1:20:38	1:41:35	1:47:43	2:08:59	2:36:26	3:42:27
90	24:32	39:15	49:35	1:16:42	1:21:58	1:43:15	1:49:29	2:11:06	2:39:00	3:45:56

WOMEN'S LONG DISTANCE RUNNING EVENT STANDARDS

AGE	5 KM	8 KM	10 KM	15 KM	10 MILE	20 KM	21097	25 KM	30 KM	42195
OC	14:22	23:39	29:53	45:49	49:23	1:02:12	1:05:57	1:18:59	1:35:58	2:18:00
35	14:49	24:23	30:49	47:15	50:56	1:04:09	1:08:01	1:21:27	1:38:47	2:20:10
36	14:55	24:33	31:01	47:34	51:16	1:04:34	1:08:28	1:21:59	1:39:26	2:21:06
37	15:01	24:43	31:14	47:53	51:37	1:05:00	1:08:56	1:22:32	1:40:06	2:22:03
38	15:07	24:53	31:27	48:12	51:58	1:05:27	1:09:24	1:23:06	1:40:47	2:23:01
39	15:14	25:03	31:40	48:32	52:19	1:05:54	1:09:53	1:23:41	1:41:29	2:24:00
40	15:20	25:14	31:53	48:53	52:41	1:06:22	1:10:22	1:24:16	1:42:12	2:25:01
41	15:26	25:25	32:06	49:14	53:03	1:06:50	1:10:52	1:24:52	1:42:55	2:26:02
42	15:33	25:35	32:20	49:36	53:26	1:07:19	1:11:22	1:25:28	1:43:39	2:27:05
43	15:40	25:47	32:34	49:58	53:50	1:07:49	1:11:54	1:26:06	1:44:25	2:28:10
44	15:47	25:58	32:49	50:20	54:14	1:08:19	1:12:26	1:26:44	1:45:11	2:29:16
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90	28:54	47:15	1:00:08	1:32:11	1:39:22	2:05:09	2:12:42	2:38:55	3:13:06	4:33:06

MEN'S RACE WALKING EVENT STANDARDS

AGE	1500 M	1 MILE	3 KM	2 MILE	5 KM	8 KM	10 KM	15 KM	20 KM	30 KM	40 KM	50 KM
OC	5:19.0	5:44.0	11:08	12:00	18:51	30:36	38:30	58:00	1:18:40	2:00:00	2:43:00	3:38:00
30	5:20.3	5:45.5	11:11	12:03	18:53	30:40						
31	5:22.2	5:47.5	11:15	12:07	18:59	30:49						
32	5:24.1	5:49.5	11:19	12:12	19:04	30:58						
33	5:25.9	5:51.5	11:22	12:16	19:10	31:07						
34	5:27.7	5:53.4	11:26	12:20	19:16	31:17						
35	5:29.5	5:55.3	11:30	12:24	19:22	31:26	39:20	59:15	1:20:22	2:02:35	2:46:31	3:42:42
36	5:31.1	5:57.0	11:34	12:28	19:28	31:35	39:31	59:32	1:20:45	2:03:10	2:47:19	3:43:47
37	5:32.7	5:58.8	11:38	12:31	19:34	31:44	39:43	59:50	1:21:09	2:03:47	2:48:08	3:44:53
38	5:34.4	6:00.6	11:41	12:35	19:40	31:54	39:55	1:00:08	1:21:34	2:04:25	2:48:59	3:46:01
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WOMEN'S RACE WALKING EVENT STANDARDS

AGE	1500 M	1 MILE	3 KM	2 MILE	5 KM	8 KM	10 KM	15 KM	20 KM	30 KM	40 KM	50 KM
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30	5:55.7	6:23.6	12:24	13:23	20:58	34:04						
31	5:58.0	6:26.1	12:29	13:28	21:05	34:14						
32	6:00.3	6:28.5	12:34	13:33	21:12	34:24						
33	6:02.6	6:30.1	12:39	13:38	21:19	34:35						
34	6:04.8	6:33.3	12:43	13:43	21:26	34:47						
35	6:07.0	6:35.7	12:48	13:48	21:33	34:59	43:45	1:05:55	1:29:23	2:16:22	3:05:17	4:07:45
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38	6:12.1	6:42.2	13:01	14:01	21:54	35:45	44:27	1:06:59	1:30:52	2:18:36	3:08:20	4:11:49
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52	6:49.4	7:21.5	14:17	15:24	24:02	39:02	48:48	1:13:32	1:39:43	2:32:06	3:26:42	4:36:21
53	6:52.7	7:24.9	14:24	15:31	24:13	39:20	49:11	1:14:06	1:40:30	2:33:18	3:28:19	4:38:31
54	6:55.1	7:28.5	14:31	15:38	24:25	39:39	49:35	1:14:42	1:41:18	2:34:32	3:29:59	4:40:46
55	6:59.4	7:32.2	14:38	15:46	24:37	39:59	49:59	1:15:19	1:42:08	2:35:48	3:31:43	4:43:04
56	7:02.9	7:35.1	14:45	15:54	24:49	40:19	50:24	1:15:57	1:42:59	2:37:06	3:33:29	4:45:26
57	7:06.5	7:39.8	14:53	16:02	25:02	40:40	50:50	1:16:35	1:43:52	2:38:27	3:35:19	4:47:53
58	7:10.3	7:43.9	15:01	16:10	25:15	41:01	51:17	1:17:16	1:44:46	2:39:51	3:37:12	4:50:24
59	7:14.1	7:48.0	15:09	16:19	25:29	41:23	51:45	1:17:57	1:45:43	2:41:17	3:39:09	4:53:01
60	7:18.1	7:52.3	15:17	16:28	25:43	41:46	52:13	1:18:40	1:46:41	2:42:46	3:41:10	4:55:42
61	7:22.1	7:56.7	15:25	16:37	25:57	42:09	52:42	1:19:24	1:47:41	2:44:17	3:43:14	4:58:27
62	7:26.3	8:01.2	15:34	16:47	26:12	42:33	53:12	1:20:10	1:48:43	2:45:51	3:45:21	5:01:18
63	7:30.7	8:05.1	15:43	16:57	26:28	42:58	53:43	1:20:57	1:49:47	2:47:28	3:47:34	5:04:15
64	7:35.2	8:10.8	15:52	17:07	26:44	43:24	54:16	1:21:46	1:50:53	2:49:09	3:49:51	5:07:18
65	7:39.9	8:15.9	16:02	17:18	27:00	43:51	54:49	1:22:36	1:52:01	2:50:53	3:52:12	5:10:27
66	7:44.8	8:21.1	16:12	17:29	27:17	44:19	55:23	1:23:28	1:53:11	2:52:40	3:54:37	5:13:42
67	7:49.8	8:26.5	16:23	17:40	27:35	44:47	55:59	1:24:21	1:54:24	2:54:31	3:57:08	5:17:03
68	7:54.1	8:32.1	16:34	17:52	27:53	45:17	56:36	1:25:17	1:55:39	2:56:26	3:59:44	5:20:32
69	8:00.4	8:37.9	16:45	18:04	28:12	45:47	57:14	1:26:14	1:56:57	2:58:25	4:02:26	5:24:08
70	8:05.9	8:43.9	16:57	18:16	28:31	46:19	57:54	1:27:14	1:58:18	3:00:28	4:05:13	5:27:52
71	8:11.6	8:50.0	17:09	18:29	28:51	46:51	58:35	1:28:15	1:59:41	3:02:35	4:08:05	5:31:42
72	8:17.4	8:56.4	17:21	18:42	29:12	47:25	59:17	1:29:19	2:01:07	3:04:46	4:11:04	5:35:41
73	8:23.6	9:02.1	17:34	18:56	29:33	47:60	1:00:00	1:30:25	2:02:37	3:07:02	4:14:10	5:39:49
74	8:29.9	9:09.8	17:47	19:10	29:56	48:36	1:00:46	1:31:33	2:04:10	3:09:24	4:17:22	5:44:06
75	8:36.5	9:16.9	18:01	19:25	30:19	49:14	1:01:33	1:32:44	2:05:46	3:11:51	4:20:42	5:48:33
76	8:43.3	9:24.2	18:15	19:41	30:43	49:53	1:02:21	1:33:57	2:07:25	3:14:22	4:24:07	5:53:08
77	8:50.4	9:31.8	18:30	19:57	31:07	50:33	1:03:12	1:35:13	2:09:08	3:16:59	4:27:41	5:57:54
78	8:57.8	9:39.7	18:45	20:14	31:33	51:15	1:04:04	1:36:32	2:10:56	3:19:43	4:31:24	6:02:52
79	9:05.4	9:47.1	19:01	20:31	32:01	51:59	1:04:59	1:37:54	2:12:48	3:22:34	4:35:16	6:08:01
80	9:13.4	9:56.6	19:18	20:49	32:29	52:45	1:05:56	1:39:20	2:14:44	3:25:31	4:39:17	6:13:24
81	9:21.6	10:05.5	19:35	21:07	32:58	53:32	1:06:55	1:40:49	2:16:44	3:28:34	4:43:25	6:18:56
82	9:30.2	10:14.8	19:53	21:27	33:29	54:21	1:07:56	1:42:21	2:18:49	3:31:45	4:47:45	6:24:43
83	9:39.1	10:24.5	20:12	21:47	34:02	55:12	1:09:00	1:43:58	2:20:60	3:35:05	4:52:16	6:30:46
84	9:48.5	10:34.6	20:31	22:08	34:36	56:06	1:10:07	1:45:39	2:23:16	3:38:33	4:56:59	6:37:04
85	9:58.3	10:45.2	20:52	22:30	35:12	57:02	1:11:17	1:47:24	2:25:39	3:42:11	5:01:55	6:43:40
86	10:08.5	10:56.2	21:13	22:53	35:50	58:00	1:12:30	1:49:14	2:28:08	3:45:58	5:07:04	6:50:33
87	10:19.2	11:07.7	21:36	23:17	36:29	59:01	1:13:46	1:51:09	2:30:44	3:49:56	5:12:26	6:57:44
88	10:30.4	11:19.7	21:59	23:42	37:10	1:00:05	1:15:06	1:53:08	2:33:26	3:54:03	5:18:03	7:05:13
89	10:42.0	11:32.3	22:24	24:09	37:54	1:01:11	1:16:29	1:55:13	2:36:15	3:58:22	5:23:54	7:13:03
90	10:54.2	11:45.3	22:49	24:36	38:39	1:02:20	1:17:55	1:57:23	2:39:12	4:02:51	5:30:00	7:21:12

TRACK STANDARDS - 1989

AGE DIV.	100	200	400	800	1500	MILE	3000	5000	AGE DIV.
OC	9.85	19.62	43.29	1:41.73	3:29.46	3:46.09	7:32.0	12:57	OC
M30	10.00	19.94	44.04	1:43.28	3:31.70	3:48.37	7:34.3	12:57	M30
M35	10.21	20.49	45.53	1:46.24	3:37.76	3:54.90	7:46.4	13:19	M35
M40	10.44	21.08	47.16	1:49.56	3:44.57	4:02.24	8:01.0	13:44	M40
M45	10.69	21.73	48.98	1:53.22	3:52.06	4:10.35	8:17.1	14:12	M45
M50	10.96	22.45	51.00	1:57.34	4:00.51	4:19.46	8:35.2	14:43	M50
M55	11.27	23.26	53.26	2:02.39	4:10.85	4:30.60	8:57.3	15:21	M55
M60	11.63	24.18	55.81	2:08.53	4:23.44	4:44.18	9:24.2	16:07	M60
M65	12.06	25.24	58.72	2:15.55	4:37.84	4:59.70	9:55.1	16:59	M65
M70	12.58	26.50	62.06	2:23.63	4:54.39	5:17.59	10:30.6	18:00	M70
M75	13.22	28.00	65.95	2:32.86	5:13.38	5:38.05	11:11.2	19:10	M75
M80	14.04	29.84	70.53	2:43.50	5:35.14	6:01.51	11:57.8	20:30	M80
M85	15.10	32.11	76.00	2:55.85	6:00.45	6:28.87	12:52.1	22:02	M85
M90	16.49	34.97	82.50	3:10.33	6:30.13	7:00.87	13:55.6	24:32	M90
WOC	10.78	21.58	47.83	1:52.92	3:52.50	4:10.96	8:21.7	14:22	WOC
W30	10.96	21.97	48.75	1:54.81	3:55.25	4:13.75	8:24.5	14:22	W30
W35	11.22	22.63	50.56	1:58.46	4:02.67	4:21.77	8:39.4	14:49	W35
W40	11.49	23.36	52.58	2:02.57	4:11.08	4:30.84	8:57.3	15:20	W40
W45	11.80	24.16	54.83	2:07.12	4:20.39	4:40.90	9:17.3	15:54	W45
W50	12.13	25.06	57.36	2:12.27	4:30.98	4:52.32	9:39.9	16:33	W50
W55	12.51	26.07	60.23	2:18.67	4:44.06	5:06.42	10:07.9	17:20	W55
W60	12.96	27.23	63.50	2:26.53	5:00.15	5:23.73	10:42.2	18:19	W60
W65	13.50	28.59	67.28	2:35.64	5:18.80	5:43.88	11:22.1	19:27	W65
W70	14.16	30.21	71.69	2:46.28	5:40.61	6:07.38	12:08.7	20:47	W70
W75	14.98	32.18	76.90	2:58.67	6:06.03	6:34.78	13:03.0	22:20	W75
W80	16.05	34.62	83.15	3:13.22	6:35.74	7:06.88	14:06.5	24:49	W80
W85	17.45	37.72	90.83	3:30.55	7:11.19	7:45.17	15:22.4	26:18	W85
W90	19.35	41.72	100.23	3:51.44	7:53.91	8:31.22	16:53.5	28:54	W90

HURDLES AND STEEPLECHASE STANDARDS - 1989

AGE DIV.	110H	100H	80H	400H	300H	3000SC	2000SC	AGE DIV.
OC	1.067m/42"			.914m/36"				OC
M30	13.00			47.92	34.23	8:12.8		M30
M35	13.28			49.68	35.47	8:26.4		M35
M40	13.71			51.68	36.88	8:44.0		M40
M45	14.33			54.07	38.56	9:07.2		M45
M50	14.86	13.46		55.70	39.70	9:37.0		M50
M55	15.81	14.32		58.59	41.72	10:13.1		M55
M60	16.47	14.92		61.19	43.46		7:03.9	M60
M65	17.54	15.89		65.59	46.46		7:38.0	M65
M70	18.32	16.59	13.06	71.46	50.43		8:18.0	M70
M75			13.92	77.51	54.38		9:04.1	M75
M80			14.87	84.65	58.86		9:56.8	M80
M85			15.96	93.33	64.11			M85
M90			17.16	104.37	70.47			M90
WOC		100H	80H	400H	300H		2000SC	WOC
W30		.840m/33"		.762m/30"			6:00.0	W30
W35		12.25	9.68	52.94	37.77		6:02.2	W35
W40		12.51		54.36	38.57		6:20.1	W40
W45		12.90		56.57	40.16			W45
W50		.762m/30"		.762m/30"			6:43.3	W50
W55		13.36	10.56	59.10	42.07		7:09.3	W55
W60		14.04	11.10	62.16	43.98		7:38.0	W60
W65			11.58		46.71		8:10.9	W65
W70			12.12		49.53		8:48.1	W70
W75			12.76		52.78		9:29.6	W75
W80			13.51		56.58		10:16.3	W80
W85			14.40		61.06		11:10.6	W85
W90			15.48		66.43			W90
			16.82		72.97			
			18.52		81.12			
			20.74		91.54			

LONG DISTANCE RUNNING STANDARDS - 1989

AGE DIV.	5K	8K	10K	15K	10M	20K	HALF-MAR	25K	30K	MARATHON	AGE DIV.
OC	12:57	21:18	26:55	41:17	44:29	56:02	59:25	1:11:09	1:26:27	2:04:20	OC
M35	13:19	21:54	27:41	42:27	45:45	57:37	1:01:06	1:13:10	1:28:44	2:06:06	M35
M40	13:44	22:35	28:33	43:47	47:10	59:25	1:03:00	1:15:27	1:31:31	2:10:03	M40
M45	14:12	23:21	29:30	45:15	48:45	1:01:24	1:05:07	1:17:58	1:34:34	2:14:24	M45
M50	14:43	24:12	30:34	46:53	50:32	1:03:39	1:07:29	1:20:49	1:38:01	2:19:17	M50
M55	15:21	25:14	31:53	48:54	52:42	1:06:23	1:10:23	1:24:17	1:42:14	2:25:17	M55
M60	16:07	26:29	33:29	51:22	55:20	1:09:43	1:13:55	1:28:31	1:47:21	2:32:33	M60
M65	16:59	27:56	35:18	54:09	58:22	1:13:31	1:17:57	1:33:21	1:53:13	2:40:53	M65
M70	18:00	29:36	37:25	57:24	1:01:51	1:17:55	1:22:37	1:38:56	1:59:59	2:50:30	M70
M75	19:10	31:31	39:50	1:01:06	1:05:50	1:22:56	1:27:56	1:45:18	2:07:43	3:01:29	M75
M80	20:30	33:42	42:36	1:05:20	1:10:24	1:28:41	1:34:03	1:52:37	2:16:34	3:12:17	M80
M85	22:02	36:16	45:49	1:10:17	1:15:44	1:35:24	1:41:09	2:01:08	2:26:54	3:28:47	M85
M90	24:32	39:15	49:35	1:16:42	1:21:58	1:43:15	1:49:29	2:11:06	2:39:00	3:45:56	M90
WOC	14:22	23:39	29:53	45:49	49:23	1:02:12	1:05:57	1:18:59	1:35:58	2:18:00	WOC
W35	14:49	24:23	30:49	47:15	50:56	1:04:09	1:08:01	1:21:27	1:38:47	2:20:10	W35
W40	15:20	25:14	31:53	48:53	52:41	1:06:22	1:10:22	1:24:16	1:42:12	2:25:01	W40
W45	15:54	26:10	33:04	50:43	54:39	1:08:50	1:12:59	1:27:24	1:45:59	2:30:24	W45
W50	16:33	27:14	34:25	52:46	56:52	1:11:38	1:15:57	1:30:57	1:50:17	2:36:29	W50
W55	17:20	28:33	36:04	55:18	59:36	1:15:05	1:19:36	1:35:20	1:55:36	2:44:01	W55
W60	18:19	30:09	38:06	58:25	1:02:58	1:19:19	1:24:06	1:40:43	2:02:08	2:53:15	W60
W65	19:27	32:02	40:28	1:02:03	1:06:53	1:24:14	1:29:19	1:46:58	2:09:41	3:03:59	W65
W70	20:47	34:13	43:14	1:06:18	1:11:27	1:30:00	1:35:26	1:54:17	2:18:52	3:16:33	W70
W75	22:20	36:46	46:27	1:11:13	1:16:46	1:36:41	1:42:31	2:02:46	2:29:11	3:31:08	W75
W80	24:49	39:45	50:13	1:17:00	1:23:00	1:44:32	1:50:50	2:12:44	2:41:18	3:48:13	W80
W85	26:18	43:18	54:43	1:23:54	1:30:26	1:53:54	2:00:46	2:24:37	2:55:44	4:08:39	W85
W90	28:54	47:15	60:08	1:32:11	1:39:22	2:05:09	2:12:42	2:38:55	3:13:06	4:33:06	W90

RACE WALKING STANDARDS - 1989

AGE DIV.	1500	MILE	3000	2-MI	5000	8K	10K	15K	20K	30K	40K	50K	AGE DIV.
OC	5:19.0	5:44.0	11:08	12:00	18:51	30:36	38:30	58:00	1:18:40	2:00:00	2:43:00	3:38:00	OC
M30	5:20.3	5:45.5	11:11	12:03	18:53	30:40							
M35	5:29.5	5:55.3	11:30	12:24	19:22	31:26	39:20	59:15	1:20:22	2:02:35	2:46:31	3:42:42	M35
M40	5:37.9	6:04.4	11:49	12:43	19:52	32:14	40:20	1:00:46	1:22:25	2:05:43	2:50:46	3:48:24	M40
M45	5:47.6	6:14.9	12:08	13:05	20:26	33:10	41:29	1:02:30	1:24:47	2:09:19	2:55:40	3:54:56	M45
M50	5:58.7	6:26.9	12:31	13:30	21:05	34:13	42:50	1:04:30	1:27:30	2:13:28	3:01:18	4:02:46	M50
M55	6:11.6	6:40.7	12:58	13:59	21:50	35:27	44:21	1:06:49	1:30:37	2:18:14	3:07:46	4:11:07	M55
M60	6:26.3	6:56.6	13:29	14:32	22:42	36:51	46:07	1:09:28	1:34:13	2:23:44	3:15:14	4:21:07	M60
M65	6:43.4	7:15.0	14:04	15:10	23:42	38:29	48:09	1:12:33	1:38:24	2:30:56	3:23:53	4:32:40	M65
M70	7:03.4	7:36.5	14:47	15:56	24:53	40:23	50:32	1:16:08	1:43:15	2:37:30	3:33:56	4:46:08	M70
M75	7:26.6	8:01.7	15:35	16:48	26:15	42:37	53:19	1:20:19	1:48:57	2:46:11	3:45:44	5:01:54	M75
M80	7:54.3	8:31.5	16:33	17:50	27:52	45:15	56:36	1:25:17	1:55:40	2:56:26	3:59:40	5:20:32	M80
M85	8:27.2	9:07.0	17:42	19:05	29:48	48:23	60:33	1:31:13	2:03:43	3:08:42	4:16:20	5:42:49	M85
M90	9:07.1	9:50.1	19:06	20:35	32:09	52:12	65:19	1:38:23	2:13:27	3:23:34	4:36:30	6:09:48	M90
WOC	5:54.1	6:21.8	12:21	13:19	20:55	33:58	42:44	1:04:23	1:27:19	2:13:12	3:01:00	4:02:00	WOC
W30	5:55.7	6:23.6	12:24	13:23	20:58	34:04							
W35	6:07.0	6:35.7	12:48	13:48	21:33	34:59	43:45	1:05:55	1:29:23	2:16:22	3:05:17	4:07:45	W35
W40	6:17.3	6:46.9	13:10	14:11	22:09	36:12	44:58	1:07:46	1:31:55	2:20:13	3:10:32	4:14:44	W40
W45	6:29.3	6:59.8	13:35	14:39	22:52	37:07	46:25	1:09:56	1:34:50	2:24:40	3:16:35	4:22:51	W45
W50	6:43.3	7:14.8	14:04	15:10	23:41	38:27	48:04	1:12:25	1:38:13	2:29:50	3:23:36	4:32:13	W50
W55	6:59.4	7:32.2	14:38	15:46	24:37	39:59	49:59	1:15:19	1:42:08	2:35:48	3:31:43	4:43:04	W55
W60	7:18.1	7:52.3	15:17	16:28	25:43	41:46	52:13	1:18:40	1:46:41	2:42:46	3:41:10	4:55:42	W60
W65	7:39.9	8:15.9	16:02	17:18	27:00	43:51	54:49	1:22:36	1:52:01	2:50:53	3:52:12	5:10:27	W65
W70	8:05.9	8:43.9	16:57	18:16	28:31	46:19	57:54	1:27:14	1:58:18	3:00:28	4:05:13	5:27:52	W70
W75	8:36.5	9:16.9	18:01	19:25	30:19	49:14	61:33	1:32:44	2:05:46	3:11:51	4:20:42	5:48:33	W75
W80	9:13.4	9:56.6	19:18	20:49	32:29	52:45	65:56	1:39:20	2:14:44	3:25:31	4:39:17	6:13:24	W80
W85	9:58.3	10:45.2	20:52	22:30	35:12	57:02	71:17	1:47:24	2:25:39	3:42:11	5:01:55	6:43:40	W85
W90	10:54.2	11:45.3	22:49	24:36	38:39	62:20	77:55	1:57:23	2:39:12	4:02:51	5:30:00	7:21:12	W90

SAMPLE COMPLETED HEAT SHEETS - USING AGE FACTORS

MEET _____

DATE _____

RUNNING
EVENT _____

100

Open-Class Standard (OC): $\frac{9.85}{\text{men}}$ $\frac{10.78}{\text{women}}$

1	2	3	4	5	6	7	8	9	10
LANE	NAME	AFFILIATION	AGE	AGE FACTOR	ACTUAL TIME	AGE-GRADED TIME	PLACE	PERF. LEVEL PCT.	OVER-ALL PLACE
	JACK	NEW YORK	M40	.9435	12.07	11.39	3	86.5	3
2	DICK	DENVER TC	M32	.9769	13.91	13.59	6	72.5	9
3	BOB	GREAT BRITAIN	M41	.9392	12.07	11.34	2	86.9	2
4	BILL	PHILA. PIONEERS	M55	.8740	12.28	10.73	1	91.8	1
5	DAVID	ATLANTA TC	M27	1.0000	11.90	11.90	4	82.8	7
6	TOM	LOS ANGELES	M66	.8106	15.00	12.16	5	81.1	8
1	MARY	STRIDERS	W77	.7012	18.30	12.83	3	84.0	6
2	JANE	TAMPA, FLA.	W35	.9610	13.13	12.62	1	85.4	4
3	LAURIE	CHICAGO	W21	1.0000	12.64	12.64	2	85.3	5

MEET _____

DATE _____

FIELD
EVENT _____

HIGH JUMP

Open-Class Standard (OC): $\frac{2.42}{\text{men}}$ $\frac{2.09}{\text{women}}$

1	2	3	4	5	6	7	8	9	10				
WT.	NAME	CLUB	AGE	AGE FACTOR	1	2	3	4	ACTUAL MARK	AGE-GRADED MARK	PL.	PERF. LEVEL PCT.	OVER-ALL PLACE
	TED		M62	1.4148					1.42/4-8	2.01/6-7	3	83.1	2
	JOHN		M37	1.0853					1.83/6-0	1.99/6-6	4	82.2	4
	CHUCK		M72	1.5954					1.26/4-1 1/2	2.01/6-7	2	83.1	2
	PETE		M65	1.4660					1.32/4-4	1.94/6-4	5	80.2	7
	GEORGE		M40	1.1160					1.89/6-2	2.11/6-11	1	87.2	1
	DAJUNE		W40	1.1450					1.37/4-6	1.57/5-2	3	75.1	8
	EDITH		W75	1.8190					.94/3-1	1.71/5-7	1	81.8	5
	SUCAN		W24	1.0000					1.68/5-6	1.68/5-6	2	80.4	6

SAMPLE COMPLETED HEAT SHEETS - USING AGE FACTORS

MEET _____

DATE _____

RUNNING
EVENT

100

Open-Class Standard (OC): $\frac{9.85}{\text{men}}$ $\frac{10.78}{\text{women}}$

1	2	3	4	5	6	7	8	9	10
LANE	NAME	AFFILIATION	AGE	AGE FACTOR	ACTUAL TIME	AGE-GRADED TIME	PLACE	PERF. LEVEL PCT.	OVER-ALL PLACE
						col. 5 x col. 6		OC std. ÷ col. 7	
1	JACK	NEW YORK	M40	.9435	12.07	11.39	3	86.5	3
2	DICK	DENVER TC	M32	.9769	13.91	13.59	6	72.5	9
3	BOB	GREAT BRITAIN	M41	.9392	12.07	11.34	2	86.9	2
4	BILL	PHILA. PIONEERS	M55	.8740	12.28	10.73	1	91.8	1
5	DAVID	ATLANTA TC	M27	1.0000	11.90	11.90	4	82.8	7
6	TOM	LOS ANGELES	M66	.8106	15.00	12.16	5	81.1	8
1	MARY	STRIDERS	W77	.7012	18.30	12.83	3	84.0	6
2	JANE	TAMPA, FLA.	W35	.9610	13.13	12.62	1	85.4	4
3	LAURIE	CHICAGO	W21	1.0000	12.64	12.64	2	85.3	5

MEET _____

DATE _____

FIELD
EVENT

HIGH JUMP

Open-Class Standard (OC): $\frac{2.42}{\text{men}}$ $\frac{2.09}{\text{women}}$

1	2	3	4	5	6	7	8	9	10				
WT.	NAME	CLUB	AGE	AGE FACTOR	1	2	3	4	ACTUAL MARK	AGE-GRADED MARK	PL.	PERF. LEVEL PCT.	OVER-ALL PLACE
									col. 5 x col. 6			col. 7 ÷ OC	
	TED		M62	1.4148					1.42/4-8	2.01/6-7	3	83.1	2
	JOHN		M37	1.0853					1.83/6-0	1.99/6-6	4	82.2	4
	CHUCK		M72	1.5954					1.26/4-1½	2.01/6-7	2	83.1	2
	PETE		M65	1.4660					1.32/4-4	1.94/6-4	5	80.2	7
	GEORGE		M40	1.1160					1.89/6-2	2.11/6-11	1	87.2	1
	DAPHNE		W40	1.1450					1.37/4-6	1.57/5-2	3	75.1	8
	EDITH		W75	1.8190					.94/3-1	1.71/5-7	1	81.8	5
	SUSAN		W24	1.0000					1.68/5-6	1.68/5-6	2	80.4	6

SAMPLE COMPLETED HEAT SHEETS - USING AGE FACTORS

MEET _____ DATE _____ RUNNING EVENT SHORT HURDLES

Open-Class Standard (OC): 12.90 12.25
men women

							col. 5 x col. 6			OC std. ÷ col. 7	
1	2	3			4	5	6	7	8	9	10
LANE	NAME	CLUB	DIST	HT	AGE	AGE FACTOR	ACTUAL TIME	AGE-GRADED TIME	PLACE	PERF. LEVEL PCT.	OVER-ALL PLACE
1	ROGER		110	42"	M25	1.0000	14.95	14.95	2	86.3	3
2	LARRY		110	39"	M33	.9811	15.89	15.59	6	82.7	7
3	DON		110	39"	M40	.9401	16.25	15.28	4	84.4	6
4	MIKE		100	36"	M57	.8789	17.03	14.97	3	86.2	4
5	HARRY		100	33"	M65	.8118	18.37	14.91	1	86.5	2
6	JIM		80	30"	M76	.9150	16.62	15.21	5	84.8	5
1	PHILIPPA		80	30"	W42	1.1365	12.33	14.01	1	87.4	1
2	MARTHA		80	30"	W54	1.0206	15.46	15.78	2	77.6	8

MEET _____ DATE _____ FIELD EVENT SHOT PUT

Open-Class Standard (OC): 20.40 19.58
men women

									col. 5 x col. 6			col. 7 ÷ OC	
1	2	3	4	5					6	7	8	9	10
WT.	NAME	CLUB	AGE	AGE FACTOR	1	2	3	4	ACTUAL MARK	AGE-GRADED MARK	PL.	PERF. LEVEL PCT.	OVER-ALL PLACE
16#	BOB		M42	1.1502					12.96/42-6	14.91/48-11	4	73.1	5
6Kg	PHIL		M53	1.1894					13.24/43-5	15.75/51-8	3	77.2	4
5Kg	DAVE		M67	1.4135					12.03/39-5	17.01/55-9½	2	83.4	2
4Kg	DOC		M72	1.4377					12.24/40-2	17.60/57-9	1	86.3	1
4Kg	HERB		M85	2.0500					7.17/23-6	14.70/48-2½	5	72.1	6
4Kg	JOAN		W38	1.1288					10.36/34-0	11.69/38-4	2	59.7	7
3Kg	LINDA		W55	1.3600					7.72/25-4	10.50/34-5	3	53.6	8
3Kg	BERNICE		W64	1.6445					9.42/30-11	15.49/50-10	1	79.1	3

SAMPLE COMPLETED HEAT SHEET - USING AGE FACTORS - FOR MULTI-EVENT COMPETITION

MEET _____ DATE _____ MULTI-EVENT DECATHLON/HEPTATHLON

Open-Class Standard (OC): men women

col. 5
x col. 6

1	2	3	4	5	6	7	8	9
LANE	NAME	AFFILIATION	AGE	AGE FACTOR	ACTUAL TIME	AGE-GRADED TIME	PLACE	IAAF POINTS
		MEN'S 400						
1	BARRY		M45	.8839	58.12	51.37	3	753
2	JOE		M45	.8839	57.27	50.62	2	786
3	GARY		M45	.8839	56.16	49.64	1	831
4	STAN		M45	.8839	59.07	52.21	4	716
		WOMEN'S 200						
1	MARILYN		W40	.9238	27.51	25.41	2	850
2	PHILIPPA		W40	.9238	26.60	24.57	1	927
3	MARY		W40	.9238	28.15	26.00	3	797
4	KELLY		W40	.9238	29.64	27.38	4	681

SAMPLE COMPLETED HEAT SHEETS - USING AGE STANDARDS

MEET _____ DATE _____ RUNNING EVENT 100

Open-Class Standard (OC): $\frac{9.85}{\text{men}}$ $\frac{10.78}{\text{women}}$

1	2	3	4	5	6	col. 5 ÷ col. 6	8	OC ÷ col. 7
LANE	NAME	AFFILIATION	AGE	TIME STANDARD	ACTUAL TIME	PERF. LEVEL PCT.	PLACE	AGE- GRADED TIME
1	JACK		M40	10.44	12.07	86.5	3	11.39
2	DICK		M32	10.08	13.91	72.5	9	13.59
3	BOB		M41	10.49	12.07	86.9	2	11.34
4	BILL		M55	11.27	12.28	91.8	1	10.73
5	DAVID		M27	9.85	11.90	82.8	7	11.90
6	TOM		M66	12.16	15.00	81.1	8	12.15
7	MARY		W77	15.37	18.30	84.0	6	12.83
8	JANE		W35	11.22	13.13	85.5	5	12.61
9	LAURIE		W21	10.78	12.64	85.3	4	12.64

MEET _____ DATE _____ FIELD EVENT HIGH JUMP

Open-Class Standard (OC): $\frac{2.42}{\text{men}}$ $\frac{2.09}{\text{women}}$

1	2	3	4	5					6	col. 6 ÷ col. 5	8	9
WT.	NAME	CLUB	AGE	DIST. STD.	1	2	3	4	ACTUAL MARK	PERF. LEVEL PCT.	PL.	AGE-GRADED MARK
	TED		M62	1.71					1.42/4-8	83.0	3	2.01/6-7
	JOHN		M37	2.23					1.83/6-0	82.1	4	1.99/6-6
	CHUCK		M72	1.51					1.26/4-1 1/2	83.4	2	2.01/6-7
	PETE		M65	1.65					1.32/4-4	80.0	7	1.94/6-4
	GEORGE		M40	2.17					1.89/6-2	87.1	1	2.11/6-11
	DAPHNE		W40	1.83					1.37/4-6	74.9	8	1.57/5-2
	EDITH		W75	1.15					.94/3-1	81.7	5	1.71/5-7
	SUSAN		W24	2.09					1.68/5-6	80.4	6	1.68/5-6

SAMPLE COMPLETED HEAT SHEETS - USING AGE STANDARDS

MEET _____

DATE _____

RUNNING EVENT SHORT HUROLES

Open-Class Standard (OC): 12.90 12.25
men women

1	2	3	4		5	6	7	8	9
			Dist	HT					
LANE	NAME	CLUB	AGE	TIME STANDARD	ACTUAL TIME	PERF. LEVEL PCT.	PLACE	AGE-GRADED TIME	
1	ROGER		110 42"	M25	12.90	14.95	86.3	3	14.95
2	LARRY		110 39"	M33	13.15	15.89	82.8	7	15.58
3	DON		110 39"	M40	13.71	16.25	84.4	6	15.28
4	MIKE		100 36"	M57	14.68	17.03	86.2	4	14.97
5	HARRY		100 33"	M65	15.89	18.37	86.5	2	14.91
6	JIM		80 30"	M76	14.10	16.62	84.8	5	15.21
7	PHILIPPA		80 30"	W42	10.78	12.33	87.4	1	14.01
8	MARTHA		80 30"	W54	12.00	15.46	77.6	8	15.78

MEET _____

DATE _____

FIELD EVENT SHOT PUT

Open-Class Standard (OC): 20.40 19.58
men women

1	2	3	4	5	6				7	8	9
					1	2	3	4			
WT.	NAME	CLUB	AGE	DIST. STD.	ACTUAL MARK	PERF. LEVEL PCT.	PL.	AGE-GRADED MARK			
16#	BOB		M42	17.73	12.96/42-6	73.1	5	14.91/48-11			
6Kg	PHIL		M53	17.15	13.24/43-5	77.2	4	15.75/51-8			
5Kg	DAVE		M67	14.43	12.03/39-5	83.4	2	17.01/55-9 1/2			
4Kg	DOC		M72	14.19	12.24/40-2	86.3	1	17.60/57-9			
4Kg	HERB		M85	9.95	7.17/23-6	72.1	6	14.71/48-3			
4Kg	JUAN		W38	17.35	10.36/34-0	59.7	7	11.69/38-4			
3Kg	LINDA		W55	14.40	7.72/25-4	53.6	8	10.50/34-5			
3Kg	BERNICE		W64	11.90	9.42/30-11	79.1	3	15.49/50-10			

SAMPLE COMPLETED HEAT SHEET - USING AGE STANDARDS

MEET _____

DATE _____

RUNNING
EVENT

10K

Open-Class Standard (OC): 26:55 29:53
men women

1	2	3	4	5	6	col. 5 ÷ col. 6	8	OC std. ÷ col. 7
LANE	NAME	AFFILIATION	AGE	TIME STANDARD	ACTUAL TIME	PERF. LEVEL PCT.	PLACE	AGE- GRADED TIME
	STEVE FERRAZ		M40	28:33	31:33	90.5	3	29:45
	STEVE LESTER		M45	29:30	31:38	93.3	1	28:51
	BILL JOHNSTON		M50	30:34	33:59	89.9	5	29:56
	PATRICK DEVINE		M55	31:53	37:45	84.4	11	31:54
	ORLO KENNISTON		M60	33:29	37:00	90.5	2	29:45
	MAC OSBORN		M70	37:25	43:28	86.1	7	31:16
	BILL BROBSTON		M75	39:50	46:36	85.5	9	31:29
	CHET CRABB		M80	42:36	58:25	72.9	14	36:55
	PAUL SPANGLER		M85	45:49	65:52	69.6	15	38:40
	GAIL SCOTT		W40	31:53	37:30	85.0	10	35:09
	CHRIS TATTERSALL		W45	33:04	38:03	86.9	6	34:23
	GINA FAUST		W50	34:25	38:10	90.2	4	33:08
	HELEN DICK		W60	38:06	44:20	85.9	8	34:47
	GERRY DAVIDSON		W65	40:28	51:00	79.3	12	37:41
	JUDY SIMON		W70	43:14	55:48	77.5	13	38:34
	MARY AMES		W80	50:13	81:16	61.8	16	48:21

DISTANCE RUN - MEN				MEN'S HANDICAP (meters)			DISTANCE RUN - WOMEN			WOMEN'S HANDICAP (meters)				
AGE	T=9.85	T=19.62	T=43.29	100 M	200 M	400 M	AGE	T=9.85	T=19.62	T=43.29	100 M	200 M	400 M	
OC	100.0	200.0	400.0	OC	0.0	0.0	OC	91.4	181.9	366.7	OC	8.6	18.1	33.3
30	98.5	196.8	394.0	30	1.5	3.2	30	89.9	178.7	360.7	30	10.1	21.3	39.3
31	98.1	195.7	391.8	31	1.9	4.3	31	89.5	177.7	358.6	31	10.5	22.3	41.4
32	97.7	194.7	389.6	32	2.3	5.3	32	89.1	176.7	356.4	32	10.9	23.3	43.6
33	97.3	193.6	387.3	33	2.7	6.4	33	88.7	175.7	354.3	33	11.3	24.3	45.7
34	96.9	192.6	385.1	34	3.1	7.4	34	88.3	174.7	352.1	34	11.7	25.3	47.9
35	96.5	191.5	382.9	35	3.5	8.5	35	87.9	173.7	349.9	35	12.1	26.3	50.1
36	96.1	190.5	380.6	36	3.9	9.5	36	87.6	172.7	347.7	36	12.4	27.3	52.3
37	95.7	189.5	378.4	37	4.3	10.5	37	87.2	171.7	345.5	37	12.8	28.3	54.5
38	95.3	188.4	376.1	38	4.7	11.6	38	86.8	170.7	343.2	38	13.2	29.3	56.8
39	94.8	187.4	373.9	39	5.2	12.6	39	86.4	169.7	341.0	39	13.6	30.3	59.0
40	94.4	186.3	371.6	40	5.6	13.7	40	86.0	168.7	338.8	40	14.0	31.3	61.2
41	94.0	185.3	369.3	41	6.0	14.7	41	85.6	167.6	336.6	41	14.4	32.4	63.4
42	93.6	184.2	367.0	42	6.4	15.8	42	85.2	166.6	334.3	42	14.8	33.4	65.7
43	93.2	183.1	364.7	43	6.8	16.9	43	84.8	165.6	332.1	43	15.2	34.4	67.9
44	92.7	182.1	362.3	44	7.3	17.9	44	84.4	164.6	329.8	44	15.6	35.4	70.2
45	92.3	181.0	360.0	45	7.7	19.0	45	84.0	163.5	327.5	45	16.0	36.5	72.5
46	91.9	179.9	357.7	46	8.1	20.1	46	83.6	162.5	325.3	46	16.4	37.5	74.7
47	91.5	178.9	355.4	47	8.5	21.1	47	83.2	161.5	323.0	47	16.8	38.5	77.0
48	91.1	177.8	353.0	48	8.9	22.2	48	82.8	160.4	320.7	48	17.2	39.6	79.3
49	90.6	176.7	350.6	49	9.4	23.3	49	82.4	159.4	318.4	49	17.6	40.6	81.6
50	90.2	175.6	348.3	50	9.8	24.4	50	82.0	158.3	316.0	50	18.0	41.7	84.0
51	89.8	174.5	345.9	51	10.2	25.5	51	81.6	157.3	313.7	51	18.4	42.7	86.3
52	89.3	173.4	343.5	52	10.7	26.6	52	81.1	156.2	311.4	52	18.9	43.8	88.6
53	88.8	172.2	341.1	53	11.2	27.8	53	80.7	155.1	309.1	53	19.3	44.9	90.9
54	88.4	171.1	338.7	54	11.6	28.9	54	80.3	154.0	306.7	54	19.7	46.0	93.3
55	87.9	170.0	336.3	55	12.1	30.0	55	79.8	152.9	304.3	55	20.2	47.1	95.7
56	87.4	168.8	333.9	56	12.6	31.2	56	79.3	151.8	302.0	56	20.7	48.2	98.0
57	87.0	167.7	331.5	57	13.0	32.3	57	78.9	150.7	299.6	57	21.1	49.3	100.4
58	86.5	166.5	329.0	58	13.5	33.5	58	78.4	149.6	297.2	58	21.6	50.4	102.8
59	86.0	165.3	326.6	59	14.0	34.7	59	77.9	148.4	294.8	59	22.1	51.6	105.2
60	85.4	164.1	324.1	60	14.6	35.9	60	77.4	147.3	292.3	60	22.6	52.7	107.7
61	84.9	162.9	321.6	61	15.1	37.1	61	76.9	146.1	289.9	61	23.1	53.9	110.1
62	84.4	161.7	319.1	62	15.6	38.3	62	76.4	144.9	287.4	62	23.6	55.1	112.6
63	83.8	160.4	316.6	63	16.2	39.6	63	75.8	143.7	284.9	63	24.2	56.3	115.1
64	83.3	159.2	314.0	64	16.7	40.8	64	75.3	142.5	282.4	64	24.7	57.5	117.6
65	82.7	157.9	311.4	65	17.3	42.1	65	74.7	141.2	279.9	65	25.3	58.8	120.1
66	82.1	156.6	308.9	66	17.9	43.4	66	74.2	140.0	277.3	66	25.8	60.0	122.7
67	81.5	155.3	306.3	67	18.5	44.7	67	73.6	138.7	274.8	67	26.4	61.3	125.2
68	80.9	153.9	303.6	68	19.1	46.1	68	73.0	137.4	272.2	68	27.0	62.6	127.8
69	80.3	152.6	301.0	69	19.7	47.4	69	72.4	136.1	269.6	69	27.6	63.9	130.4
70	79.6	151.2	298.3	70	20.4	48.8	70	71.7	134.8	266.9	70	28.3	65.2	133.1
71	79.0	149.8	295.6	71	21.0	50.2	71	71.1	133.4	264.2	71	28.9	66.6	135.8
72	78.3	148.4	292.9	72	21.7	51.6	72	70.5	132.0	261.5	72	29.5	68.0	138.5
73	77.7	147.0	290.1	73	22.3	53.0	73	69.8	130.6	258.8	73	30.2	69.4	141.2
74	76.9	145.5	287.4	74	23.1	54.5	74	69.1	129.2	256.0	74	30.9	70.8	144.0
75	76.2	144.0	284.5	75	23.8	56.0	75	68.4	127.7	253.2	75	31.6	72.3	146.8
76	75.5	142.5	281.7	76	24.5	57.5	76	67.6	126.2	250.4	76	32.4	73.8	149.6
77	74.7	140.9	278.8	77	25.3	59.1	77	66.9	124.7	247.6	77	33.1	75.3	152.4
78	73.9	139.3	275.9	78	26.1	60.7	78	66.1	123.1	244.7	78	33.9	76.9	155.3
79	73.0	137.7	272.9	79	27.0	62.3	79	65.2	121.5	241.7	79	34.8	78.5	158.3
80	72.2	136.0	269.9	80	27.8	64.0	80	64.4	119.9	238.7	80	35.6	80.1	161.3
81	71.3	134.3	266.9	81	28.7	65.7	81	63.5	118.2	235.6	81	36.5	81.8	164.4
82	70.4	132.6	263.8	82	29.6	67.4	82	62.7	116.5	232.6	82	37.3	83.5	167.4
83	69.5	130.9	260.7	83	30.5	69.1	83	61.7	114.8	229.4	83	38.3	85.2	170.6
84	68.5	129.0	257.5	84	31.5	71.0	84	60.8	113.0	226.2	84	39.2	87.0	173.8
85	67.5	127.2	254.3	85	32.5	72.8	85	59.8	111.1	223.0	85	40.2	88.9	177.0
86	66.5	125.3	251.1	86	33.5	74.7	86	58.8	109.2	219.6	86	41.2	90.8	180.4
87	65.5	123.4	247.8	87	34.5	76.6	87	57.7	107.3	216.3	87	42.3	92.7	183.7
88	64.4	121.4	244.4	88	35.6	78.6	88	56.6	105.3	212.9	88	43.4	94.7	187.1
89	63.3	119.4	241.1	89	36.7	80.6	89	55.5	103.3	209.4	89	44.5	96.7	190.6
90	62.2	117.4	237.6	90	37.8	82.6	90	54.4	101.3	205.9	90	45.6	98.7	194.1

100, 200 and 400 (Handicap Start) - Sample Completed Heat Sheet

MEET _____ DATE _____ RUNNING EVENT 100

Open-Class Standard (OC): 9.85
men

OC std.
col.7

1	2	3	4	5	6	7	8	9	10
LANE	NAME	AFFILIATION	AGE	HANDICAP (meters)	DISTANCE RUN	ACTUAL AND AGI-GRADED TIME	PLACE	PERF. LEVEL PCT.	OVER-ALL PLACE
1	BESS		W78	33.9	66.1	11.3	5	87.2	
2	TONY		M74	23.1	76.9	11.5	7	85.6	
3	BRUCE		M55	12.1	87.9	10.4	1	94.7	
4	KEN		M37	4.3	95.7	10.9	3	90.4	
5	BOB		M61	15.1	84.9	11.4	6	86.4	
6	IRENE		W53	19.3	80.7	10.5	2	93.8	
7	BEN		M25	0	100.0	11.0	4	89.5	

Sample Completed Heat Sheet - Portsmouth Start

Meet _____ Date _____ Event 800 (PORTSMOUTH START)

OC STD. 1:42 (102 sec.) REPORT OF HEAD JUDGE OF FINISH

Head Judge _____ (Signed) Head Timer _____ (Signed)

1	2	3	4	5	6	7	8	9	10
Age	Time Std	TIME STD (Sec.)	NAME	AFFILIATION	HCP (sec.)	START DELAY	Total Time	Place	Actual Time
W60	2:27	147	JANE		45	:00	3:15	7	3:15
M62	2:11	131	TIM		29	:16	2:57	5	2:41
W39	2:02	122	MARY		20	:25	3:07	6	2:42
W25	1:53	113	DEBBIE		11	:34	2:50	3	2:16
M44	1:52	112	JOE		10	:35	2:47	1	2:12
M35	1:46	106	MARK		4	:39	2:56	4	2:17
M25	1:42	102	JOHN		0	:45	2:49	2	2:04

1. KEEP TRACK OF YOUR PROGRESS OVER THE YEARS, AND SET GOALS FOR THE CURRENT YEAR AND FUTURE YEARS
PERSONAL PERFORMANCE CHART

NAME JOHN

			7x9(R) 7÷9(F) 4x5	3÷5	3÷4	4+9(R) 4x9(F) 7÷5	3÷9(R) 3x9(F) 5x6; 5x8	4+9(R) 4x9(F) 7÷5	4-6or8(R) 6or8÷4(F) 3÷7(R) 7÷3(F)	Find pts. in IAAF tables
	1	2	3	4	5	6	7	8	9	10
DATE OR YEAR	AGE	EVENT	OC STANDARD	AGE STANDARD	AGE FACTOR	ACTUAL MARK	AGE-GRADED MARK	GOAL	PERF. LEVEL PCT	IAAF PTS.
1960	21	100	9.85		1.0000	11.6	11.60		84.9%	732
1979	40	"	"		.9435	12.07	11.39		86.5%	776
1984	45	"	"		.9217	12.31	11.35		86.8%	784
1989	50	"	"		.8987	12.85	11.55		85.3%	742
1990	51	-	"	11.02	.8940		11.35	12.70	86.8%	784
2009	70	-	"		.7832			14.49	"	784
1960	21	800	1541.73		1.0000	2:02.4	2:02.40		83.1%	
1979	40	"	"		.9285	2:12.3	2:02.86		82.8%	
1984	45	"	"		.8985	2:09.7	1:56.53		87.3%	
1989	50	"	"		.8670	2:18.04	1:59.68		85.0%	
1990	51	"	"		.8602		1:56.53	2:15.47	87.3%	
2009	70	"	"		.7083		"	2:44.52	"	
1960	21	10K	26:55		1.0000	-	-		-	
1979	40	"	"		.9430	36:15	34:12		78.7%	
1984	45	"	"		.9125	34:21	31:20		85.9%	
1989	50	"	"		.8804	37:06	32:40		82.4%	
1990	51	"	"		.8735		31:20	35:52	85.9%	
2009	70	"	"		.7192		"	43:34	"	
1960	21	LJ	8.79		1.0000	7.10/23-3½	7.10/23-3½		80.8%	838
1979	40	"	"		1.1320	6.00/19-8	6.79/22-3¼		77.3%	764
1984	45	"	"		1.2010	5.80/19-0	6.96/22-10		79.2%	804
1989	50	"	"		1.2790	5.20/17-¼	6.65/21-9¾		75.7%	732
1990	51	"	"		1.2959		7.10/23-3½	5.48/17-11¾	80.5%	838
2009	70	"	"		1.6940		"	4.19/13-9	80.8%	838

R = running events; F = field events -54- x = multiply by ÷ = divide by

2. COMPARE YOUR PERFORMANCES IN DIFFERENT EVENTS

PERSONAL PERFORMANCE CHART

NAME _____

				7x9(R) 7÷9(F) 4x5	3÷5	3÷4	4÷9(R) 4x9(F) 7÷5	3÷9(R) 3x9(F) 5x6; 5x8	4÷9(R) 4x9(F) 7÷5	4÷6or8(R) 6or8÷4(F) 3÷7(R) 7÷3(F)	Find pts. in IAAF tables
1	2	3	4	5	6	7	8	9	10		
DATE OR YEAR	AGE	EVENT	OC STANDARD	AGE STANDARD	AGE FACTOR	ACTUAL MARK	AGE-GRADED MARK	GOAL	PERF. LEVEL PCT	IAAF PTS.	
1984	45	100	9.85		.9217	12.31	11.35		86.8%		
"	"	800	1:41.73		.8985	2:09.7	1:56.53		87.3%		
"	"	10K	26:55		.9125	34:21	31:20		85.9%		
"	"	LJ	8.79		1.2010	5.80/19-0	6.96/22-10		79.2%		

3. CHART YOUR PROGRESS IN CURRENT YEAR

PERSONAL PERFORMANCE CHART

NAME _____

				7x9(R) 7÷9(F) 4x5	3÷5	3÷4	4÷9(R) 4x9(F) 7÷5	3÷9(R) 3x9(F) 5x6; 5x8	4÷9(R) 4x9(F) 7÷5	4÷6or8(R) 6or8÷4(F) 3÷7(R) 7÷3(F)	Find pts. in IAAF tables
1	2	3	4	5	6	7	8	9	10		
DATE OR YEAR	AGE	EVENT	OC STANDARD	AGE STANDARD	AGE FACTOR	ACTUAL MARK	AGE-GRADED MARK	GOAL	PERF. LEVEL PCT	IAAF PTS.	
90 GOAL	51	800	1:41.73	1:58.27	.8602		1:56.53	2:15.47	87.3%		
5/15	"	"	"	"	"	2:25.10	2:04.82		81.5%		
6/10	"	"	"	"	"	2:22.25	2:02.42		83.1%		
7/1	"	"	"	"	"	2:20.14	2:00.53		84.4%		
7/22	"	"	"	"	"	2:17.50	1:58.29		86.0%		
8/2	"	"	"	"	"	2:15.46	1:56.52		87.3%		

5. ESTIMATE YOUR PERFORMANCE IN NEW EVENTS

PERSONAL PERFORMANCE CHART

NAME _____

		7x9(R) 7÷9(F) 4x5	3÷5	3÷4	4+9(R) 4x9(F) 7÷5	3÷9(R) 3x9(F) 5x6; 5x8	4+9(R) 4x9(F) 7÷5	4÷6or8(R) 6or8÷4(F) 3÷7(R) 7÷3(F)	Find pts. in IAAF tables	
DATE OF YEAR	1 AGE	2 EVENT	3 OC STANDARD	4 AGE STANDARD	5 AGE FACTOR	6 ACTUAL MARK	7 AGE-GRADED MARK	8 GOAL	9 PERF. LEVEL PCT	10 IAAF PTS.
	M51	100	9.85	11.02	.8940	12.70	11.35		86.8%	
	"	200	19.62	22.60	.8679			26.04	"	
	"	400	43.29	51.43	.8418			59.25	"	
	"	800	1:41.73	1:58.27	.8602			2:16.15	"	
	M51	1500	3:29.46	4:02.41	.8641	4:53.06	4:13.23		82.7%	
	"	MILE	3:46.09	4:21.51	.8646			5:16.21	"	
	"	5000	12:57	14:50	.8735			17:56	"	
	M51	10K	26:55	30:49	.8735	38:16	33:26		80.5%	
		MARA.	2:04:20	2:20:23	.8856			2:54:23	"	
	M51	5H	12.90	13.63	.9465	17.30	16.37		78.8%	
	"	LH	47.02	40.10	1.1724			50.89	"	
	M51	HJ	2.42	1.94	1.2485	1.60/5-3	1.99/6-6½		82.6%	
	"	PV	6.03	4.63	1.3023			3.82/12-6¼	"	
	"	LJ	8.79	6.78	1.2959			5.60/18-4¼	"	
	"	TJ	17.97	13.79	1.3025			11.39/37-4¼	"	
	M51	5P	20-40	17.59	1.1596	14.17/46-6	16.43/53-11		80.6%	
	"	DT	69.50	60.99	1.1396			49.16/161-3	"	
	"	HT	76.85	63.74	1.2056			51.37/168-6	"	
	"	JAV	90.42	64.69	1.3978			52.14/171-0	"	
	M51	M-W	5:44.0	6:29.5	.8832	7:58.50	7:02.61		81.4%	
	"	5K-W	18:51	21:13	.8881			26:04	"	
	"	20K-W	1:18:40	1:28:05	.8931			1:48:12	"	

WORLD TRACK & FIELD AGE-GROUP RECORDS

Men's World Five Year Age Group Records

100 METERS			
DIV.	MARK	NAME(RESIDENCE)	AGE MEET DATE
M35	10.3	EDWARD JEFFERIS(RSA)	35 11-24-71
M40	10.7	THANE BAKER(USA)	41 9-13-72
M45	11.0	THANE BAKER(USA)	48 6-14-80
M50	11.2	KEN DENNIS(USA)	50 7-18-87
M55	11.6	PAYTON JORDAN(USA)	56 6-23-73
M60	11.6	ALFRED GUIDET(USA)	56 6-22-74
M65	11.8	PAYTON JORDAN(USA)	61 5-27-78
M65	12.5	BERNARD HOGAN(AUS)	65 11-30-85
M70	13.0	PAYTON JORDAN(USA)	70 4-25-87
M75	14.3	JOSIAH PACKARD(USA)	75 6-23-79
M80	15.4	JOSIAH PACKARD(USA)	80 2-25-84
M85	16.3	DUNCAN MCCLEAN(SCO)	88 7-6-73

200 METERS			
DIV.	MARK	NAME(RESIDENCE)	AGE MEET DATE
M35	20.8	DELANO HERIMETHER(USA)	35 6-9-78
M40	20.68	PIETRO MENNEA(ITA)	35 - -87
M40	21.9	REGINALD AUSTIN(AUS)	40 8-10-77
M45	21.8	MANUEL ULACIO(VEN)	42 9-4-82
M45	22.3	GEORGE RHODEN(JAM)	45 7-2-72
M50	22.9	KEN DENNIS(USA)	50 7-18-87
M55	23.6	RON TAYLOR(GBR)	52 7-31-86
M55	23.9	ALFRED GUIDET(USA)	55 6-24-73
M60	24.9	PAYTON JORDAN(USA)	60 6-19-77
M65	25.6	BERNARD HOGAN(AUS)	65 12-6-85
M70	26.8	PAYTON JORDAN(USA)	70 6-20-87
M75	29.5	JOSIAH PACKARD(USA)	75 6-24-79
M80	32.3	JOSIAH PACKARD(USA)	80 2-18-84
M85	39.3	CHARLES BOOTH(AUS)	85 3-19-89

400 METERS			
DIV.	MARK	NAME(RESIDENCE)	AGE MEET DATE
M35	46.38	JAMES KING(USA)	35 5-25-84
M40	48.75	HAGUES ROGER(FRA)	41 7-16-82
M45	50.46	HANNO RHEINECK(FRG)	45 12-5-87
M50	50.46	JAMES BURNETT(USA)	45 6-29-85
M50	51.8	RON TAYLOR(GBR)	52 9-27-86
M55	53.98	CHARLIE WILLIAMS(GBR)	57 12-5-87
M60	53.81	BERTHOLD NEUMANN(FRG)	55 9-6-86
M60	57.65	JACK GREENWOOD(USA)	60 7-20-86
M65	52.4	PETER MIRKES(FRG)	60 8-28-68
M65	61.4	JOHN ALEXANDER(USA)	67 5-16-87
M70	64.6	JOSIAH PACKARD(USA)	73 8-10-77
M75	68.5	JOSIAH PACKARD(USA)	75 6-23-79
M80	75.4	HAROLD CHAPSON(USA)	80 7-9-83
M85	91.54	LONGINO PEREZ(MEX)	85 12-5-87

800 METERS			
DIV.	MARK	NAME(RESIDENCE)	AGE MEET DATE
M35	1:49.2Y	GEORGE SCOTT(NZL)	35 5-12-72
M40	1:53.5	RON BELL(GBR)	40 6-14-87
M45	1:53.3	NOEL CARROLL(GBR)	40 6-23-82
M45	1:57.73	GEORGE COHEN(USA)	45 8-23-85
M50	1:57.4	KLAUS MAINKA(GFR)	45 - -81
M50	2:00.70	TOM ROBERTS(AUS)	50 4-22-84
M55	2:06.6	DEREK TURNBULL(NZL)	55 5-14-82
M60	2:17.0	JOHN GILMOUR(AUS)	60 1-11-81
M65	2:14.02M	FRANK EVANS(NZL)	60 6-25-85
M65	2:20.5	JACK STEVENS(AUS)	65 8-13-82
M70	2:34.5	MONTY MONTGOMERY(USA)	71 9-4-77
M75	2:40.0	HAROLD CHAPSON(USA)	75 5-14-78
M80	2:53.5	HAROLD CHAPSON(USA)	80 7-11-82
M85	3:29.42	HAROLD CHAPSON(USA)	81 10-9-83
M85	3:29.42	LONGINO PEREZ(MEX)	85 11-29-87

1500 METERS			
DIV.	MARK	NAME(RESIDENCE)	AGE MEET DATE
M35	3:33.91	MIKE BOIT(KEN)	36 8-21-85
M40	3:52.0	MICHEL BERNARD(FRA)	40 6-20-72
M45	4:01.47	DAVID SIRL(GBR)	45 12-5-87
M50	4:05.2	TOM ROBERTS(AUS)	50 3-22-84
M55	4:17.4	DEREK TURNBULL(NZL)	55 2-20-82
M60	4:14.4	GUNTHER HESSELMANN(FRG)	55 6-23-81
M60	4:30.0	JOHN GILMOUR(AUS)	60 12-22-79
M65	4:41.82	JACK RYAN(AUS)	65 12-5-87
M70	5:11.8	MERV JENKINSON(AUS)	70 1-6-80
M75	5:30.1	HAROLD CHAPSON(USA)	75 8-11-77
M80	6:04.28	ED BENHAM(USA)	80 12-5-87
M85	7:03.38	LONGINO PEREZ(MEX)	85 12-5-87

1 MILE			
DIV.	MARK	NAME(RESIDENCE)	AGE MEET DATE
M35	3:52.48	JOHN WALKER(NZL)	36 7-2-88
M40	4:12.58	RON BELL(GBR)	42 8-6-88
M45	4:16.75	DAVID SIRL(AUS)	45 12-6-87
M50	4:30.06	TOM ROBERTS(AUS)	53 12-6-87
M55	4:40.4	JACK RYAN(AUS)	55 12-15-77
M60	4:57.1	JOHN GILMOUR(AUS)	61 11-13-80
M65	5:05.61	JACK RYAN(AUS)	65 12-6-87
M70	5:42.2	MONTY MONTGOMERY(USA)	70 7-9-77
M75	6:15.1	HAROLD CHAPSON(USA)	78 7-5-81
M80	8:07.1	PAUL SPANGLER(USA)	81 6-7-80
M85	8:43.3	HAROLD CHAPSON(USA)	80 3-4-83
M85	8:04.7	JOSEF GALIA(FRG)	87 9-4-85

3000 METERS			
DIV.	MARK	NAME(RESIDENCE)	AGE MEET DATE
M35	7:52.48	JOHN WALKER(NZL)	35 7-10-87
M40	8:17.4	JACK FOSTER(NZL)	43 1-31-76
M45	p8:17.4	BARRY BROWN(USA)	40 7-30-84
M45	8:36.0	LAURIE OHARA(GBR)	45 7-8-77
M50	8:53.8	RAY HATTON(USA)	50 6-25-82
M55	9:12.8	JACK RYAN(AUS)	55 1-24-78
M60	p9:01.8	GUNTHER HESSELMANN(FRG)	55 7-15-81
M60	9:41.2	JOHN GILMOUR(AUS)	61 11-22-80
M65	10:10.2	JOHN GILMOUR(AUS)	65 11-22-84
M70	11:46.2	HAROLD CHAPSON(USA)	73 3-28-76
M75	p11:43.8	JOHN FARRELL(GBR)	70 6-27-82
M75	13:06.4	RICHARD BREDEHBECK(USA)	75 6-13-81
M80	p12:23.4	ED BENHAM(USA)	75 5-7-83
M80	14:39.0	PAUL SPANGLER(USA)	80 9-14-86
M85	p13:17.0	FRITZ HELBER(FRG)	85 5-4-84
M85	16:32.0	PAUL SPANGLER(USA)	85 5-4-84

5000 METERS			
DIV.	MARK	NAME(RESIDENCE)	AGE MEET DATE
M35	13:16.36	CARLOS LOPES(POR)	37 6-28-84
M40	13:45.6	LUCIEN RAULT(FRA)	40 5-21-76
M45	14:23.6	LUCIEN RAULT(FRA)	46 6-19-82
M50	15:31.0	ALAIN MIHOUN(FRA)	50 6-6-71
M55	p15:06.0	JEAN ONSELE(BEL)	50 9-12-84
M55	15:52.8	JACK RYAN(AUS)	55 4-20-78
M60	p15:42.4	GUNTHER HESSELMANN(FRG)	55 6-27-81
M60	16:33.3	JOHN GILMOUR(AUS)	61 8-9-80
M65	17:43.4	JACK RYAN(AUS)	65 12-1-87
M70	19:33.0	JOHN FARRELL(GBR)	70 6-20-79
M75	20:59.0	EDWARD BENHAM(USA)	75 9-23-83
M80	21:57.88	EDWARD BENHAM(USA)	81 8-6-88
M85	26:50.2	JOSEF GALIA(FRG)	87 8-16-85

10,000 METERS			
DIV.	MARK	NAME(RESIDENCE)	AGE MEET DATE
M35	27:17.48	CARLOS LOPES(POR)	37 7-2-84
M40	28:33.4	LUCIEN RAULT(FRA)	40 6-9-76
M45	30:02.56	ANTONIO VILLANUEVA(MEX)	45 11-29-87
M50	32:05.6	LUCIANO AJARONE(ITA)	51 10-1-81
M55	33:08.2	DEREK TURNBULL(NZL)	55 2-13-82
M60	p32:50.3	GUNTHER HESSELMANN(FRG)	55 6-2-81
M60	34:23.0	JOHN GILMOUR(AUS)	61 11-26-80
M65	36:04.6	TEDE JENSEN(SWE)	65 9-15-72
M70	40:40.2	ALAN BURGOME(AUS)	71 12-16-85
M75	42:34.8	LUIS RIVERA(MEX)	75 9-3-77
M80	44:29.4	EDWARD BENHAM(USA)	81 8-4-88
M85	54:23.0	JOSEF GALIA(FRG)	87 8-28-85

ONE HOUR RUN			
DIV.	MARK	NAME(RESIDENCE)	AGE MEET DATE
M35	12:15.99	20.774 GASTON ROELANTS(BEL)	35 9-20-72
M40	11:13.09	18.900 WILLIAM STODDART(GBR)	40 8-21-71
M45	11:12.68	18.862 ALAIN MIHOUN(FRA)	45 3-20-66
M50	11:95.4	18.575 ALAIN MIHOUN(FRA)	50 5-16-71
M55	10:11.94	17.185 JOHN GILMOUR(AUS)	55 10-14-74
M60	10:03.1	16.853 JOHN GILMOUR(AUS)	61 10-21-79
M65	9:15.40	15.892 JOHN GILMOUR(AUS)	65 10-7-84
M70	9:17.3	14.642 STAN NICHOLLS(AUS)	72 6-14-83
M75	8:33.5	13.181 LOU GREGORY(USA)	75 12-17-77
M80	p8:89.9	13.697 ED BENHAM(USA)	75 4-9-83
M80	7:94.6	12.130 PAUL SPANGLER(USA)	81 11-1-80
M85	6:47.2	10.088 PAUL SPANGLER(USA)	85 11-18-84

HURDLES: 110M: 35-39,42"; 40-49,39"; 50-59,36"; 100M: 60-69,30"; 80M: 70+,30"			
DIV.	MARK	NAME(RESIDENCE)	AGE MEET DATE
M35	14.1	GHULAM RAZIK(PAK)	36 2-16-69
M40	14.4y 42"	DON FINLAY(GBR)	40 8-1-49
M45	14.7	LEOPOLD MARIEN(BEL)	41 8-13-75
M45	14.66	WALT BUTLER(USA)	40 8-8-81
M45	14.7y	STAN DRUCKERY(USA)	40 8-27-88
M50	15.1	VALBJORN THORLAKSSON(ICE)	45 7-8-79
M55	15.6	JACK GREENWOOD(USA)	51 8-10-77
M55	16.6	ANDRE FINDERLI(FRA)	55 9-14-78
M60	p16.3	JACK GREENWOOD(USA)	56 8-29-82
M60	14.98	JACK GREENWOOD(USA)	60 7-19-86
M65	16.4	ALBERTUS VAN ZYL(RSA)	65 8-29-87
M70	14.52	HERB MILLER(USA)	70 7-18-86
M75	p13.52	TEOFILO COLON(PUR)	70 6-23-85
M75	16.23	AHITI PAJUNEN(FIN)	76 7-30-86
M80	17.5	RUSSELL MEYERS(USA)	80 7-7-84

400 METER HURDLES (35-49: 36"; 50-59: 33"; 60+: 30")			
DIV.	MARK	NAME(RESIDENCE)	AGE MEET DATE
M35	49.72	JAMES KING(USA)	35 5-13-84
M40	54.08	LEON HACKER(RSA)	40 7-29-79
M45	54.1	GEORGE MATHE(RSA)	40 6-30-79
M45	55.18	GUIDO MUELLER(FRG)	47 8-1-86
M50	58.1	JACK GREENWOOD(USA)	50 7-3-76
M55	59.85	JACK GREENWOOD(USA)	57 9-27-83
M60	66.01	RUDOLPH VALENTINE(USA)	62 8-23-85
M65	p65.56	FRANS BUYS(HOL)	60 6-28-85
M65	p64.45	FRANS BUYS(HOL)	60 5-3-85
M65	71.4	ROBERT HUNT(USA)	65 5-18-85
M70	77.50	GILBERTO GONZALEZ(PUR)	70 9-27-83
M75	89.58	RUSSELL MEYERS(USA)	77 5-9-81
M80	1:51.0	HERBERT ANDERSON(USA)	80 7-24-82

INTERMEDIATE HURDLES (300M: 50-59, 33"; 60+, 30")			
DIV.	MARK	NAME(RESIDENCE)	AGE MEET DATE
M50	43.16	RICHARD RIZZO(NY)	50 8-4-88
M55	43.29	OSIDIO DE JESUS(PUR)	55 9-17-88
M55	45.6	WILLIAM CLARK(NJ)	55 8-4-88
M60	45.59	JACK GREENWOOD(USA)	62 7-3-88
M65	48.0	ALBERTUS VAN ZYL(RSA)	65 8-29-87
M65	p47.82	ARNE PETERSSON(SWE)	65 6-25-88
M70	p50.1	RUDY VALENTINE(NY)	65 8-5-88
M75	52.5	DAN BULKLEY(USA)	71 8-4-88
M75	61.13	CLAUDE HILLS(USA)	76 8-4-88

3000 METER STEEPLECHASE			
DIV.	MARK	NAME(RESIDENCE)	AGE MEET DATE
M35	8:33.4	IVAN KABANOV(URS)	36 7-27-75
M40	8:41.5	GASTON ROELANTS(BEL)	40 7-6-77
M45	9:25.28	RON ROBERTSON(NZ)	46 12-5-87
M50	p9:16.2	NILS UNDERSAKER(NOR)	45 9-12-84
M50	9:58.2	MAURICE MORRELL(GBR)	50 8-3-83
M55	10:39.0	ELIGIO GALICIA(MEX)	56 8-1-79
M60	11:41.6	OLLE ERLVAND(SWE)	61 8-1-79
M65	12:24.8	NORMAN BRIGHT(USA)	65 8-15-75
M70	13:26.5	STAN NICHOLLS(AUS)	70 4-11-81
M75	15:21.0	STAN NICHOLLS(AUS)	75 11-15-86

2000 METER STEEPLECHASE			
DIV.	MARK	NAME(RESIDENCE)	AGE MEET DATE
M60	7:43.45	LUIS TORRES(PUR)	60 12-5-87
M65	p7:20.2	JAMES M. DA SILVA(POR)	60 6-25-88
M65	p7:41.18	JAN KYSTAD(NOR)	60 - -85
M65	8:45.2	MAX MCKAY(AUS)	65 2-25-89
M70	8:38.17	DAN BULKLEY(USA)	71 8-5-88
M75	10:32.17	STAN NICHOLLS(AUS)	76 12-5-87
M75	10:46.0	BOB BOAL(USA)	75 8-15-87

HIGH JUMP			
DIV.	MARK	NAME(RESIDENCE)	AGE MEET DATE
M35	7-1	2.16 VIKTOR BOLSHOV(URS)	35 6-20-74
M40	6-9	2.06 JOHN HARTFIELD(USA)	40 9-1-85
M45	6-2 3/4	1.90 HERM UYATT(USA)	48 4-19-80
M50	6-2	1.88 HERM UYATT(USA)	51 8-21-83
M55	p6-2	1.88 HORST HANDL(AUT)	52 6-25-88
M55	5-9	1.75 HERM UYATT(USA)	55 10-4-86
M60	p5-10 1/2	1.79 HERM UYATT(USA)	55 5-26-87
M60	5-3	1.60 HANS OVERLAND(NOR)	60 8-22-84
M65	5-1	1.55 BURL GIST(USA)	67 8-29-87
M65	p5-1	1.55 HANS BITTER(FRG)	65 6-23-85
M70	4-10 1/4	1.48 IAN HUME(CAN)	70 9-8-84
M75	4-3 1/4	1.30 GULAB SINGH(IND)	76 4- -81
M75	4-3 1/4	1.30 HERBERT ANDERSON(USA)	75 3-24-78
M80	3-11 1/4	1.20 HERBERT ANDERSON(USA)	80 8-28-82
M85	3-8 1/2	1.13 BUELL CRANE(USA)	85 7-26-85

POLE VAULT			
DIV.	MARK	NAME(RESIDENCE)	AGE MEET DATE
M35	17-4 3/4	5.30 KRISTOS PAPANIKOLAOU(GRE)	36 9-9-77
M40	p1		

SHOT PUT (35-49: 16#; 50-59: 6Kg; 60-69: 5Kg; 70+ 4Kg)					
DIV.	MARK	NAME(RESIDENCE)	AGE	MEET DATE	
M35	72.9 3/4	BRIAN OLDFIELD(USA)	38	5-26-84	
M40	70.3	BRIAN OLDFIELD(USA)	40	8-22-85	
M45	58.1 1/4	PIERRE COLNARD(FRA)	47	6-12-76	
p68.1 3/4	IVAN IVANCI(CYUG)	45	8-31-83		
M50	57.7 1/4	17.56 HERMANN HOMBRECHER(FRG)	50	8-14-75	
M55	51.9	15.77 HERMANN HOMBRECHER(FRG)	55	8-6-80	
M60	47.5	14.45 REINO NOKELAINEN(FIN)	64	8-22-84	
p49.9	15.16 ROLF STRANDLI(SWE)	62	6-25-88		
M65	48.2 3/4	14.70 REINO NOKELAINEN(FIN)	65	8-3-85	
M70	46.1 1/4	14.05 VOITTO ELO(FIN)	70	6-23-85	
M75	39.8 3/4	12.11 GERHARD SCHEPE(FRG)	76	11-28-87	
M80	31.9 1/2	9.69 KARSTEN BRODERSEN(CHL)	80	11-28-87	
M85	25.0	7.62 BUELL CRANE(USA)	85	8-14-87	

DISCUS THROW (35-49: 2Kg; 50-59: 1.5Kg; 60+: 1Kg)					
DIV.	MARK	NAME(RESIDENCE)	AGE	MEET DATE	
M35	233-9	71.24 JOHN POMELL(USA)	36	6-9-84	
M40	227-11	69.48 AL OERTER(MY)	43	5-31-80	
M45	216-11	66.12 AL OERTER(USA)	45	3-28-82	
p222-9	67.90 AL OERTER(USA)	46	11-12-83		
M50	185-9	56.62 PARRY O'BRIEN(USA)	52	8-19-84	
p214-3	65.30 AL OERTER(USA)	50	12-28-86		
M55	177-1	53.98 KAUKO JOUPELLA(FIN)	56	9-3-77	
M60	187-2	57.06 KAUKO JOUPELLA(FIN)	61	7-16-82	
M65	182-6	55.62 KONSTANTY MAKSYMCIK(ZYK)(GBR)	65	9-17-79	
M70	156-6	47.70 OLAV REPPEN(NOR)	71	9-11-82	
M75	136-6	41.60 OSMO RENVALL(FIN)	76	7-19-86	
M80	111-9	34.08 KARSTEN BRODERSEN(CHL)	80	12-4-87	
M85	67-2	20.47 BUELL CRANE(USA)	85	7-26-85	
p69-2	21.08 BUELL CRANE(USA)	87	7-3-87		
p67-7	20.60 BUELL CRANE(USA)	86	7-11-86		

HAMMER THROW (35-49: 16#; 50-59: 6Kg; 60-69: 5Kg; 70+: 4Kg)					
DIV.	MARK	NAME(RESIDENCE)	AGE	MEET DATE	
M35	256-5	78.16 GIANNPAULO URLANDO(ITA)	39	7-25-84	
M40	243-11	74.34 ED BURKE(USA)	44	4-28-84	
M45	205-1	62.52 HANS POTSCHAUT	48	7-18-81	
M50	208-6	63.56 HANS POTSCHAUT	54	11-29-87	
M55	204-8	62.40 HANS POTSCHAUT	55	7-16-88	
M60	190-3	58.00 PENNTI SAARIKOSKI(FIN)	61	8-26-87	
M65	154-2	47.00 WOLFRAM HAUSMANN(FRG)	65	12-4-87	
p156-10	47.80 VEIKKO POHJONEN(FIN)	65	- 85		
M70	155-11	47.54 ROY FOLEY(USA)	71	3-20-88	
M75	133-5	40.68 OSMO RENVALL(FIN)	76	6-15-86	
p150-8	45.92 AARNE MIETTINEN(FIN)	75	- 88		
M80	112-5	34.28 KARSTEN BRODERSEN(CHL)	80	12-1-87	
M85	89-6 3/4	27.30 FRIEDERICH BENDER(FRG)	85	6-22-85	

JAVELIN THROW (35-49: 800 GRAMS; 60+: 600 GRAMS)					
DIV.	MARK	NAME(RESIDENCE)	AGE	MEET DATE	
M35	286-1	87.20 JANI ZIRNIS(URS)	35	5-14-83	
M40	259-1	78.98 URS VON WARTBURG(SWI)	42	8-2-79	
M45	238-10	72.80 LARRY STUART(USA)	46	5-12-84	
p239-7	73.02 LARRY STUART(USA)	48	6-14-86		
M50	215-9	65.76 LARRY STUART(USA)	50	4-30-88	
M55	187-5	57.14 VEIKKO KUJALA(FIN)	55	6-28-87	
p189-0	57.62 GILBERTO GONZALEZ(PUR)	60	11-28-87		
M60	191-10	58.48 DELES PICKARTS(USA)	60	11-28-87	
M65	156-10	47.80 MAURI HERTAKIVI(FIN)	65	3-13-82	
p168-2	51.26 BILL MORALES(USA)	65	8-18-87		
p160-5	48.90 MAURI HERTAKIVI(FIN)	66	8-13-87		
M70	142-2	43.34 BILL MORALES(USA)	70	12-5-87	
p157-9	48.08 BILL MORALES(USA)	70	8-16-87		
p152-1	46.36 BILL MORALES(USA)	70	7-25-87		
p144-6	44.06 HANS SCHNEIDER(FRG)	70	6-11-82		
M75	126-4	38.52 GERHARD SCHEPE(FRG)	76	12-5-87	
M80	94-6	28.80 HERBERT ANDERSON(USA)	80	7-24-82	
p97-5	29.69 HERBERT ANDERSON(USA)	80	1-29-82		
M85	62-5	19.02 BUELL CRANE(USA)	85	6-6-85	
p74-5 1/2	22.69 HERBERT ANDERSON(USA)	85	9-5-87		
p66-0	20.11 HERBERT ANDERSON(USA)	85	8-16-87		

DECATHLON(1962 IAAF SCORING TABLES)					
DIV.	MARK	NAME(RESIDENCE)	AGE	MEET DATE	
M35	754.7	WERNER VOM MOLTKE(FRG)	35	5-12-72	
M40	678.4	WOLFGANG LINKMANN(FRG)	40	6-6-81	
M45	573.4	GARY MILLER(USA)	47	3-23-85	
M50	621.2	GARY MILLER(USA)	50	5-27-88	
M55	524.6	RICHMOND MORCOM(USA)	55	9-11-76	
M60	455.2	RICHMOND MORCOM(USA)	61	6-28-82	
M65	340.0	IAM HUME(CAN)	66	6-20-81	
M70	309.7	GILBERTO GONZALEZ(PUR)	70	7-2-83	
M75	165.9	HERBERT ANDERSON(USA)	75	3-24-78	
M80	99.4	HERB ANDERSON(USA)	80	8-28-82	
M85	25.2	A. E. PITCHER(USA)	85	9-19-87	

PENTATHLON(1985 IAAF SCORING TABLES)					
DIV.	MARK	NAME(RESIDENCE)	AGE	MEET DATE	
M35	3806	SILVIO HODOS(FRA)	35	4-17-83	
M40	3455	WERNER SCHALLAU(FRG)	40	9-30-83	
M45	3117	GARY MILLER(USA)	45	9-30-83	
M50	2976	GARY MILLER(USA)	50	6-26-88	
M55	2566	RICHMOND MORCOM(USA)	56	8-12-77	
M60	2346	RUDY HOCHREITER(AUS)	61	12-3-87	
M65	2028	GUDMUND SKRIVERIK(NOR)	65	7-31-86	
p2043w	RICHMOND MORCOM(USA)	65	7-13-86		
M70	1683	ADOLF KOCH(FRG)	70	12-3-87	
M75	1002	GERHARD SCHEPE(FRG)	76	12-3-87	
p1398	WALTER STRUEBEL(FRG)	75	8-24-84		
M80	869	KARSTEN BRODERSEN(CHL)	80	12-3-87	
M85	372	HERB ANDERSON(USA)	85	12-3-87	

Women's World Five Year Age Group Records

100 METERS					
DIV.	MARK	NAME(RESIDENCE)	AGE	MEET DATE	
M35	11.6	ERIKA ROST(FRG)	35	6-2-79	
M40	12.0	MAEVE KYLIE(IRL)	40	4-25-70	
M45	12.5	MAEVE KYLIE(IRL)	45	1-21-74	
M50	12.5	WENDY EY(AUS)	45	2-4-84	
M55	12.9	IRENE OBERA(USA)	51	6-1-85	
M60	13.6	SHIRLEY PETERSON(AUS)	55	1-21-84	
M65	14.57	PAULA SCHNEIDERHAM(FRG)	61	9-24-83	
M70	15.04h	PAULA SCHNEIDERHAM(FRG)	65	12-4-87	
p14.90	PAULA SCHNEIDERHAM(FRG)	66	6-25-88		
M75	16.2	POLLY CLARKE(USA)	70	4-17-81	
M85	16.87	POLLY CLARKE(USA)	75	8-31-85	

200 METERS					
DIV.	MARK	NAME(RESIDENCE)	AGE	MEET DATE	
M35	22.5	MARINA STEPANOVA(URS)	36	6-27-86	
M40	25.0	VIVI MARKUSSEN(DEN)	40	8-17-80	
M45	26.2	WENDY EY(AUS)	45	3-4-84	
M50	27.3	IRENE OBERA(USA)	51	6-1-85	
M55	28.9	ELIANA GAETE(CHL)	55	11-1-87	
M60	30.26	PAULA SCHNEIDERHAM(FRG)	61	9-26-83	
M65	32.15h	AILEEN HOGAN(AUS)	65	11-28-87	
M70	34.2	POLLY CLARKE(USA)	71	9-6-81	
M75	35.93	POLLY CLARKE(USA)	75	8-31-85	

400 METERS					
DIV.	MARK	NAME(RESIDENCE)	AGE	MEET DATE	
M35	50.56	AURELIA PENTOM(CUB)	35	7-15-78	
M40	55.3	MAEVE KYLIE(IRL)	41	7-22-70	
M45	59.68	COLLEEN MILLS(NZL)	47	1-10-81	
p58.35	JUDY POLLOCK(AUS)	45	8-8-85		
M50	63.2	ANNE MCKENZIE(RSA)	50	10-15-75	
M55	68.6	DAPHNE PRIE(AUS)	55	4-18-87	
M60	72.5	AILEEN HOGAN(AUS)	60	9-17-83	
p72.24	PAULA SCHNEIDERHAM(FRG)	63	6-27-85		
M65	74.31	PAULA SCHNEIDERHAM(FRG)	65	12-5-87	
M70	84.23	POLLY CLARKE(USA)	73	9-28-83	
p79.4	ALDREY REID(RSA)	70	9-17-83		
p79.74	ALDREY REID(RSA)	70	6-27-85		
M75	89.62	POLLY CLARKE(USA)	75	8-25-85	

800 METERS					
DIV.	MARK	NAME(RESIDENCE)	AGE	MEET DATE	
M35	1:56.51	JARMILA KRATCOVILLOVA(CZE)	35	7-13-86	
M40	2:06.5	ANNE MCKENZIE(RSA)	42	7-1-67	
M45	2:19.2	ANNE MCKENZIE(RSA)	45	11-13-70	
p2:16.8	JUDY POLLOCK(AUS)	45	8-8-85		
p2:18.52	GUDLIEVE ROGEMAN(BEL)	45	6-23-85		
M50	2:23.1	ANNE MCKENZIE(RSA)	50	10-29-75	
M55	2:42.03	VLBERG OSTBERG(NOR)	55	8-1-86	
p2:39.03	OLGA VYSKOVA(CZE)	55	6-22-85		
M60	2:53.8	ANNE MCKENZIE(RSA)	60	10-16-85	
M65	3:09.10	BRITTA TIBBLING(NOR)	68	8-1-86	
M70	3:22.43	JOHANNA LUTHER(FRG)	71	8-24-84	
p3:19.03	JOHANNA LUTHER(FRG)	71	6-23-85		
M75	3:49.74	POLLY CLARKE(USA)	75	8-23-85	

1500 METERS					
DIV.	MARK	NAME(RESIDENCE)	AGE	MEET DATE	
M35	3:57.73	MARICICA PUICA(ROM)	35	8-30-85	
M40	4:20.7	JOYCE SMITH(GBR)	40	5-21-78	
M45	4:49.2	ANNE MCKENZIE(RSA)	49	11-16-74	
p4:40.35	JUDY POLLOCK(AUS)	45	8-8-85		
p4:43.84	GUDLIEVE ROGEMAN(BEL)	45	6-28-85		
M50	4:54.5	ANNE MCKENZIE(RSA)	50	10-15-75	
p4:51.19	T. HELLWAGNER(AUT)	50	6-25-88		
M55	5:15.7	JEAN ALBURY(AUS)	55	4-6-85	
M60	5:44.9	MARGARET MILLER(USA)	60	7-16-86	
M65	5:44.81	SHIRLEY BRASHER(AUS)	61	12-5-87	
M70	6:10.17	BRITTA TIBBLING(SWE)	66	8-25-84	
M75	7:30.01	JOHANNA LUTHER(FRG)	71	8-25-84	
		BERTA HIELSCHER(FRG)	75	8-25-84	

ONE MILE					
DIV.	MARK	NAME(RESIDENCE)	AGE	MEET DATE	
M35	4:17.33	MARICICA PUICA(ROM)	35	8-21-85	
M40	4:54.69	DORIS HERITAGE(USA)	40	4-23-83	
M45	5:28.9	MARYLIN HARBIN(USA)	45	2-29-83	
M50	5:29.39	JEANNE HOAGLAND(USA)	51	12-6-87	
M55	5:50.6	MARGARET MILLER(USA)	55	2-7-81	
M60	6:35	PAT DIXON(USA)	63	7-23-82	
M65	6:55.6	PAT DIXON(USA)	66	6-22-85	
M70	7:41.2	PAT DIXON(USA)	70	4-22-89	

3000 METERS					
DIV.	MARK	NAME(RESIDENCE)	AGE	MEET DATE	
M35	8:27.83	MARICICA PUICA(ROM)	35	9-7-85	
M40	9:11.2	JOYCE SMITH(GBR)	40	4-30-78	
M45	10:23.4	URSULA BLASCHKE(FRG)	45	7-30-77	
p9:31.38	JOYCE PALM(SWE)	45	- 87		
p9:34.7	JOYCE SMITH(GBR)	46			

SHOT PUT (35-49: 4kg; 50+: 3kg)			
DIV. MARK	NAME(RESIDENCE)	AGE	MEET DATE
M35	70-1 3/4	21.38 HELENA FIBINGEROVA(CZE)	35 8-22-84
M40	62-10 1/2	19.16 ANTONINA IVANOVA(URS)	41 2-24-74
M45	46-6 1/4	14.18 LIESL HUBER(FRG)	45 10-13-79
M55	p55-1	16.79 HELGA PARTS(URS)	45 - -83
M50	48-8 3/4	14.85 VALERIE YOUNG(AUS)	50 11-29-87
M55	40-0	12.19 ROSEMARY CHRIMES(GBR)	55 7-23-88
M60	32-7 3/4	9.95 ISUZU TSUJII(JPN)	60 9-23-83
M65	p38-6 1/4	11.74 MARIA VAN AS(RSA)	60 5-9-81
M65	p36-7 3/4	11.17 MARIANNE HAMM(FRG)	60 6-25-88
M65	32-11 3/4	10.05 MARIA VAN AS(RSA)	65 4-5-86
M70	25-5 1/2	7.76 HANNA GELBRICH(FRG)	70 9-23-83
M75	25-7	7.80 IRJA SARNAAMA(FIN)	78 8-22-84

DISCUS THROW (1kg)			
DIV. MARK	NAME(RESIDENCE)	AGE	MEET DATE
M35	228-4	69.60 FAINA MYELNIK(URS)	35 9-9-80
M40	206-5	62.92 HELGI PARTS(URS)	41 10-4-78
M45	p209-0	63.70 HELGI PARTS(URS)	43 10-2-80
M50	160-7	48.94 ODETE DOMINGOS(BRA)	47 4-8-82
M55	p194-6	59.30 HELGI PARTS(URS)	45 9-2-83
M50	142-10	43.54 VALERIE YOUNG(AUS)	50 12-5-87
M55	p145-0	44.20 ODETE DOMINGOS(BRA)	50 9-13-84
M55	130-4	43.64 ODETE DOMINGOS(BRA)	50 6-27-85
M60	101-3	39.72 ROSEMARY CHRIMES(GBR)	55 7-31-88
M65	p105-8	30.86 ANNECHEN REILE(FRG)	60 10-19-75
M65	94-9 3/4	32.22 MARIANNE HAMM(FRG)	60 6-25-88
M70	74-1	28.90 ANNECHEN REILE(FRG)	66 8-9-81
M70	p79-1 3/4	24.12 ANNECHEN REILE(FRG)	72 11-29-87
M75	59-3 3/4	18.08 VERA WISCHMANN(FRG)	75 7-29-86

HAMMER THROW (35-49: 4kg; 50+: 3kg)			
DIV. MARK	NAME(RESIDENCE)	AGE	MEET DATE
M35	132-5	40.36 CHRISTINE SCHULTZ(AUS)	36 11-29-87
M40	109-11	33.50 CHRISTINE BATTERSBY(AUS)	44 11-19-88
M45	111-10	34.10 IRENE MITCHELL(AUS)	46 11-28-87
M50	108-4	33.02 ANNEMARIE SCHOLTEN(FRG)	53 12-4-87
M55	115-2	35.10 ROSEMARY CHRIMES(GBR)	55 7-24-88
M60	99-11 1/4	30.46 LYDIA WIDERA(AUS)	61 12-5-87
M65	91-9 1/2	27.98 ILSE BELLIN(FRG)	66 11-28-87
M70	p30-10	9.40 BERYL SYRINGER(USA)	70 10-9-83
M75	41-9 1/2	12.74 RUTH FRITH(AUS)	78 3-27-88
M80	56-6	17.22 IRJA SARNAAMA(FIN)	82 11-28-87

JAVELIN THROW (30-49: 600G; 50+: 400G)			
DIV. MARK	NAME(RESIDENCE)	AGE	MEET DATE
M35	193-4	58.94 ANNELEISE GERHARDS(FRG)	37 8-13-72
M40	p209-4	63.80 NINA NIKANOROVA(URS)	35 9-4-82
M40	170-1	51.84 ANNELE VIRKKALA(FIN)	40 8-2-87
M45	156-7	47.74 ANNELEISE GERHARDS(FRG)	45 5-30-81
M50	137-4	41.86 GERTRUDE SCHONAUER(AUT)	51 9-24-88
M55	131-7	40.10 HEATHER DOHERTY(AUS)	55 1-7-89
M60	92-10 1/4	28.30 BERNICE HOLLAND(USA)	60 11-29-87
M65	p97-2 1/4	29.62 MARIANNE HAMM(FRG)	60 6-25-88
M65	84-7 3/4	25.80 HANNA GELBRICH(FRG)	67 8-6-80
M70	81-11	24.97 HANNA GELBRICH(FRG)	70 9-26-83
M75	74-2 1/2	22.62 IRJA SARNAAMA(FIN)	77 9-26-83

AMERICAN TRACK & FIELD AGE-GROUP RECORDS

MENS AMERICAN FIVE YEAR AGE GROUP RECORDS

100 YARDS			
DIV. MARK	NAME(RESIDENCE)	AGE	MEET DATE
M35	9.7	WALT BUTLER(TX)	37 6-11-78
M40	9.8	THANE BAKER(TX)	42 7-13-74
M45	9.8	PERCY KNOX(CA)	41 7-11-75
M45	10.0	THANE BAKE. (TX)	46 5-27-78
M50	10.4	THANE BAKER(TX)	52 6-23-84
M55	10.7	PAYTON JORDAN(CA)	55 3-25-72
M55	10.7	ALFRED GUIDET(CA)	55 7-14-73
M60	10.9	CHARLES BEAUDRY(TX)	55 8-10-74
M60	10.9	PAYTON JORDAN(CA)	61 5-6-78
M65	12.1	HARRY KOPPEL(CA)	66 7-19-79
M70	13.4	BARRY IVERS(ME)	72 8-6-83
M75	13.4	HERBERT ANDERSON(CO)	75 10-1-77
M80	15.1	HERBERT ANDERSON(CO)	80 7-24-82
M85	18.8	A. E. PITCHER(IN)	87 9-25-88

200 METERS			
DIV. MARK	NAME(RESIDENCE)	AGE	MEET DATE
M35	10.3	RUBEN WHITNEY(TX)	35 6-14-80
M40	10.7	THANE BAKER(TX)	41 9-13-72
M45	11.0	THANE BAKER(TX)	48 6-14-80
M50	11.2	KEN DENNIS(CA)	50 7-18-87
M55	11.6	PAYTON JORDAN(CA)	56 6-23-73
M55	11.6	ALFRED GUIDET(CA)	56 6-22-74
M60	11.8	PAYTON JORDAN(CA)	61 5-27-78
M65	12.6	PAYTON JORDAN(CA)	65 6-12-82
M70	13.0	PAYTON JORDAN(CA)	70 4-25-87
M75	14.3	JOSIAH PACKARD(CA)	75 6-23-79
M80	15.4	JOSIAH PACKARD(CA)	80 2-25-84
M85	18.7	BUJELL CRANE(ID)	85 7-26-85

400 METERS			
DIV. MARK	NAME(RESIDENCE)	AGE	MEET DATE
M35	46.38	JAMES KING(US)	35 5-25-84
M40	49.2	STAN WHITLEY(CA)	42 5-28-88
M45	50.59	JAMES BURNETT(IL)	45 8-25-85
M50	p50.46	JAMES BURNETT(IL)	45 6-29-85
M50	52.79	LARRY COLBERT(MD)	50 12-5-87
M55	54.56	RUDOLPH VALENTINE(WY)	55 6-9-79
M60	57.65	JACK GREENWOOD(KS)	60 7-20-86
M65	61.4	JOHN ALEXANDER(TX)	67 5-16-87
M70	64.6	JOSIAH PACKARD(CA)	73 8-10-77
M75	68.5	JOSIAH PACKARD(CA)	75 6-23-79
M80	75.4	HAROLD CHAPSON(HA)	80 7-9-83
M85	94.95	KONRAD BOAS(NY)	85 8-27-88

800 METERS			
DIV. MARK	NAME(RESIDENCE)	AGE	MEET DATE
M35	1:52.1	RALPH LEE(CA)	37 6- -79
M40	1:54.9	GEORGE COHEN(CA)	40 8-16-80
M45	1:57.73	GEORGE COHEN(CA)	45 8-23-85
M50	2:01.1	BILL FITZGERALD(CA)	50 6-29-75
M55	2:08.9	BILL FITZGERALD(CA)	55 7-5-80
M60	2:18.87	DEAN SMITH(IL)	61 8-16-87
M65	2:25.3	FRANK FINGER(VA)	65 7-5-80
M70	2:34.5	MONTY MONTGOMERY(CA)	71 9-4-77
M75	2:40.0	HAROLD CHAPSON(HI)	75 5-14-78
M80	2:53.5	HAROLD CHAPSON(HI)	80 7-11-82
M85	p2:49.4	HAROLD CHAPSON(HI)	81 10-9-83
M85	3:58.3	PAUL SPANGLER(CA)	85 5-9-84

1500 METERS			
DIV. MARK	NAME(RESIDENCE)	AGE	MEET DATE
M35	3:52.7	RAMSEY THOMAS(MD)	35 7-11-79
M40	p3:50.9	BILL STEWART(MI)	37 5-24-80
M40	3:56.2	BILL STEWART(MI)	40 9-27-83
M45	p3:54.9	BILL STEWART(MI)	40 4-23-83
M45	4:04.4	ERNEST BILLUPS(IL)	46 9-27-83
M50	p4:03.13	MIKE MANLEY(OR)	45 8-15-87
M50	4:05.8	RAY HATTON(OR)	50 7-8-82
M55	4:25.24	JIM SUTTON(CA)	55 7-19-86
M60	4:49.8	DON LONGENECKER(NM)	62 6-24-78
M65	4:59.1	WILLIAM ANDBERG(MN)	65 7-4-76
M70	5:19.38	AUSTIN NEWMAN(NJ)	70 7-19-86
M75	5:30.1	HAROLD CHAPSON(HI)	75 8-11-77
M80	6:04.28	ED BENHAM(MD)	80 12-5-87
M85	p5:54.5	HAROLD CHAPSON(HI)	80 7-17-82
M85	7:44.96	PAUL SPANGLER(CA)	85 5-5-84

ONE MILE			
DIV. MARK	NAME(RESIDENCE)	AGE	MEET DATE
M35	4:12.4	RAMSEY THOMAS(MD)	35 7-26-79
M40	4:13.78	BYRON DYCE(FL)	40 8-6-88
M45	4:29.5	BILL FITZGERALD(CA)	46 4-23-72
M50	p4:28.02	MIKE MANLEY(OR)	46 6-25-88
M50	4:32.2	BILL FITZGERALD(CA)	50 7-13-75
M55	4:55.3	WILLIAM FRASER(MN)	55 7-22-85
M60	p4:45.1	RAY HATTON(OR)	55 5-16-87
M60	p4:46.5	DON GAMMIE(OR)	55 10-5-86
M60	5:15.2	CLIVE DAVIES(OR)	63 6-9-79
M65	5:22.2	MONTY MONTGOMERY(CA)	65 4-8-72
M70	5:42.2	MONTY MONTGOMERY(CA)	70 7-9-77
M75	6:15.1	HAROLD CHAPSON(HI)	78 7-5-81
M80	6:07.1	PAUL SPANGLER(CA)	81 6-7-80
M85	p6:43.3	HAROLD CHAPSON(HI)	80 3-4-83
M85	12:23.6	HERB KIRK(MT)	87 8-26-83

3000 METERS			
DIV. MARK	NAME(RESIDENCE)	AGE	MEET DATE
M35	8:31.5	RAMSEY THOMAS(MD)	35 8-4-79
M40	8:43.7	WEB LOUDAT(NM)	40 6-13-87
M45	p8:17.4	BARRY BROWN(FL)	40 7-30-84
M45	9:06.6	KIRK RANDALL(MA)	45 6-13-87
M50	8:53.8	RAY HATTON(OR)	50 6-25-82
M55	9:37.88	RAY HATTON(OR)	56 6-26-88
M60	10:41.8	GUNNER LINDE(CA)	60 7-29-88
M65	10:51.0	NORMAN BRIGHT(WA)	65 6-17-75
M70	11:46.2	HAROLD CHAPSON(HI)	73 3-28-76
M75	13:06.4	RICHARD BREDEBECCK(OH)	75 6-13-81
M80	p12:23.4	ED BENHAM(MD)	75 5-7-83
M80	14:39.0	PAUL SPANGLER(CA)	80 7-22-79
M85	16:32.0	PAUL SPANGLER(CA)	85 5-4-84

TWO MILES			
DIV. MARK	NAME(RESIDENCE)	AGE	MEET DATE
M35	9:21.4	GLYNN WOOD(DC)	35 10-26-69
M40	9:17.6N	RAY HATTON(OR)	40 4-1-72
M45	p9:06.6	BARRY BROWN(FL)	40 7-30-84
M45	9:37.8	DENNY MEYER(WA)	45 5-5-78
M50	10:15.2	DAVID STEVENSON(CA)	50 7-26-79
M55	10:35.0	BILL MCCHESEY(OR)	55 7-15-83
M60	11:09	DON LONGENECKER(NM)	62 6-25-78
M65	11:30.0N	MONTY MONTGOMERY(CA)	66 3-25-73
M70	12:40.0	HAROLD CHAPSON(HI)	73 3-14-76
M75	14:30	LOU GREGORY(FL)	76 9-30-78
M80	15:47.2	PAUL SPANGLER(CA)	80 7-28-79

THREE MILES			
DIV. MARK	NAME(RESIDENCE)	AGE	MEET DATE
M35	13:44.2	PETER MCARDLE(NY)	35 6-11-64
M40	14:29.2	RAY HATTON(OR)	42 6-15-74
M45	15:07	PETER MUNDLE(CA)	46 7-7-74
M50	15:37.8	JAMES O'NEIL(CA)	50 1-10-76
M55	16:51.2	CLIVE DAVIES(OR)	59 7-13-75
M60	16:59.2	DON LONGENECKER(NM)	62 6-25-78
M65	17:59.2	NORMAN BRIGHT(WA)	65 7-22-75
M70	19:20	JOHN STEVENS(US)	70 6-16-79
M75	21:10.8	LOU GREGORY(FL)	75 5-6-78
M80	24:08.2	PAUL SPANGLER(CA)	80 7-28-79

5000 METERS			
DIV. MARK	NAME(RESIDENCE)	AGE	MEET DATE
M35	13:51.7	MIKE MANLEY(OR)	38 6-1-80
M40	14:59.6N	HAL HIGDON(IN)	41 8-25-72
M45	p14:27.0	MIKE MANLEY(OR)	40 6-6-82
M45	15:17.4	RAY HATTON(OR)	48 8-2-80
M50	p15:11.0	SALVADOR VASQUEZ(CA)	46 7-5-86
M50	16:09.80	JIM DALEY(NH)	51 8-16-87
M55	p15:42.0	RAY HATTON(OR)	51 7-30-83
M55	16:27.1	JAMES O'NEIL(CA)	55 1-12-81
M60	17:19.0	CLIVE DAVIES(OR)	64 8-2-80
M65	p16:52.0	JAMES O'NEIL(CA)	60 6-25-85
M65	18:30	WILLIAM ANDBERG(MN)	65 7-4-76
M70	p17:40.4	CLIVE DAVIES(OR)	66 7-30-82
M70	20:02.57	ALFRED FUNK(MT)	73 8-16-87
M75	20:59.0	EDWARD BENHAM(MD)	75 9-23-83
M80	21:57.88	EDWARD BENHAM(MD)	81 8-6-88
M85	28:03.8	PAUL SPANGLER(CA)	85 4-14-84

SIX MILES			
DIV. MARK	NAME(RESIDENCE)	AGE	MEET DATE
M35	28:02.4	PETER MCARDLE(NY)	35 5-3-64
M40	29:59.0	RAY HATTON(OR)	43 4-26-75
M45	30:47.0	RAY HATTON(OR)	45 6-11-77
M50	32:40	PETER MUNDLE(CA)	50 10-1-78
M55	35:05	CLIVE DAVIES(OR)	59 7-12-75
M60	36:41.6	JAMES OLESON(CA)	60 6-11-78
M65	38:17.4	NORMAN BRIGHT(WA)	65 7-12-75
M70	42:14	EDWARD BENHAM(MD)	73 5-2-81
M75	44:35	LOU GREGORY(FL)	76 9-30-78

10,000 METERS			
DIV. MARK	NAME(RESIDENCE)	AGE	MEET DATE
M35	29:03.4	FRANK SHORTER(CO)	36 6-8-84
M40	29:03.4	PETER MCARDLE(NY)	35 5-3-64
M40	30:56.0	RAY HATTON(OR)	43 4-26-75
M45	31:48	RAY HATTON(OR)	45 6-11-77
M50	32:10.4	RAY HATTON(OR)	51 6-18-83
M55	35:03.2	JAMES O'NEIL(CA)	55 8-16-80
M60	p33:47.4	RAY HATTON(OR)	55 8-1-87
M65	p33:53.6	NORMAN GREEN(PA)	55 11-29-87
M60	35:19.8	CLIVE DAVIES(OR)	63 8-19-78
M65	38:38.0	NORMAN BRIGHT(WA)	66 8-3-76
M70	41:21.0	RAY SEARS(IL)	70 8-10-77
M75	43:54.75	EDWARD BENHAM(MD)	75 9-25-83
M80	44:29.4	EDWARD BENHAM(MD)	81 8-4-88
M85	63:58.4	PAUL SPANGLER(CA)	86 6-22-85

ONE HOUR RUN			
DIV. MARK	NAME(RESIDENCE)	AGE	MEET DATE
M35	11-1070	18.681 KEN MUELLER(MA)	35 5-13-72</

HURDLES: 110M: 35-39,42"; 40-49,39"; 50-59,36";
100M: 60-69,30"; 80M: 70+,30"

DIV.	MARK	NAME(RESIDENCE)	AGE	MEET DATE
M35	14.7	MIKE KELLY(GA)	37	6-16-84
M40	14.67	WALT BUTLER(CA)	40	8-8-81
	14.66	STAN DRUCKERY(WI)	40	8-27-88
M45	15.0	JACK GREENWOOD(KS)	46	9-14-72
M50	15.1	JACK GREENWOOD(KS)	51	8-10-77
M55	16.8	CHARLES BEAUDRY(TX)	55	8-24-74
	p16.3	JACK GREENWOOD(KS)	56	8-29-82
M60	14.98	JACK GREENWOOD(CO)	60	7-19-86
M65	17.43	ROBERT HUNT(CA)	65	5-18-85
M70	14.52	HERB MILLER(CA)	70	7-18-86
M75	16.35	CLAUDE HILLS(PA)	75	8-14-87
M80	17.5	RUSSELL MEYERS(FL)	80	7-7-84

DIV.	MARK	NAME(RESIDENCE)	AGE	MEET DATE
M35	49.72	JAMES KING(CA)	35	5-13-84
M40	55.9	RON WHITNEY(CA)	40	10-26-83
M45	55.7	JACK GREENWOOD(KS)	46	8-24-72
M50	58.1	JACK GREENWOOD(KS)	50	7-3-76
M55	59.85	JACK GREENWOOD(KS)	57	9-27-83
M60	66.01	RUDOLPH VALENTINE(NY)	62	8-23-85
M65	71.4	ROBERT HUNT(CA)	65	5-18-85
M70	77.50	GILBERTO GONZALEZ(PR)	70	9-27-83
M75	89.58	RUSSELL MEYERS(FL)	77	5-9-81
M80	1:51.0	HERBERT ANDERSON(CO)	80	7-24-82

DIV.	MARK	NAME(RESIDENCE)	AGE	MEET DATE
M35	6-8 3/4	2.05 JOHN DOBROTH(CA)	38	5-13-79
	p6-9	2.06 JOHN HARTFIELD(TX)	37	8-7-82
M40	6-9	2.06 JOHN HARTFIELD(TX)	40	9-1-85
M45	6-2 3/4	1.90 HERM WYATT(CA)	48	4-19-80
M50	6-2	1.88 HERM WYATT(CA)	51	8-20-83
M55	5-9	1.75 HERM WYATT(CA)	55	10-4-86
	p5-10 1/2	1.79 HERM WYATT(CA)	55	5-23-87
M60	5-2 3/4	1.59 BURL GIST(CA)	64	4-28-84
M65	5-1	1.55 BURL GIST(CA)	67	8-29-87
M70	4-8	1.42 HAMILTON MORNINGSTON(MI)	70	7-25-87
M75	4-3 1/4	1.30 HERBERT ANDERSON(CO)	75	3-24-78
	p4-4	1.32 STAN THOMPSON(HI)	75	12-28-85
M80	3-11 1/4	1.20 HERBERT ANDERSON(CO)	80	8-29-82
M85	3-8 1/2	1.13 BUELL CRANE(ID)	85	7-26-85

DIV.	MARK	NAME(RESIDENCE)	AGE	MEET DATE
M35	16-7	5.05 STEPHEN SMITH(OR)	36	7-15-88
M40	15-1 1/4	4.60 ROGER RUTH(CAN)	44	9-7-72
	p15-3	4.65 CHARLES POLHAMUS(GA)	41	6-28-85
M45	15-0	4.57 ROGER RUTH(CAN)	45	7-21-73
M50	14-4	4.37 VIC COOK(CA)	50	7-25-82
M55	13-6 1/4	4.12 RICHMOND MORCOM(PA)	55	8-4-76
M60	12-3 1/2	3.74 BOO MORCOM(PA)	63	8-2-84
M65	12-4 1/2	3.77 BOO MORCOM(PA)	65	8-3-86
M70	10-3	3.12 JIM VERNON(CA)	71	7-23-88
M75	9-6 1/4	2.90 CAROL JOHNSTON(CA)	75	2-7-87
M80	6-6 1/2	1.99 BOB MACCONAGHY(CA)	80	5-28-88
M85	5-8	1.73 A. E. PITCHER(IN)	86	5-14-88

DIV.	MARK	NAME(RESIDENCE)	AGE	MEET DATE
M35	25-11	7.90 TOM CHILTON(TN)	35	6-8-72
M40	24-4 3/4	7.43 TOM CHILTON(TN)	40	3-24-78
M45	21-11	6.68 SHIRLEY DAVISSON(CA)	45	10-4-75
M50	21-1	6.42 SHIRLEY DAVISSON(CA)	50	4-12-80
M55	20-1 1/4	6.10 TOM PATSALIS(CA)	59	7-18-81
M60	19-11	6.07 TOM PATSALIS(CA)	60	7-10-82
M65	17-4 1/4	5.29 TOM PATSALIS(CA)	65	12-1-87
M70	14-10 1/4	4.53 CLAUDE HILLS(PA)	70	7-3-82
M75	12-10 1/2	3.92 HERBERT ANDERSON(CO)	76	8-5-78
M80	11-7	3.53 WALT WESBROOK(CA)	80	6-24-78
M85	9-1	2.77 BUELL CRANE(ID)	85	6-6-85

DIV.	MARK	NAME(RESIDENCE)	AGE	MEET DATE
M35	49-11 1/2	15.23 DAVE JACKSON(CA)	36	5-16-68
M40	50-4 3/4	15.36 MILAN TIFF(CA)	40	7-16-88
M45	45-2 1/4	13.77 DAVE JACKSON(CA)	45	8-11-77
M50	43-3 1/2	13.19 DAVE JACKSON(CA)	50	7-10-82
M55	41-5	12.62 GORDON FARRELL(CA)	57	1-8-75
M60	39-6 3/4	11.96 TOM PATSALIS(CA)	60	7-10-82
M65	35-3 1/2	10.84 TOM PATSALIS(CA)	65	12-5-87
M70	29-5 1/4	8.97 JOHN DAMSKI(CA)	70	5-25-85
M75	28-2 3/4	8.60 WINFIELD MCFADDEN(CA)	75	8-17-80
M80	22-8	6.91 HERBERT ANDERSON(CO)	80	7-24-82
	p25-4	7.72 WINFIELD MCFADDEN(CA)	81	10-4-86
	p24-5	7.44 WINFIELD MCFADDEN(CA)	80	5-25-85
M85	20-2 1/4	6.15 BUELL CRANE(ID)	85	8-23-85

DIV.	MARK	NAME(RESIDENCE)	AGE	MEET DATE
M35	72-9 3/4	22.19 BRIAN OLDFIELD(CA)	38	5-26-84
M40	70-3	21.41 BRIAN OLDFIELD(CA)	40	8-22-85
M45	55-2 1/2	16.83 ED HILL(MD)	45	8-23-88
M50	44-9	13.64 BOB HUMPHREY(CA)	51	12-7-87
M55	44-2 1/2	13.47 PHIL MULKEY(GA)	55	8-5-88
M60	47-1 1/2	14.36 PHIL BRUSCA(MD)	60	11-29-87
M65	40-4	12.29 ELIAS CASTANEDA(CA)	65	8-18-84
M70	43-11 1/2	10.40 ROSS CARTER(OR)	72	8-2-86
M75	34-9	10.59 JIM YORK(CA)	75	7-2-88
M80	27-5 3/4	8.37 WILLIAM GARTHUNE(VA)	80	8-5-88
M85	25-0	7.62 BUELL CRANE(ID)	87	8-14-87

DIV.	MARK	NAME(RESIDENCE)	AGE	MEET DATE
M35	233-9	71.24 JOHN POWELL(US)	36	6-9-84
M40	227-11	69.48 AL OERTER(NY)	43	5-31-80
M45	216-11	66.12 AL OERTER(NY)	45	3-28-82
	p222-9	67.90 AL OERTER(NY)	46	11-12-83
M50	185-9	56.62 PARRY O'BRIEN(CA)	52	8-19-84
	p214-3	65.30 AL OERTER(NY)	50	12-28-86
M55	182-0	55.48 WENDELL PALMER(TX)	56	6-5-88
M60	174-1	53.06 DANIEL ALDRICH(CA)	62	8-17-80
M65	163-1	49.72 THOMAS MCDERMOTT(CT)	66	5-1-84
	p164-10	50.24 DANIEL ALDRICH(CA)	65	4-28-84
M70	142-6	43.44 DANIEL ALDRICH(CA)	70	3-5-89
M75	118-0	35.96 A. REDMOND DOMS(CA)	75	5-8-82
M80	91-4	27.84 BURT DEGROOT(CA)	80	8-15-87
	p97-3	29.64 KEN CARNINE(CA)	80	4-30-88
M85	67-2	20.47 BUELL CRANE(ID)	85	7-26-85
	p69-2	21.08 BUELL CRANE(ID)	87	7-3-87
	p67-7	20.60 BUELL CRANE(ID)	86	7-11-86

DIV.	MARK	NAME(RESIDENCE)	AGE	MEET DATE
M35	232-5	70.84 HAROLD CONMOLLY(CA)	37	7-20-69
M40	243-11	74.34 ED BURKE(CA)	44	4-28-84
M45	198-5	60.48 ED BURKE(CA)	45	5-19-85
M50	182-6	55.62 BOB BACKUS(MA)	50	6-12-77
M55	197-8	60.24 BOB BACKUS(MA)	55	8-2-81
M60	155-0	47.24 BOB RICHARDS(CA)	60	4-20-86
	p136-9	40.90 THOMAS MCDERMOTT(CT)	68	7-19-86
	p136-9	41.68 THOMAS MCDERMOTT(CT)	65	7-15-83
M70	140-2	42.72 DANIEL ALDRICH(CA)	70	7-16-88
M75	102-2	31.14 JIM YORK(CA)	75	7-16-88
M80	66-3	20.19 JOHN WHITTEMORE(CA)	80	6-7-80
M85	54-3 1/2	16.55 BUELL CRANE(ID)	87	8-16-87

DIV.	MARK	NAME(RESIDENCE)	AGE	MEET DATE
M35	268-1	81.72 WILLIAM FLOERKE(KS)	35	7-21-79
M40	242-9	74.00 LARRY STUART(CA)	41	6-9-79
M45	238-10	72.80 LARRY STUART(CA)	46	5-12-84
	p239-7	75.02 LARRY STUART(CA)	48	6-14-86
M50	215-9	65.76 LARRY STUART(CA)	50	4-30-88
M55	180-9	55.10 BILL MORALES(CA)	56	4-19-73
M60	191-10	58.48 DELES PICKARTS(CA)	60	11-28-87
M65	148-3	45.18 BILL MORALES(CA)	67	5-26-84
	p168-2	51.26 BILL MORALES(CA)	65	3-13-82
M70	142-2	43.34 BILL MORALES(CA)	70	12-5-87
	p157-9	48.08 BILL MORALES(CA)	70	8-16-87
	p152-1	46.36 BILL MORALES(CA)	70	7-25-87
M75	108-0	32.92 EMERY CURTICE(CA)	75	7-24-82
M80	94-6	28.80 HERBERT ANDERSON(CO)	80	7-24-82
	p97-5	29.69 HERBERT ANDERSON(CO)	80	1-29-82
M85	62-5	19.02 BUELL CRANE(ID)	85	6-6-85
	p66-0	20.11 HERBERT ANDERSON(CO)	85	8-16-87
	p74-5 1/2	22.69 HERBERT ANDERSON(CO)	85	9-5-87

DIV.	MARK	NAME(RESIDENCE)	AGE	MEET DATE
M35	6230	PHIL MULKEY(ALA)	38	3-26-71
M40	6212	DAVE THORSON(CA)	40	6-6-81
M45	5734	GARY MILLER(CA)	47	3-23-85
M50	6212	GARY MILLER(CA)	50	5-27-88
M55	5246	RICHMOND MORCOM(PA)	55	9-11-76
M60	4552	RICHMOND MORCOM(PA)	61	8-28-82
M65	2783	CLAUDE HILLS(PA)	65	6-24-77
	p3064	RICHMOND MORCOM(PA)	65	7-26-86
M70	2513	CLAUDE HILLS(PA)	70	7-3-82
M75	1659	HERBERT ANDERSON(CO)	75	3-24-78
M80	994	HERB ANDERSON(CO)	80	8-28-82
M85	252	A. E. PITCHER(USA)	85	9-19-87

DIV.	MARK	NAME(RESIDENCE)	AGE	MEET DATE
M35	3377	FRANK REILLY(CA)	39	6-20-87
	p3432	MIKE HILL(US)	36	6-20-87
M40	3055	GARY MILLER(CA)	43	8-16-81
	p3157w	REX HARVEY(CA)	40	7-13-86
M45	3117	GARY MILLER(CA)	45	9-30-83
M50	2976	GARY MILLER(CA)	50	6-26-88
M55	2566	RICHMOND MORCOM(PA)	56	8-12-77
M60	2301	JOHN ALEXANDER(TX)	61	5-8-81
	p2043w	RICHMOND MORCOM(PA)	66	6-20-87
M70	1384	BILL MORALES(CA)	65	7-13-86
M75	927	CLAUDE HILLS(PA)	71	12-3-87
	p943	KEN CARNINE(CA)	76	6-26-88
	p922	HERBERT ANDERSON(CO)	75	8-12-77
M80	706	HERBERT ANDERSON(CO)	80	9-4-82
M85	372	HERBERT ANDERSON(CO)	85	12-3-87

Women's American Five Year Age Group Records

DIV.	MARK	NAME(RESIDENCE)	AGE	MEET DATE
M35	12.3	ALMETA PARISH(CA)	38	5-17-75
M40	11.4	IRENE OBERA(CA)	42	5-15-76
M45	11.7	IRENE OBERA(CA)	45	4-28-79
M50	13.5	SHIRLEY KINSEY(CA)	51	2-7-81
M55	14.8	SALLIE STIEGELMEIER(OH)	55	10-14-87
M60	14.7	JOSEPHINE KOLDA(CA)	64	5-1-82
M65	15.2	POLLY CLARKE(CO)	67	5-21-78
M70	26.6	MARILLA SALISBURY(CA)	73	8-1-81
M75	27.5	MARILLA SALISBURY(CA)	75	7-23-83

DIV.	MARK	NAME(RESIDENCE)	AGE	MEET DATE
M35	11.9	PHIL RASCHKER(GA)	36	6-25-83
M40	12.31H	PHIL RASCHKER(GA)	40	12-1-87
	p12.3	PHIL RASCHKER(GA)	40	6-6-87
M45	12.63	IRENE OBERA(CA)	45	7-7-79
M50	12.9	IRENE OBERA(CA)	51	6-1-85
M55	14.6	RUTH CHRISTIAN(CA)	55	8-18-79
M60	15.5	JOSEPHINE KOLDA(CA)	63	10-3-81
M65	16.1	POLLY CLARKE(CO)	67	5-6-78
M70	16.2	POLLY CLARKE(CO)	70	4-17-81
M75	16.87	POLLY CLARKE(CO)	75	8-31-85

DIV.	MARK	NAME(RESIDENCE)	AGE	MEET DATE
M35	24.63	PHIL RASCHKER(GA)	36	9-24-83
	24.69	JANE FREDERICK(CA)	35	8-31-87
M40	25.72	PHIL RASCHKER(GA)	40	12-4-87
	p25.7	PHIL RASCHKER(GA)	40	6-6-87
M45	26.21	IRENE OBERA(CA)	47	1-13-81
M50	27.3	IRENE OBERA(CA)	51	6-1-85
	p25.32.29	NIKKI RYAN(WA)	56	6-26-88
M60	33.3	JOSEPHINE KOLDA(CA)	63	2-27-82
M65	34.2	JOSEPHINE KOLDA(CA)	67	5-18-85
M70	34.2	POLLY CLARKE(CO)	71	9-6-81
M75	35.93	POLLY CLARKE(CO)	75	8-31-85

DIV.	MARK	NAME(RESIDENCE)	AGE	MEET DATE
M35	56.8	PHIL RASCHKER(GA)	36	6-25-83
M40	59.9	IRENE OBERA(CA)	42	7-4-76
M45	61.1	IRENE OBERA(CA)	46	8-16-80
M50	63.7	IRENE OBERA(CA)	51	5-18-85
M55	76.1	JANE CLARKSON(MO)	56	8-2-87
M60	80.31	JOSEPHINE KOLDA(CA)	64	5-1-82
M65	82.3	JOSEPHINE KOLDA(CA)	65	10-1-83

10,000 METERS				
DIV.	MARK	NAME (RESIDENCE)	AGE	MEET DATE
W35	31:35.52	FRANCIS LARRIEU(TX)	35	9-30-88
W40	35:33.6	JUDY FOX(CA)	40	8-15-81
	p35:20.59	LAURIE BINDER(CA)	40	8-14-87
W45	38:19.8	VICKY BIGELOW(CA)	48	8-21-83
W50	38:53.6	MILA KANIACHTY	51	6-26-82
W55	41:32.2	TOSHIKO D'ELIAC(NJ)	55	8-23-85
W60	44:51.0	PAT DIXON(CR)	63	7-16-82
W65	49:22.41	JACLYN CASELLI(CA)	65	7-18-86
W70	60:01	BESS JAMES(CA)	70	7-13-80
	p58:25.98	PEARL MEHL(CO)	73	8-14-87
W75	89:49.8	MARILLA SALISBURY(CA)	75	7-9-83

ONE HOUR RUN				
DIV.	MARK	NAME (RESIDENCE)	AGE	MEET DATE
W35	9-11:24	15.512 MARYLIN PAUL(OR)	36	7-20-74
W40	9-11:97	15.579 LINDA SIPPRELLE(DC)	43	7-29-78
W45	9-3:376	14.828 MARYLIN HARBIN(CA)	45	3-26-83
W50	8-13:55	14.116 NICKI HOBSON(CA)	50	8-4-81
	p8-19:09	14.620 MOLA BRUHN(US)	51	5-18-80
W55	7-10:21	12.199 MARCIE TRENT(AK)	58	7-18-76
W60	8-10	12.884 MARCIE TRENT(AK)	61	7-28-79
W65	5-11:94	9.139 EDNA BERGM(T)	67	2-5-83
W70	6-52	9.704 ALICE WERBEL(CA)	70	9-14-86
W75	4-16:7	6.590 MARILLA SALISBURY(CA)	76	6-7-84

HURDLES (35-39: 100M, 33"; 40+: 80M, 30")				
DIV.	MARK	NAME (RESIDENCE)	AGE	MEET DATE
W35	13-77	JANE FREDERICK(CA)	35	8-31-87
W40	12-10H	PHIL RASCHKER(CA)	40	11-28-87
	p12-0	PHIL RASCHKER(CA)	40	6-6-87
W45	12-5	CHERRIE SHERRARD(CA)	45	7-14-84
W50	14-6	CHRISTEL MILLER(CA)	50	6-1-85
W55	16-6	SHIRLEY KINSEY(CA)	55	7-14-84
W60	19-7	PATRICIA PETERSON(MY)	62	5-28-88

INTERMEDIATE HURDLES (400M: 35-49, 30"; 300M: 50+, 30")				
DIV.	MARK	NAME (RESIDENCE)	AGE	MEET DATE
W40	65-03	PHIL RASCHKER(USA)	40	12-5-87
W60	71-74	PAT PETERSON(USA)	62	8-4-88

HIGH JUMP				
DIV.	MARK	NAME (RESIDENCE)	AGE	MEET DATE
W35	6-1 1/4	1.86 JANE FREDERICK(CA)	36	8-15-88
W40	5-1	1.55 PHIL RASCHKER(GA)	40	7-11-87
W45	4-4	1.32 SHIRLEY SMITH(FL)	47	7-16-82
W50	4-4 1/2	1.33 CHRISTEL MILLER(CA)	51	3-29-86
W55	3-8	1.12 SHIRLEY KINSEY(CA)	56	3-29-86
	3-8	1.12 JOYCE VARNEY(HI)	57	9-17-83
	3-8	1.12 PATRICIA PETERSON(MY)	60	5-28-88
W65	3-8	1.12 MARY BOWMASTER(OH)	67	8-17-84
W70	3-8 1/2	1.13 MARY BOWMASTER(OH)	70	11-28-87

LONG JUMP				
DIV.	MARK	NAME (RESIDENCE)	AGE	MEET DATE
W35	21-4	6.50 WILLYE WHITE(US)	35	10-26-74
W40	16-10 3/4	5.15 JOANNE GRISSON(IN)	44	7-20-83
	p17-10	5.43 PHIL RASCHKER(GA)	40	6-6-87
W45	15-9	4.80 IRENE OBERA(CA)	45	4-7-79
W50	14-6 1/2	4.43 IRENE OBERA(CA)	54	7-30-88
W55	12-0	3.66 SHIRLEY KINSEY(CA)	55	7-1-84
	p12-2 1/2	3.72 MAGDALENA KUEHNE(CA)	56	6-20-87
	p12-0	3.66 MAGDALENA KUEHNE(CA)	57	8-4-88
W60	11-7	3.53 JEAN CAMPBELL(VA)	62	4-30-88
W65	10-5 1/4	3.18 MARY BOWMASTER(OH)	66	9-23-83
W70	10-2 1/2	3.11 MARY BOWMASTER(OH)	70	12-1-87
W75	8-2 3/4	2.51 POLLY CLARKE(CO)	78	8-13-88

TRIPLE JUMP				
DIV.	MARK	NAME (RESIDENCE)	AGE	MEET DATE
W35	36-7	11.15 PHIL RASCHKER(GA)	36	9-18-83
W40	36-7 1/2	11.16 PHIL RASCHKER(GA)	40	12-1-87
W45	30-8 1/4	9.35 JOAN GRISSON(IN)	45	9-18-83
W50	28-9 3/4	8.78 CHRISTEL MILLER(CA)	52	12-5-87
W55	26-1 1/2	7.96 MAGDALENA KUEHNE(CA)	56	7-11-87
W60	21-5	6.53 JOSEPHINE SULLIVAN(SC)	63	9-2-88
W65	p9-10 1/2	3.01 AMY ROBERTSON(US)	67	6-12-82
W70	16-9 3/4	5.12 EDITH MENDYKA(CA)	73	1-29-84
W75	15-7	4.75 EDITH MENDYKA(CA)	75	5-17-86

SHOT PUT (30-49: 4kg; 50+: 3kg)				
DIV.	MARK	NAME (RESIDENCE)	AGE	MEET DATE
W35	45-3	13.79 LYNN GRAMAM(CA)	35	4-9-83
W40	39-7	12.06 JOANNE GRISSON(IN)	41	6-19-80
W45	39-7 1/2	12.08 JOANNE GRISSON(IN)	45	7-22-84
W50	34-10 1/4	10.62 MARJORIE LARNEY(CA)	50	8-15-87
W55	31-6	9.60 BERNICE HOLLAND(OH)	58	8-25-85
W60	30-11 1/4	9.43 BERNICE HOLLAND(OH)	61	8-5-88
W65	26-5	8.05 MARY BOWMASTER(OH)	68	7-18-86
W70	26-9	8.15 EDITH MENDYKA(CA)	72	9-17-83
W75	24-5	7.44 EDITH MENDYKA(CA)	75	7-18-86

DISCUS THROW (1kg)				
DIV.	MARK	NAME (RESIDENCE)	AGE	MEET DATE
W35	146-11	44.78 JANET WILSON(CA)	35	7-3-88
W40	107-5	32.74 LURLINE STRUPPECK(LA)	40	8-15-87
	p111-4	33.94 MARY PRIEST(OR)	43	8-7-83
W45	106-5	32.44 JOANNE GRISSON(IN)	45	8-7-83
W50	90-4	27.53 SHIRLEY KINSEY(CA)	53	7-10-82
	p97-3	29.64 MARJORIE LARNEY(CA)	50	8-15-87
W55	100-8	30.68 BERNICE HOLLAND(OH)	57	6-30-84
	p90-2 3/4	27.50 BERNICE HOLLAND(OH)	60	11-28-87
W65	63-6	19.35 EDITH MENDYKA(CA)	68	10-6-79
W70	62-6	19.05 EDITH MENDYKA(CA)	70	8-8-81
W75	58-1	17.70 EDITH MENDYKA(CA)	75	1-19-86

HAMMER THROW (35-49: 4kg; 50+: 3kg)				
DIV.	MARK	NAME (RESIDENCE)	AGE	MEET DATE
W35	117-5	35.80 JOAN STRATTON(USA)	35	11-29-87
W40	51-6	15.70 MARYLIN KNIGHT(USA)	44	6-23-85
	p73-1 1/4	22.28 BRENDA BLOOMFIELD(USA)	44	5-3-86
W45	68-5 3/4	20.87 SHIRLEY SMITH(USA)	48	12-17-83
W50	60-6	18.44 CHRISTEL MILLER(USA)	50	1-5-86
	p61-7	18.77 RACHEL LYGA(MN)	53	7-4-88
W55	93-10	28.60 SALLY POLK(CA)	58	10-1-88
W65	30-0	9.14 ELIZABETH PARTRIDGE(USA)	67	12-1-82
W70	30-10	9.40 BERYL SYRINGER(USA)	70	10-9-83

JAVELIN THROW (30-49: 600 GRAMS; 50+: 400 GRAMS)				
DIV.	MARK	NAME (RESIDENCE)	AGE	MEET DATE
W35	152-11	46.62 JANE FREDERICK(CA)	35	9-1-87
W40	139-3	42.44 LURLINE STRUPPECK(LA)	41	7-23-88
W45	102-8	31.30 CHRISTEL MILLER(CA)	48	3-23-83
W50	108-7	33.10 CHRISTEL MILLER(CA)	50	3-10-85
W55	88-10	27.07 SHIRLEY KINSEY(CA)	55	10-6-84
W60	92-10 1/4	28.30 BERNICE HOLLAND(OH)	60	11-29-87
W65	74-0	22.55 EDITH MENDYKA(CA)	65	6-27-76
W70	72-7	22.12 EDITH MENDYKA(CA)	72	5-14-83
W75	65-7 1/2	20.00 EDITH MENDYKA(CA)	76	6-20-87

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WAVA HURDLES AND IMPLEMENTS SPECIFICATIONS

HURDLES										
WOMEN					MEN					
Age	Race Distance	Hurdle Height	To 1st Hurdle	Between Hurdles	To Finish	Race Distance	Hurdle Height	To 1st Hurdle	Between Hurdles	To Finish
35-39	100m	.840m 33"	13.00m 42'8 1/2"	8.5m 27'10 1/2"	10.5m 34'5"					
40-49	80m	.762m 30"	12.00m 39'4"	8.0m 26'3"	12.00m 39'4"	110m	.991m 39"	13.72m 45'	9.14m 30'	14.02m 46'
50-59	80m	.762m 30"	12.00m 39'4"	7.0m 22'11 1/2"	19.00m 62'4"	100m	.914m 36"	13.00m 42'8"	8.50m 27'10 1/2"	10.50m 34'5"
60-69	80m	.762m 30"	12.00m 39'4"	7.0m 22'11 1/2"	19.00m 62'4"	100m	.840m 33"	13.00m 42'8"	8.50m 27'10 1/2"	10.50m 34'5"
70 plus	80m	.762m 30"	12.00m 39'4"	7.0m 22'11 1/2"	19.00m 62'4"	80m	.762m 30"	12.00m 39'4"	8.00m 26'3"	12.00m 39'4"
35-39	400m	.762m 30"	45.00m 147'7-1/4"	35.00m 114'9 1/2"	40.00m 131'2 1/2"					
40-49	400m	.762m 30"	45.00m 147'7-1/4"	35.00m 114'9 1/2"	40.00m 131'2 1/2"	400m	.914m 36"	45.00m 147'7 1/2"	35.00m 114'9 1/2"	40.00m 131'2 1/2"
50-59	300m	.762m 30"	50.00m 164'0 1/2"	35.00m 114'9 1/2"	40.00m 131'2 1/2"	300m	.840m 33"	50.00m 164'0 1/2"	35.00m 114'9 1/2"	40.00m 131'2 1/2"
60-69	300m	.762m 30"	50.00m 164'0 1/2"	35.00m 114'9 1/2"	40.00m 131'2 1/2"	300m	.762m 30"	50.00m 164'0 1/2"	35.00m 114'9 1/2"	40.00m 131'2 1/2"
70 plus	300m	.762m 30"	50.00m 164'0 1/2"	35.00m 114'9 1/2"	40.00m 131'2 1/2"	300m	.762m 30"	50.00m 164'0 1/2"	35.00m 114'9 1/2"	40.00m 131'2 1/2"

Scoopedchase distance: All females, and male age-groups 160 and above - 200m.
 Male age-groups younger than 160 - 300m.

IMPLEMENTS				
Age	Shot put	Discus	Hammer	Javelin
35-49	4.00K	1.00K	4.00K	600 gms.
50 plus	3.00K	1.00K	3.00K	600 gms.
40-49	7.26K (16 lbs)	2.00K	7.26K (16 lbs)	800 gms.
50-59	6.00K	1.50K	6.00K	800 gms.
60-69	5.00K	1.00K	5.00K	800 gms.
70 plus	4.00K	1.00K	4.00K	800 gms.

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U.S. MASTERS ALL AMERICAN STANDARDS OF EXCELLENCE FOR MASTERS RACE WALKERS

Mile					2-mile					5K					10K					20K														
M40	7:29.8	14:30	15:40	24:30	31:00	1:45	M40	8:55.4	17:20	18:40	29:00	1:00	2:04	M40	9:12.4	17:53	19:17	31:00	1:04	2:12	M40	10:30.2	20:24	21:59	33:00	1:08	2:20	M40	11:45.0	22:49	24:35	38:00	1:18	2:40
M45	7:42.8	15:10	16:20	26:00	34:00	1:52	M45	9:12.4	17:53	19:17	31:00	1:04	2:12	M45	10:30.2	20:24	21:59	33:00	1:08	2:20	M45	11:45.0	22:49	24:35	38:00	1:18	2:40	M45	12:20.2	23:59	25:50	41:00	1:24	2:52
M50	8:25.1	16:20	17:37	27:30	37:00	1:58	M50	10:30.2	20:24	21:59	33:00	1:08	2:20	M50	11:45.0	22:49	24:35	38:00	1:18	2:40	M50	12:20.2	23:59	25:50	41:00	1:24	2:52	M50	13:20.7	29:48	32:08	50:00	1:42	3:28
M55	8:43.1	16:55	18:15	29:00	40:00	2:04	M55	10:55.4	21:13	22:51	35:00	1:12	2:28	M55	11:45.0	22:49	24:35	38:00	1:18	2:40	M55	12:20.2	23:59	25:50	41:00	1:24	2:52	M55	13:20.7	29:48	32:08	50:00	1:42	3:28
M60	9:19.9	18:07	19:32	30:30	43:00	2:10	M60	11:45.0	22:49	24:35	38:00	1:18	2:40	M60	12:20.2	23:59	25:50	41:00	1:24	2:52	M60	13:20.7	29:48	32:08	50:00	1:42	3:28	M60	14:15.0	30:00	32:00	50:00	1:48	3:40

U.S. MASTERS STANDARDS OF EXCELLENCE FOR MEN

Event	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84	85-89
100	11.0	11.33	11.67	12.0	12.5	13.0	13.5	14.0	15.0	16.5	18.0	20.0
200	22.4	23.3	24.2	25.1	26.0	27.2	28.5	29.8	32.4	35.8	39.8	44.0
400	51.0	52.5	54.0	56.0	58.5	61.5	65.0	70.0	76.5	84.5	94.0	105.0
800	2:01	2:04	2:08	2:13	2:19	2:27	2:37	2:49	3:06	3:27	3:54	4:24
1500	4:11	4:15	4:22	4:32	4:45	5:02	5:24	5:47	6:22	7:03	7:59	9:15
Mile	4:31	4:35	4:42	4:53	5:07	5:25	5:49	6:14	6:51	7:38	8:42	10:10
5000	15:30	15:42	16:06	16:44	17:30	18:24	19:36	21:08	23:30	26:00	29:00	32:30
10000	32:11	32:35	33:30	34:45	36:15	38:10	40:30	44:15	48:30	54:30	61:15	68:30
110H	15.3	16.4	17.75	18.75								
100H					18.0	19.0	20.0	21.3				
80H									18.0	21.0	25.0	30.0
400H	57.6	59.7	62.0	64.4								
300H					48.0	51.0	55.0	60.0	66.5	74.5	84.0	95.0
3K-5C	10:00	10:20	10:55	11:40	12:30	13:20			9:30	10:30	12:00	14:00
2K-5C												
HJ	1.94	1.85	1.76	1.68	1.59	1.50	1.41	1.32	1.23	1.13	1.02	.92
	6-4 1/2	6-3 3/4	5-9 1/2	5-6	5-2 1/2	4-11	4-7 1/2	4-4	4-1 1/2	3-8	3-4	3-1
PV	4.40	4.15	3.90	3.60	3.30	3.05	2.80	2.55	2.30	2.05	1.80	1.50
	14-5 1/2	13-7 1/2	12-9 1/2	11-9 1/2	10-10	10-0	9-2 1/2	8-4 1/2	7-6 1/2	6-8 1/2	5-11	4-11
LJ	6.55	6.20	5.85	5.45	5.10	4.75	4.40	4.00	3.65	3.35	3.00	2.65
	21-6	20-4 1/2	19-2 1/2	17-10 1/2	16-9	15-7	14-5 1/2	13-1 1/2	11-11 1/2	11-0	9-10	8-8 1/2
TJ	13.35	12.65	11.90	11.15	10.40	9.65	8.90	8.20	7.50	6.80	6.10	5.50
	43-9 1/2	41-6	39-1 1/2	36-7	34-1 1/2	31-8	29-2 1/2	26-11	24-7 1/2	22-4	20-1 1/2	18-1 1/2
Shot	15.20	14.10	13.00	12.00	12.40	11.20	12.00	10.80	10.00	8.80	7.65	6.50
	49-10 1/2	46-3 1/2	42-8	39-4 1/2	40-8 1/2	36-9	39-4 1/2	35-5 1/2	33-0	28-10 1/2	25-1 1/2	21-4
Discus	44.80	42.60	40.60	38.00	40.00	36.40	40.00	36.80	31.60	26.40	21.40	16.20
	147-0	139-9	133-2	124-8	131-3	119-5	131-3	120-9	103-8	86-7	70-2 1/2	53-2
Hammer	47.24	44.20	41.14	38.10	38.40	36.00	36.00	33.00	29.00	25.00	22.50	18.00
	155-0	145-0	135-0	125-0	126-0	118-1	118-1	108-3	95-2	82-0	73-10	60-0
Jav	62.00	57.00	52.00	48.00	43.00	38.50	40.00	35.00	29.00	24.00	19.00	15.00
	203-5	187-0	170-7	157-6	141-1	126-4	141-1	114-10	95-2	78-9	62-4	49-2
35Pvt.	15.00	14.00	13.00	12.00	10.00	9.00						
25Pvt.							11.00	10.00	9.00	8.00	7.00	6.00
56Pvt.	9.50	9.00	8.50	8.00	6.00	5.00	4.50	4.00	3.50	3.00	2.50	2.00
PEW	2800	2600	2400	2200	2000	1800	3000	3000	3000	2500	2000	1000
DEC	5500	5250	5000	4500	4000	3000	6000	5500	5000	4000	2000	1500

notes: 1) 100 standards are for automatic time; use standard conversion for hand time.
 2) Short hurdles: 30-49: 39"; 50-59: 36"; 60-69: 33"; 70+: 30".
 3) Long hurdles: 30-49: 36"; 50-59: 33"; 60+: 30".
 4) Shot put: 30-49: 7.26k (16f); 50-59: 6k; 60-69: 5k; 70+: 4k.
 5) Discus throw: 30-49: 2kg; 50-59: 1.5kg; 60+: 1.0kg.
 6) Hammer: 30-49: 7.26k (16f); 50-59: 6k; 60-69: 5k; 70+: 4k.
 7) Javelin: 30-49: 800g; 60+: 400g.
 8) Metric heights and distances are the standard; feet and inches listed for convenience.
 9) Dec/Pentathlon: 30-59: IAAF points; 60+: Ten Hums points (old NAVA).

U.S. MASTERS STANDARDS OF EXCELLENCE FOR WOMEN

Event	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80-84
100	13.8	14.2	14.6	15.0	15.6	16.2	16.9	17.8	18.8	20.0	21.2
200	28.0	29.2	30.3	31.4	32.5	34.0	35.7	37.5	40.0	43.5	47.0
400	63.5	65.5	67.5	69.5	71.5	73.5	78.5	83.7	90.0	96.5	103.3
800	2:32	2:35	2:40	2:46	2:54	3:05	3:19	3:36	3:56	4:09	4:35
1500	5:10	5:19	5:29	5:40	5:58	6:20	6:48	7:23	8:04	8:52	9:48
Mile	5:34	5:44	5:55	6:07	6:26	6:49	7:19	7:46	8:47	9:39	10:45
5000	19:45	20:30	21:20	22:16	23:12	24:16	26:08	28:08	30:08	32:21	34:26
10000	41:00	42:40	44:40	47:00	49:30	52:00	56:00	60:00	66:00	76:00	86:00
100H	17.2	18.2			66.0	72.0	79.0	87.0	96.0		
80H			15.0	15.8	16.5	17.6	18.7	20.2	22.2	25.0	28.0
400H	75.5	79.9	84.4	88.8							
300H											
HJ	1.42	1.35	1.27	1.19	1.12	1.07	1.02	.97	.92	.89	.84
	4-8	4-5 1/2	4-2	3-11	3-8	3-6 1/2	3-4 1/2	3-2 1/2	3-0 1/2	2-11	2-9
LJ	5.00	4.60	4.25	3.90	3.55	3.20	2.85	2.60	2.35	2.10	2.00
	16-5	15-1	13-11 1/2	12-9 1/2	11-8	10-6	9-4 1/2	8-6 1/2	7-8 1/2	6-11	6-7
TJ	10.00	9.20	8.60	7.80	7.18	6.40	5.70	5.20	4.70	4.20	3.80
	29-7 1/2	28-3	26-8	23-5 1/2	22-8	20-5 1/2	18-10	16-5	13-11 1/2	13-1 1/2	
Shot	10.30	9.30	8.40	7.70	7.95	7.20	6.50	5.80	5.25	4.70	4.25
	33-9 1/2	30-6 1/2	27-7	25-3 1/2	26-1	23-7 1/2	21-4	19-0 1/2	17-3	15-5	13-11 1/2
Jav	39.50	33.50	27.50	21.50	25.00	19.00	18.00	16.00	15.00	14.00	13.50
	129-7	109-11	93-6	70-6 1/2	82-0	62-4	59-1	52-6	49-2	45-11	44-4
Discus	30.0	27.8	26.0	24.0	22.0	20.0	18.0	16.0	15.0	14.0	13.5
	98-5	91-2	85-4	78-9	72-2	65-8	59-1	52-6	49-2	45-11	44-4
Hammer	40.0	35.0	30.0	25.0	23.0	22.0	20.0	18.0	14.0	12.0	9.0
	131-3	114-10	98-5	82-0	75-6	72-2	65-8	59-1	45-11	39-5	29-7
20Pvt.	10.00	9.00	8.00	7.00	6.00	5.00	4.00	3.50	3.25	3.00	2.75

notes: 1) 100 standards are for automatic time; use standard conversion for hand time.
 2) Short hurdles: 30-39: 33"; 40+: 30".
 3) Shot put: 30-49: 4k; 40+: 3k.
 4) Javelin: 30-49: 600g; 50+: 400g.
 5) Hammer: 30-49: 4k; 40+: 3k.
 6) Metric heights and distances are the standard; feet and inches listed for convenience.

APPLICATION FOR AN ALL-AMERICAN CERTIFICATE

NAME: _____ PHONE: _____
 ADDRESS: _____ AGE GROUP: _____
 SEX: M _____ F _____
 EVENT: _____ MARK: _____
 MEET: _____ WEIGHT OF IMPLEMENT _____
 DATE OF MEET: _____ HURDLE HEIGHT _____

MEET SITE: _____
 If you have bettered the standard of excellence, please send \$10.00 and this form to: All American, National Masters News, P.O. Box 2372, Van Nuys, CA 91404. (Enclose copy of results, or note in which issue they appeared.) A 3-color, 8 1/2 x 11 certificate, suitable for framing, will be mailed to you within two weeks.

“I have received the age-graded book with single-age standards and factors. This is a marvelous piece of work and a real contribution to the sport. Thanks and congratulations.”

*Jim Saxon
Charlotte, North Carolina*

“I am greatly indebted to the National Masters News and others who developed these age-graded tables. They are providing a significant service to our sport.”

*Norman Green, Jr.
Wayne, Pennsylvania*

“The creation of age-graded standards will make a big contribution to achieving the goals and objectives of MAAD (Masters Against Age Discrimination).

*Jim O'Neil
San Diego*

HURDLES

AGE 30-49

	(1)	(2)	<input checked="" type="checkbox"/> (3)	(4)	(5)
	42	39	36	33	30
(1) 110 M	.976	1	1.024	1.049	1.073
<input checked="" type="checkbox"/> (2) 100 M	1.074	1.10	1.127	1.151	-
(3) 80 M					

$$Y = A + BX \quad .7432$$

$$1.025 = A + B39$$

$$1.05 = A + B36$$

$$A = 1.025 - 39B$$

$$A = 1.05 - 36B$$

$$-1.025 + 39B = -1.05 + 36B$$

$$3B = -.025$$

$$B = -.00833$$

$$A = .7$$

$$A = .75$$

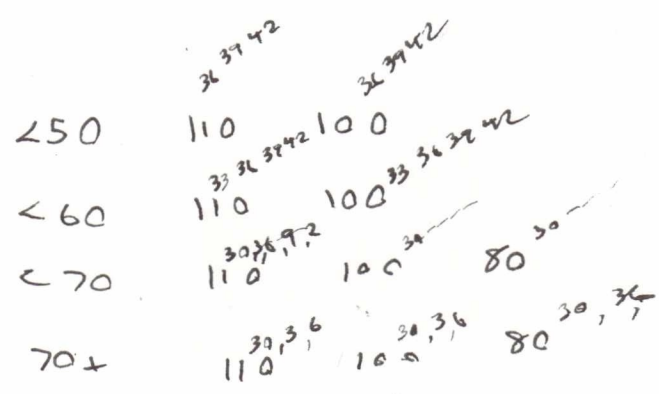
- < 30 1
- < 50 2
- < 60 3
- < 70 4
- >= 70 5

IF A\$ (RC%, 19) < 30 THEN Z = 1
 < 50 = 2
 < 60 = 3
 < 70 = 4
 >= 70 = 5

IF NON TAAF DISTANCE:

$$1.104 (100m) = (110m)$$

$$1.404 (80m) = (110m)$$



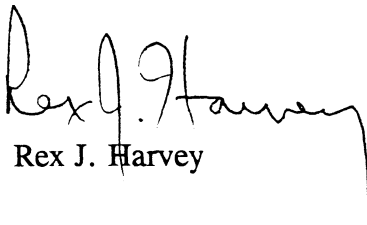
From: Rex Harvey
Subject: Photo-Chemical Machining

Date: 21Nov91

To: Pete Buca
Tom Burke
Paul Derov
Jim Duncan
John Gaag
Todd Loschelder
Curt Scheuerman
Hal Simmons
Mike Wrubel

cc: Byron Gray
Fred Alderman

Monday morning 2Dec1991 at 0930 Mr. Fred Alderman and Mr. Byron Gray of Mansfield Graphics Inc. will make a one hour presentation on the Photo-Chemical Machining process. It will include the basics of the process and the shape-size-material-tolerance capabilities of the method. Representative industrial applications will be described with samples shown and questions answered. We should all be aware of this, very precise, mass production method as it has some definite advantages which we could exploit. Recent developments in this family of processes make possible the use of this method for fabricating many more parts than the traditional ones such as screens and gaskets.


Rex J. Harvey

The walls have fallen and we have multiplied in number. The course for veteran athletics is set during the next season and you are an important part in this. You will decide how veterans athletics is to be appreciated in the future.

I will do my all to increase the appreciation of veteran athletics.

ROSS GREAT HOUSE

WAVA/TAC Hurdles and Implements Specifications

HURDLES

WOMEN

Age	Race Distance	Hurdle Height	To 1st Hurdle	Between Hurdles	To Finish
30-39	100m	.840m 33"	13.00m 42'8½"	8.5m 27'10½"	10.5m 34'5"
40-49	80m	.762m 30"	12.00m 39'4"	8.0m 26'3"	12.00m 39'4"
50-59	80m	.762m 30"	12.00m 39'4"	7.0m 22'11½"	19.00m 62'4"
60-69 70 Plus					
30-39	400m	.762m 30"	45.00m	35.00m	40.00m
40-49			147'7¾"	114'9½"	131'2½"
50-59	300m	.762m 30"	50.00m	35.00m	40.00m
60-69			164'0½"	114'9½"	131'2½"
70 plus					

MEN

30-39	110m	.991m 39"	13.72m	9.14m	14.02m
40-49			45'	30'	46'
50-59	100m	.914m 36"	13.00m 42'8"	8.50m 27'10½"	10.50m 34.5"
60-69	100m	.840m 33"	13.00m 42'8"	8.50m 27'10½"	10.50m 34'5"
70 plus	80m	.762m 30"	12.00m 39'4"	7.0m 22'11½"	19.0m 62'4"
30-49	400m	.914m 36"	45.00m 147'7½"	35.00m 114'9½"	40.00m 131'2½"
50-59	400m	.840m 33"			
60+	300m	.762m 30"	50.00m 164'0½"	35.00m 114'9½"	40.00m 131'2¾"

IMPLEMENTS

AGE	SHOT PUT	DISCUS	HAMMER	JAVELIN
Women				
30-49	4.00k	1.00k	4.00k	600gms.
50 plus	3.00k	1.00k	3.00k	400 gms.
Men				
30-49	7.26k (16 lbs.)	2.00k	7.26k (16 lbs.)	800 gms.*
50-59	6.00k	1.50k	6.00k	800 gms.*
60-69	5.00k	1.00k	5.00k	600 gms.
70 plus	4.00k	1.00k	4.00k	600 gms.

*Either "old" or "new" javelin may be used

I've published...
tinue to do so.

I believe WAVA veterans athletics helped bring 19 representative to WAVA should technical, and m

The WAVA C third term, thus Council. I ask yo in Turku on Jul

Women's R

Bridget Cusher
London, Engla

Athletic Achieve
Set British 3000-
cross-country
marathon. First
Ran in all-male

Achievements a

- First woman
- Explained air Eugene of w the triple jur
- Liaison betw
- In contact v Therapy (H)

Achievements a

- Since becom
- Championsh
- Phased in w
- Involved in s ception

Statement

Living in Lor
mulgate veteran
184 countries th

- Other long-te
- Aim for 50%
 - Raise the pr
 - Schedule mo
 - Explore the
- My motto is:

No other nom

(402) 475 - 1800

performance and can stay finitely. The walker should as fast as the proper technique; once he or she starts and racing with poor ics, these bad habits are . Soon there will be no fur- vement in times. Jumpers wers learned this lesson go and focus their attention echnique. Racewalkers who ne will improve, those who n't. □

llak won two gold medals (in d 10K racewalks) at the VI terans Games in Melbourne and is the current U.S. Na and 10K W35 champion. e is an excerpt from her for book, *The Complete Book lking.*



56, finished third in the walk at the 1988 National 8:26.3.

Age-factoring tables are due out soon from the WAVA Committees of Al Sheahan and Rodney Charnock.

Age-factoring will be a huge improvement in the multi-events because it will allow direct comparison between all age groups in a competition and will allow the results of older multi-eventers to be compared with those of open competitors. If this meet had been age-factored, the overall winner would have been Phil

Dan Bulkley, M70, 6966; fifth Ed Oleata, M50, 6831; and sixth, Henry Hopkins, M45, 6793.

Note that these preliminary age-factors seem to do a good job because they do not concentrate winners in any particular age group or groups. Gary Miller's excellent decathlon performance of 6031 earlier this year at Cal State-Los Angeles age-factors to 8604 points and vicariously would have put him on this year's U.S. Olympic team. □

won the M35 masters compe seasoned mast Davis.

Rex Harvey with an age-42 A time competitor the M45 title, p Tom Cronan.

Gary Miller, v M50-54 world r on this same tr with Ed Oleata Mulkey won the whole meet had Second place bleary-eyed after Europe.

Dick Nordqui

Updated Pentathlon Scores - 1985 Tables

by GARY D. MILLER

In Des Moines, Iowa 1986, the multi-event athletes voted, unanimously, to update Peter Mundle's records for combined events from the 1962 IAAF tables to the new 1985 tables.

Rex Harvey volunteered to do the decathlon and I volunteered to do the pentathlon. I received enormous help from Pete Mundle. Many scores had lost their subdiscipline marks; therefore, letters went out, etc. to try

and recapture those marks. Bill Forsyth was very helpful. One of his hobbies seems to be keeping tabs on pentathlon results.

The following list, except for Dr. Tilman's and Schallau's scores, is an updated World and American Pentathlon best list. If you have additions or corrections, please contact me at the following address: Gary D. Miller, 1740 Grandview Avenue, Glendale, CA 91201. □

WORLD RECORDS PENTATHLON

M35	SILVIU HODOS	3806	FRA	4/17/83
M40	WERNER SCHALLAU	3455	GFR	9/24/78
M45	GARY MILLER	3117	USA	9/30/83
M50	GARY MILLER	2976	USA	6/26/88
M55	BOO MORCOM	2566	USA	8/12/77
M60	RUDI HOCHREITER	2346	AUS	12/03/87
M65	GUDMUND SKRIVERVIK	2028	NOR	7/31/86
M70	ADOLF KOCH	1685	GFR	12/03/87
M75	GERHARD SCHEPE	1002	GFR	12/03/87
M80	KARSTEN BRODERSEN	869	GFR	12/03/87
M85	HERB ANDERSON	372	USA	12/03/87

AMERICAN RECORDS PENTATHLON

M35	FRANK REILLY	3377	CA	6/20/87
M40	GARY MILLER	3055	CA	8/16/81
M45	GARY MILLER	3117	CA	9/30/83
M50	GARY MILLER	2976	CA	6/26/88
M55	BOO MORCOM	2566	PA	8/12/77
M60	JOHN ALEXANDER	2301	TX	5/8/81
M65	BOO MORCOM	1988	NH	6/20/87
M70	BILL MORALES	1384	CA	12/03/87
M75	HERB ANDERSON	922	CO	8/12/77
M80	HERB ANDERSON	706	CO	9/04/82
M85	HERB ANDERSON	372	CO	12/03/87

1985 IAAF SCORING TABLES

THE 12TH AN EISENHOWER

\$7.00 REGISTRATIO

NAME _____

ADDRESS _____

CITY AND ST. _____

TELEPHONE _____

TAC# _____

I UNDERSTAN

SIGNATURE _____

WOMEN'S PENTATHLON RESULTS

Phil Raschker (Marietta, GA/45)

80-Meter Hurdles	1.104 14.58 14.82	13.2	863	868 *
High Jump	1.215 1.68	1.39 (4-6 $\frac{1}{2}$)	830	830
Shot Put	1.27	7.14 (23-5 $\frac{3}{4}$)	468	468
Long Jump	1.221	4.97 (16-3 $\frac{1}{2}$)	868	868
800 Meters	.8883 2:31.98	2:51.08	647	668 *
Total			3,676	<u>3702</u>

Mariene Sachs (Norwich, VT/48)

80-Meter Hurdles	1.104 17.12 17.36	15.5	548	5.56 *
High Jump	1.54	1.27 (4-2)	666	666
Shot Put	9.90	7.80 (25-7 $\frac{3}{4}$)	523	523
Long Jump	4.88	4.00 (13-1 $\frac{1}{2}$)	527	527
800 Meters	2:35.16	2:54.66	608	630 *
Total			2,872	<u>2902</u>

Barbara Stewart (Fairport, NY/50)

80-Meter Hurdles	1.057 20.68 20.82	19.56	321	230 *
High Jump	1.295 1.33	1.03 (3-4 $\frac{1}{2}$)	439	439
Shot Put	1.23 8.73	7.10 (23-3 $\frac{1}{2}$)	447	447
Long Jump	1.307 4.63	3.55 (11-7 $\frac{3}{4}$)	461	461
800 Meters	.8537 3:40.38	4:18.14	31	82
Total			1,699	

Christel Miller (Glendale, CA/57)

80-Meter Hurdles	1.115 1.011 16.31 16.55	16.13	<u>677</u>	648 *
High Jump	1.381 1.75	1.27 (4-2)	916	916
Shot Put	1.36 12.07	8.33 (23-1 $\frac{1}{4}$)	666	666
Long Jump	1.404 5.22	3.72 (12-2 $\frac{1}{2}$)	620	620
800 Meters	.8143 3:14.26	3:53.56	214	244 *
Total			3,093	<u>3103</u>

Johnnye Valien (Houston, TX/67)

80-Meter Hurdles	1.255 .907 21.44 21.58	23.63	194	178 *
High Jump	1.582 1.62	1.03 (3-4 $\frac{1}{2}$)	759	759
Shot Put	1.68 10.19	6.07 (19-11)	542	542
Long Jump	1.631 5.02	3.08 (10-1 $\frac{1}{4}$)	565	565
800 Meters	.7255 2:58.94	4:06.64	319	375 *
Total			2,379	

Martha Mendenhall (Federal Way, WA/33)

100-Meter Hurdles	.9792 18.97 19.21	19.37	393	271 *
High Jump	1.026 1.48	1.25 (4-9)	599	599
Shot Put	1.04 9.03	8.63 (23-6 $\frac{3}{4}$)	466	466
Long Jump	1.023 4.28	4.19 (13-9)	374	374
800 Meters	.9835 3:15.14	3:18.41	235	237 *
Total			2,067	

Irene Thompson (Syracuse, NY/38)

100-Meter Hurdles	.9496 17.91 18.5	18.86	498	473 *
High Jump	1.082 1.47	1.36 (4-5 $\frac{1}{2}$)	588	588
Shot Put	1.08 8.54	7.91 (25-11 $\frac{1}{2}$)	434	434
Long Jump	1.079 5.38	4.99 (16-4 $\frac{1}{2}$)	665	665
800 Meters	.9532 2:49.50	2:48.37	559	567 *
Total			2,744	

AGE 0-29

	42	39	36
110 m	1	1.025	1.05
100 m	1.104	1.132	1.159

CORRECT FIRST
FOR DISTANCE

1.104
OR
1.404

THEN FOR HEIGHT

.025/3"

AGE 30-49

	42	39	36	33
110 m	.975	1	1.025	1.05
100 m	1.076	1.104	1.132	1.159

AGE 50-59

	42	39	36	33
110 m	.861	.883	.906	.929
100 m	.950	.975	1	1.025

AGE 60-69

	42	39	36	33	30
110	.838	.861	.883	.906	.929
100	.925	.950	.975	1	1.025
80	1.177	1.208	1.240	1.273	1.304

AGE 70+

	42	39	36	33	30
110	.641	.659	.676	.694	.712
100	.815	.838	.861	.883	.906
80	.900	.925	.950	.975	1

DISEAS

AGE 0-29

2.0	1.6	1.5	1.0
1			

AGE 30-49

1	.89	.86	.73

AGE 50-59

1.163	1.03	1	.849

AGE 60-~~69~~⁺

1.370	1.218	1.178	1

AGE 70 +

1.370	1.218	1.178	1

434
251

1.0

1.5 1.6

2.0

1.10

1.00

.90

.80

.70

1.26

1.25

1.24

1.23

1.22

1.21

1.20

.19

1.18

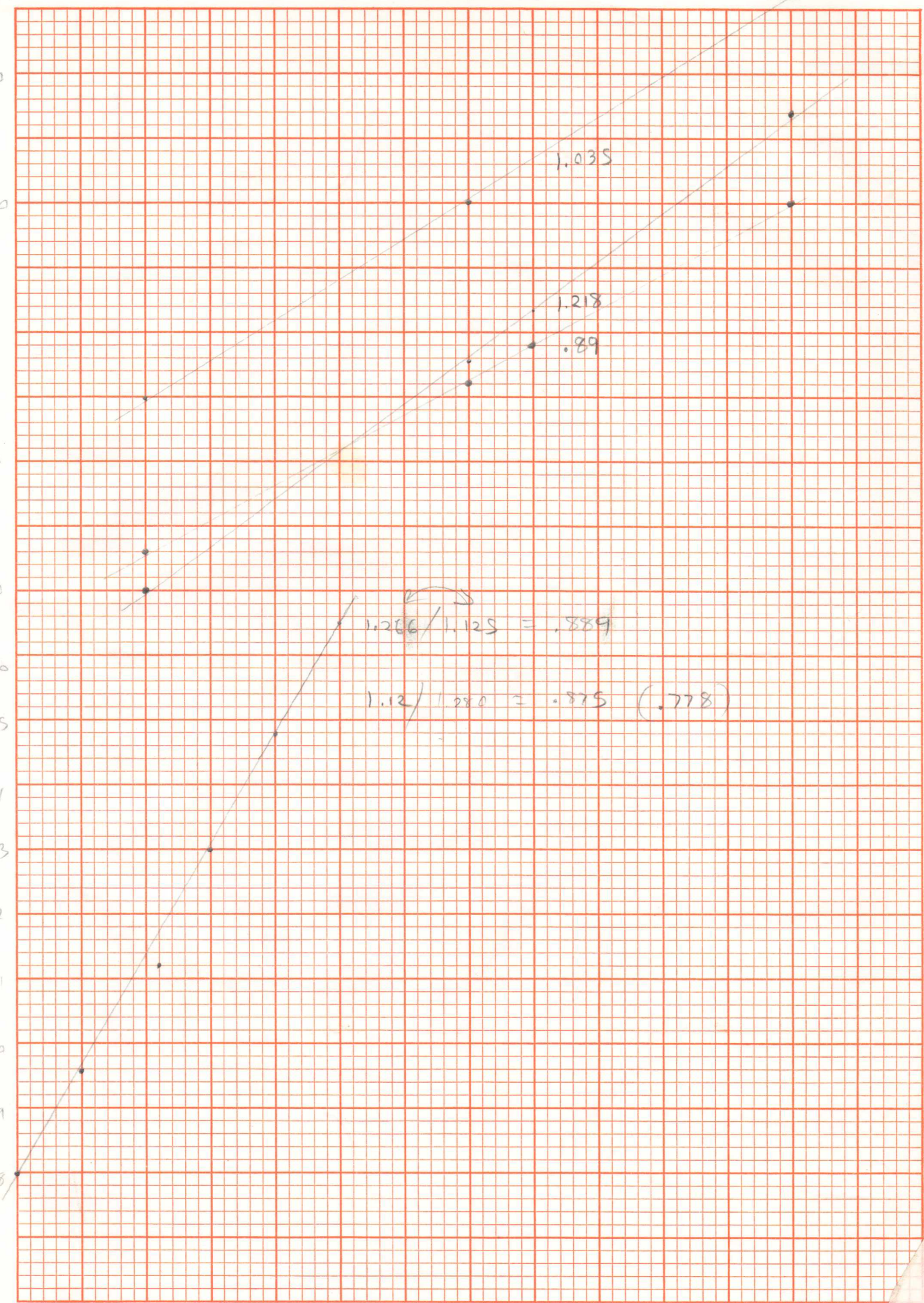
1.3

1.2

1.1

1

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KEUFFEL & ESSER CO.



$$1.288 / 1.125 = .889$$

$$1.12 / 1.280 = .875 (.778)$$

45 46 47 48 49 50