

TRACK NEWSLETTER

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National News

AC, New Haven, Conn., Oct. 22--HT, Bailey (CCAA) 192'6".
AC, New Haven, Conn., Oct. 29--HT, Bailey (CCAA) 186'2".
AC, New Haven, Conn., Nov. 5--HT, Bailey (CCAA) 188'10"; 2. Murray (Sn Conn St) 168'8".
NYAC ALL-ROUND WEIGHT THROWING, Travers Island, Pelham Manor, N.Y., Nov. 13--Mead (NYAC) 3956 (51'6 $\frac{1}{2}$ " SP, 143'5" DT, 169'1" HT, 51'7 $\frac{1}{2}$ " 35-lb Wt, 140'4" JT). HT, Engel (unat) 176'6"; 2 Doernberger (NYAC) 174'0"; 3. Mead (NYAC) 169'1".

Foreign News

JAPANESE CHAMPIONSHIPS, 5000; Tsuchya 13:56.8; 2. Shirai 13:59.6; 3. Sawaki 13:59.8; 4. Otsuki 14:00.2. 400IH, Yui 51.8. HT, Sugawara 217'1 $\frac{1}{2}$ "; 2. Murobushi 211'5 $\frac{1}{2}$ ". St, Saruwatari 8:45.4.
GHANA, 100m, Kone 10.3.
GANEFU II, Phnom-Penh, HJ, Ni (China) 7'5 $\frac{3}{8}$ ". (Progression: 6'2 $\frac{7}{8}$ ", 6'4 $\frac{3}{8}$ ", 6'6 $\frac{3}{8}$ ", 6'10 $\frac{3}{8}$ ", 7'4", 7'1 $\frac{7}{8}$ ", 7'3 $\frac{3}{8}$ ", 7'5 $\frac{3}{8}$ ", missed Valeriy Brumel's world record of 7'5 $\frac{3}{8}$ " (2.28m) by one centimeter.) 110HH, Lin (China) 13.9. TJ, Ke-yen (China) 53'2 $\frac{1}{2}$ ". HT, Bittar (Syria) 229'1 $\frac{1}{2}$ " ???.
MELBOURNE, AUSTRALIA, Nov. 5--JT, Carlton 255'7". Mile, Benson 4:04.6; 2. Clarke 4:04.7.
MELBOURNE, AUSTRALIA, Nov. 19--JT, Carlton 262'8". 880, Dalton 1:54.8; 2. Benson 1:55.1; 3. Clarke 1:56.1.
MELBOURNE, AUSTRALIA, Nov. 22--2000m, Benson 5:08.8; 2. Clarke 5:08.8. 400R, Australia 40.5.
MELBOURNE, AUSTRALIA, Nov. 26--Mile, Denholm 4:08.8; 2. Clarke 4:09.0.
INTERNATIONAL MARATHON, Fukuoka, Japan, Nov. 27--Ryan (NZ) 2:14:04.6; 2. Hiroshima (Jap) 2:14:05.2; 3. Okabe (Jap) 2:15:09.2; 4. Aihara (Jap) 2:15:36.2; 5. Teresawa (Jap) 2:15:51.2; 6. Toth (Jap) 2:16:36.2; 7. Sugihara (Jap) 2:16:55.0; 8. Aoki (Jap) 2:16:55.0; 9. Ueda (Jap) 2:17:13.0; 10. Usami (Jap) 2:17:16.0.

Cross Country Results

USTFF CHAMPIONSHIPS, Wichita, Kans., Nov. 24 (3.0 miles, 28:50.8 CR; 64", 25 mph winds)--1. Harrison (Colo St) 29:57.0; 2. Moore (So Ill TC) 30:03; 3. Redington (Tenn) 30:09; 4. Richards (BYU); 5. Sullivan (San Jose St) 30:21; 6. Lowry (San Jose St) 30:23; 7. Harper (Kans St) 30:24; 8. Sweeney (Houston TC) 30:27; 9. Lagotic (unat) 30:30; 10. Gustafson (Houston TC) 30:35; 11. Duxbury (So Ill TC) 30:37; 12. Dutton (Kans St) 30:38; 13. Yergovich (Kans TC) 30:41; 14. Nightingale (Kans St) 30:50; 15. Klemmer (San Jose St) 30:53; 16. Danielson (BYU Fr) 30:59; 17. Gilberti (Houston TC) 31:06; 18. Langdon (San Jose St) 31:11; 19. Ackman (So Ill TC) 31:12; 20. Tarry (Kans St) 31:15. Teams: Kansas State 66; 2. San Jose State 67; 3. Houston TC 71; 4. Southern Illinois TC 98; 5. BYU 117; 6. Colorado State 122; 7. Kansas 139.
NAIA CHAMPIONSHIPS, Omaha, Nebr., Nov. 26 (4.0 miles, 20:22.8 CR)--1. McMahon (Okla Bapt) 19:53.6; 2. Mason (Ft Hays St) 19:59; 3. Nelson (St Cloud St) 20:00; 4. Ewing (H Payne) 20:11; 5. McAndrew (Sante Fe) 20:37; 6. McDonnell (SW La St) 20:39; 7. Mifusud (En Mich) 20:49; 8. Savage (Westmont) 20:54; 9. Martinez (Sn Colo St) 20:55; 10. Rios (Okla Bapt) 20:55. Teams: Eastern Michigan 126; 2. Howard Payne 155; 3. Whitman 166; 4. Occidental 190; 5. Southern Colorado State 221; 6. St Cloud St 288; 7. Peru St 301.
AAU CHAMPIONSHIPS, Woodland Hills, Calif., Nov. 26 (10,000m, 31:28.4 CR, 70°-plus, tough up and down course, little level ground)--1. Larrieu (Strid) 31:23; 2. Lawson (Jayhawk TC) 32:10; 3. Lynch (SMAA) 32:10; 4. Moore (Ore TC) 32:22; 5. Woelk (Montclair) 32:34; 6. Winrow (NYAC) 32:40; 7. Mittelstaedt (UCTC) 32:50; 8. Brown (Mont) 33:01; 9. Carius (UCTC) 33:05; 10. Weeks (Strid) 33:10; 11. Delgado (Athens) 33:14; 12. Hughes (Strid) 33:19; 13. Laris (NYAC)

33:29; 14. Kimball (SBAC) 33:32; 15. Von Ruden (49ers) 33:36; 16. Jones (NYAC) 33:45; 17. Reilly (Quantico) 33:49; 18. Bowes (NYAC) 33:50; 19. McCalla (49ers) 33:50; 20. Fernee (Strid) 33:55; 21. Esias (HS) 33:59; 22. Dockstader (NYAC) 34:00; 23. Greenhall (PAA) 34:06; 24. Traynor (49ers) 34:10; 25. Rodda (Strid) 34:14. Teams: Striders 50; 2. New York AC 54; 3. University of Chicago TC 85; 4. 49ers TC 105; 5. Pasadena 150; 6. Santa Barbara AC 173; 7. Athens AC 203; 8. San Diego TA 207; 9. Alameda TC 230.

Test Your Knowledge of 1966 Season

by Ed Fox

Students of T&FN and TN should have relatively little trouble with this track quiz, a "final exam" on how well you've followed the 1966 track season. There are three sections: US, High School, and Foreign-General. Score 10 points for each correct answer. In any one section, 80-100--NUT; 50-79--SOME KIND OF NUT; Below 50--NON-NUT. If you rack up 240 or better for all three sections, consider yourself a FILBERT (a well-rounded nut). Answers page 4

US SECTION

1. Tommie Smith's outdoor 200m-220y season was marred by one defeat. Who beat Tommie?
2. Terry Thompson, Jim Isaacson, George Mason, and Bill Hartman all made T&FN standards in what event this year?
3. Theron Lewis' sole open 440 loss prior to the AAU was a stunner upset at the hands of an unheralded youngster at the SWAC meet at Houston. Name him and his school.
4. Thirteen US high jumpers hit seven feet or better outdoors this year. Can you name 10 of them, including all the Big 8 and high school jumpers who made it?
5. Running in Sydney early in the year, Jim Grelle out ran Ron Clax in a performance which bested the previous American record for the event. Which event?
6. Match the following with their schools:

Waverly Thomas	Villanova
Larry Smith	Oklahoma
Carl Hight	Tennessee
Pat Murphy	Kansas
Frank Murphy	Lamar Tech
Ken Gaines	Northwestern
	LSU

7. The name of Johnson was rather prominent on the national scene this year (cf. Jim, Gene, Clarence, and Ed in the high jump--no going back to question 4 now). Another name placed four in a single event in the June US report. Which name? Which event? Name each man.
8. In proper sequence, list Southern's world record 440-y relay team. Also, give their time and the site of the record.
9. Jim Ryun jogged to 3:51.3 at the All-American Invitational at Berkeley, you may remember. Jim was paced by Tom Von Ruden, Richard Romo, and Wade Bell. Who finished second in that race in creditable 3:58.0?
10. The Baltimore All-Eastern Invitational indoor meet saw the first 60-foot mark by a promising young shot putter. Who?

HIGH SCHOOL SECTION

1. The same foursome cracked the prep 880 and mile relay records for White Plains this season. They are:
2. Paul Heglar of Muir, Pasadena, HS had a couple of 16'3" vaults this year, yet he lost the Calif. state title at 15'3" to an "unknown" from Sacramento. Who?
3. Booker T. Washington of Wichita Falls, Texas had the best 440-yard relay mark this season...41.3. Name their fastest man, a highly rated junior.
4. Clyde Peach, the Golden West sprint double winner, attended what high school in what city?
5. John Hubbell, Dave Murphy, and Stu Voigt, all over 67-feet, were 1, 2, 3 in the shot lists this year. The No. 4 man has broken national class records in each year of his high school career so far. This year as a junior he reached 66'7". His name is:
6. Which of the four shot putters discussed above broke the interscholastic indoor shot record in March?

7. Three events in the US High School lists in 1966 were topped by preps from the state of Louisiana. Which events and who were the athletes?
8. The son of a former British Olympic distance man provided some of the highlights in high school two-mile circles, capping the year with a third in the Golden West eight lap thriller. Do you know father and son?
9. Essex Catholic had miler Martin Liquori and a new prep four-mile record in 1966. Essex's coach is a former top US miler. He is:
10. Four Bs; Bill Bahnfleth, Joe Bryant, Charles Bariether, and Thurman Boggess were outstanding prep runners this year in what event?

FOREIGN-GENERAL

1. Match last and first names of these athletes--all European Championship medal winners:

Jacques	Komar
Anatoliy	Thorith
Jean	Kalocsal
Henrik	Cochard
Detlef	Madubost
Wladislaw	Kuryan
Irving	

2. In March, Ron Clarke ran his lifetime best in the mile. It was: a) 4:02.0; b) 4:05.6; c) 3:59.8; d) 4:00.0; e) 4:09.6
3. Ron's fabulous 13:16.6 world 5000m record was run where?
4. Much has been written about the German decathlon camp. What's the name of the trainer-coach who's in back of the outstanding success of the current German decathletes?
5. What have Mark Shearman, Ed Lacey, and Steve Murdock in common?
6. Can you tell us four of the five 1965 European Cup final champions who won titles in the 1966 European Championships?
7. O.K., who won the Boston Marathon this year?
8. Host Hungary had only one winner at Budapest. Who was he?
9. Here's a hard one: Five individual titles at the Commonwealth Games went to Africans. Good going if you can get four of them.
10. The Commonwealth Games should go down in history as the greatest doublers international meet of all time. Seventeen men placed in the top six in two events each, although Kip Keino was the only double winner. Two men nabbed a first and a second. Who were they?

Steeplechase Breakthrough in 1966

by Peter Matthews

There has been a great breakthrough this season in the steeplechase, with more and more speedy flat racers turning their attentions to this somewhat neglected event. But this season's breakthroughs are, in my opinion, only a prelude of things to come.

The prime example of this trend was the Commonwealth Games. I give below the result, with contestants previous best performances:

1. Peter Welsh	8:29.6	(8:41.4)	+11.8 secs
2. Kerry O'Brien	8:32.4	(8:40.6)	+ 8.2
3. Benjamin Kogo	8:33.0	(8:47.4)	+14.4
4. Maurice Herriott	8:33.2	(8:32.4)	- 0.8
5. Ian Blackwood	8:41.4	(8:36.2)	- 5.2
6. Ernie Pomfret	8:41.6	(8:39.0)	- 2.6
7. John Linaker	8:41.6	(8:48.8)	+ 7.2
8. Naftali Chirchir	8:47.4	(8:53.4)	+ 6.0

What looked like a cinch for Maurice Herriott, saw him shunted off the medals, even though he neared his best time.

Herriott, a brilliant technician at the event and a most determined competitor, has this season been beaten in the major races, while running as well as ever. In three years (1963, 1964 and 1965), he lost only four steeplechases: to Gaston Roelants twice, including

Bulletin Board

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the Olympics; to Jozsef Macsár in the Britain v Hungary international; and to Viktor Kudinskiy in the European Cup final. During this time he consistently beat all comers, but now in this breakthrough season he has been left behind by faster men.

The top men now are fast 3000-, 5000-meter men, but a prototype of the future steeplechase champion would surely be a man with four-minute-mile speed as well as 5000-meter stamina.

So far of the top 1500-5000 men, only two have tried the steeplechase: 1) Bob Schul, who recorded 8:47.8 in 1961, long before he reached his peak; and 2) Siegfried Hermann, who clocked 8:43.8 last year in his only attempt.

When men of the caliber of Harald Norpoth, Michel Jazy, Bob Day, Jim Grelle, Lajos Mecser try this event we might really see something. And how about Ron Clarke or Kipchoge Keino?

Of those at present competing, Kudinskiy will surely slash several seconds off the present world record, as should Peter Welsh and, the youngest of them all, Benjamin Kogo.

	Best Time	Avg Best 5	Best 1500m	Flat Race	Race Times
Gaston Roelants (Bel)	8:26.4	8:28.4	4:04.8y	7:48.6	13:34.1
Viktor Kudinskiy (SU)	8:26.6	8:32.0	3:44.3	7:56.3	13:47.1
Anatoliy Kuryan (SU)	8:28.0	8:35.0			
Peter Welsh (NZ)	8:29.6	8:44.8			13:38.1
Ivan Belyayev (SU)	8:29.6	8:36.4			
Guy Texereau (Fr)	8:30.0	8:34.1	3:48.6	8:07.0	13:48.1
Z. Krzyszkowiak (Pol)	8:30.4	8:32.4	3:44.8	7:58.2	13:51.1
Manfred Letzerich (Ger)	8:31.0	8:38.4	3:50.4	8:43.8y	13:57.1
Grigoriy Taran (SU)	8:31.2	8:42.2			
Aleksandr Morozov (SU)	8:31.6	8:34.2		8:09.4	
Dieter Hartmann (Ger)	8:31.6	8:36.6	3:52.1	8:17.0	14:16.1
Adolfas Aleksiejunas (SU)	8:31.8	8:34.0	3:48.8	8:02.8	14:03.1
Jerzy Chromik (Pol)	8:32.0	8:36.3	3:44.2	8:33.4y	13:51.1
Nikolay Sokolov (SU)	8:32.4	8:34.9			14:19.1
Maurice Herriott (GB)	8:32.4	8:33.4	4:08.6y	8:08.0	14:15.1
Kerry O'Brien (Aus)	8:32.4	8:46.3	4:02.7y	8:42.4y	13:29.1
Benjamin Kogo (Ken)	8:33.0	8:48.1		8:07.4	13:42.1
Hermann Buhl (Ger)	8:34.0	8:35.5	3:44.2	7:56.4	13:50.1
Jozsef Macsár (Hun)	8:34.0	8:37.8	3:46.7	8:04.8	13:55.1
Zoltan Vamos (Rum)	8:34.0	8:35.6	3:40.5	8:09.8	14:10.1
L-E Gustafsson (Swe)	8:34.2	8:42.0	3:47.3		14:19.1
George Young (US)	8:34.2	8:38.6	4:02.5y	8:41.2y	13:40.1
Bengt Persson (Swe)	8:34.2	8:36.8	3:46.1	7:58.8	14:07.1
Eduard Osipov (SU)	8:34.4	8:37.2			14:13.1
Matvey Dmitriyev (SU)	8:34.8	8:38.7			13:57.1
Slavko Span (Fin)	8:35.4	8:38.6	3:45.5	8:14.8	14:28.1
Sandor Rozsnyoi (Hun)	8:35.6	8:42.2	3:46.4	8:05.0	14:14.1
Semyon Rzhishchin (SU)	8:35.6	8:37.2	3:54.5	8:18.0	14:22.1
Lazar Naroditskiy (SU)	8:35.6	8:38.6		8:09.6	14:01.1
Vladimir Komarov (SU)	8:35.6	8:42.5			14:04.1
Vladimir Yevdokimov (SU)	8:35.8	8:38.8			14:22.1
Aleksey Konov (SU)	8:36.2	8:40.0	3:47.0	8:11.6	13:56.1
Kestutis Orentas (SU)	8:36.2	8:43.0	3:45.0	8:02.2	13:45.1
Manuel de Oliveira (Por)	8:36.2	8:43.0	4:04.6y	8:02.2	13:51.1
Ian Blackwood (Aus)	8:36.2	8:42.8			13:42.1
Jouko Kuha (Fin)	8:36.2	8:39.2	3:46.3	8:10.8	14:05.1
Hans Huneke (Ger)	8:37.4	8:46.2	3:49.1	8:03.6	14:06.1
Boris Bantlye (SU)	8:37.6	8:41.4		8:04.4	13:56.1
Victor Caramihai (Rum)	8:37.8	8:44.2	3:54.6		14:35.1
Istvan Joni (Hun)	8:37.8	8:45.0	3:45.7		

The following do not have any times under 8:38.0, but figure highly in the average of 5 list.

Ernie Pomfret (GB)	8:39.0	8:40.3
Rainer Dorner (Ger)	8:39.6	8:41.6
Esko Siren (Fin)	8:39.4	8:41.6
Alfred Doring (Ger)	8:39.0	8:41.8
Henrich Misersky (Ger)	8:38.6	8:41.8
Trevor Vincent (Aus)	8:39.0	8:42.1
Sergey Ponomaryev (SU)	8:40.6	8:42.3
Attila Simon (Hun)	8:40.6	8:42.5
Bohumir Zhanal (Czech)	8:39.8	8:42.7

There have been 40 performers under 8:38.0 and 125 performers, those with the most:

Roelants	19	Buhl	6
Herriott	10	Morozov	5
Sokolov	9	Vamos	5
Krzyszkowiak	7	Aleksiejunas	5

US Steeplechasers

George Young	8:34.2	8:38.6	Ray Barrus	8:43.4	8:52.1
Phil Coleman	8:40.0	8:44.8	Horace Ashenfelter	8:45.4	8:54.1
Jeff Fishback	8:40.4	8:44.0	Mike Lehner	8:46.0	8:50.1
Pat Traynor	8:40.6	8:44.0	Bob Schul	8:47.8	
Vic Zwolak	8:42.0	8:45.1	Mike Manley	8:47.6	8:56.1
Charles Jones	8:42.4	8:46.4	Ken Moore	8:49.4	

England's Jim Hogan Interviewed

by Melyvn Watman
(reprinted from Athletics Weekly)

When did you take up athletics and what success did you encounter in the early days? I began at cross country in January or February of 1952. I was fourth in the novices county championship, then I was second in the junior and second again in the senior, so I was improving all the time. I didn't go beyond county championship class until the track season. I started on the track in July, and by August I had won an Irish championship: the five miles in 26 minutes flat on a grass track. That was actually an Irish record then. I was running under NACA rules and therefore ineligible to run for Ireland.

How seriously did you train at that time? I only trained about three times a week and I never ran more than four miles, I reckon, in training--and that would include four or five fast quarters. I never actually trained for the distance I had been running.

When and why did you move to England? I came to England in February 1960 to get work, nothing else. Actually I had given up athletics at the time. I hadn't run since August of 1959 and didn't start again until April.

Your original name was Cregan. Why did you change it when you arrived in England? The reason was that when I came to England I didn't know the athletics set-up and the one thing I understood (incorrectly as it happened) was that once I had run under NACA rules in Ireland I wouldn't be eligible to run in this country. So I decided to take no chances and changed my name by deed poll. It didn't leak out for a long time.

When did you achieve your breakthrough as a runner? It was in September 1961, the week I got married in fact. I was married on a Friday (Sept. 8) but my wife was taken to a hospital that night with a bad stomach upset. On the Saturday I had a four times mile relay race at Hurlingham. I had stayed up all night at the hospital but my wife persuaded me to go to the race and I ran a personal best of 4:15.9. On the Monday I ran my fastest six miles of 28:52.6, on the Thursday I set a record time in the Insurance relay and on the Saturday I broke the record in the Poly relay. I was 28 then. I don't think I would have made it if I had stayed in Ireland. I didn't train properly there, I didn't eat the right food and I used to go out a lot at nights, dancing and all.

What caused you to drop out of the European 5000 and 10,000 championships at Belgrade in 1962? At the end of June 1962 my stomach and back were in such a bad condition that I couldn't walk down the street. I had run a 28:07.2 six-miles at the beginning of the season, then 28:08.2 behind Tulloh and Hyman in the inter-county. Three weeks after I ran a mile at Hurlingham in 4:15.0 but three days later it was impossible. I couldn't walk. I didn't run from then, the beginning of July, until the London Championships on Sept. 1. I ran in that race because they (the Irish selectors) said that if I broke 14 minutes they would send me to Belgrade. I shaded it by four-tenths, but I was in terrible condition. I had a slipped sacroilia from February of that year without my knowing it until then. I had been running on it and been getting away with it until it caught up with me. I was away from work for five weeks. Well, of course, you can't go in for a European Championships on natural ability alone. I wasn't fit enough to run. I just took the trip because Jack Crump got me a seat in the plane for 20 pounds. The Irish paid 10 pounds and the Poly another 10.

Your wife was ill at home while you were in Tokyo. Was this a cause of your dropping out of the 10,000? I don't like to blame my wife's illness. In the 10,000-meters I was a bit worried. You have to make up your mind before the start: "Will I go with them or will I hold back?" I made up my mind to go with them. I went past 3000-meters only just outside my best time and obviously it was impossible for me to keep going at that rate. I was shattered and when they lapped me I dropped out. I may have the wrong idea because of dropping out but I think that when a man is lapped he's just in other people's way. I know when I lap a bloke and he gets in my way it makes me mad. I know you've got to accept that not every fellow can be a winner but in a big championship race I think lapped runners should be told to move right out. Look at the trouble they caused on the last lap in the Tokyo 10,000.

What prompted you to run the marathon in Tokyo? While on tour in Germany in August I ran a relay against the Belgrave Harriers and Blackpool. They formed four teams of six, with each man running two-miles and a little bit, and I ran the full 13 miles--and I won by over two minutes. I decided then that I was right for the marathon although this was the longest run I had ever done in training or competition. I used to be scared of my legs cracking up on the road. So I wrote to Ireland asking to be put in the marathon. They wrote back saying no, I was to run the 10,000. It wasn't until I was on the plane to Tokyo that I found out they had in fact entered me also for the marathon. It was only because I ran so badly in the 10,000 that I went in for the marathon; it was out of desperation. My legs were in a terrible condition after the 10,000. I couldn't even bend down to massage them. Abebe's coach came to massage me the day before the marathon.

He had a special massaging machine that you can put on your wrist but the minute he placed it on my leg the sweat would drop off me with the pain. He said that I was in such bad condition that if I reached six miles in the marathon I would be doing well--so how I got to 20 I don't know to this day. I still reckon I could have finished it if I'd had a massage but once my legs got tired they tightened... and, well I was like a corpse. Rigid. But I was pleased that I ran the race the way I wanted to run it. People said afterwards that if I hadn't run so fast I would have finished. But I wouldn't. I reckon that in a marathon the speed you run at--unless you go mad altogether--doesn't make a lot of difference. It's the length of time you're on the road. It's easier to be out on the road for two hours running fast than running 2½ hours slowly, I think. It's the extra time on the road that makes you tired.

Which do you prefer: marathon or track racing? Track definitely. There's a marathon race in Japan in December and I've got a chance of going, so I'm told, and then there's the Boston marathon in April but the minute the Boston's finished I'm not going to run another marathon next year unless I'm running very slowly on the track.

What are the advantages of running barefoot? I'm not sure of the advantages to anyone bar me, or Tulloh perhaps, but my times have shown I can run so much faster barefoot. I've run nearly all my races this year with spikes on and all my times have been diabolical slow compared to what I can run barefoot. I'll give you an example. I ran three races in Finland this summer. I ran 8:16.8 for 3000-meters flat out on the Sunday with spikes; then I ran 29:18.4 for 10,000 on Wednesday (my personal best with spikes); and on the Sunday I ran a barefoot 5000 in 14:00.2, passing 3000 in 8:15.0, faster than my best time the previous weekend. My best barefoot three-miles is 13:19.1 with spikes it's 13:30. Over six-miles I've run 27:35 barefoot but only 28:18 with spikes. How can you compare it? When I put spikes on I feel I am tied to the ground and when I finish a race I feel though I haven't run as hard as I could. I'm fresh ten minutes later I tape my toes when I run barefoot. I put on a piece of plaster the day before so it will fit into the skin, and it will definitely stay on for three-miles and usually for six-miles unless the track is very bad. I have to wear spikes when it's muddy, though.

How important is running to you? I like running provided I can run well, but the first time I can't break 14 minutes for three-miles you won't see Hogan around anymore. I don't like being beaten by blokes that I know I could beat if I were running at my best. I don't mind being beaten by good blokes that are running within a couple of seconds of my best time ever but I wouldn't be satisfied with losing to fellows running 13:50 and 13:55. I just couldn't take it.

Has there ever been a time when you felt like retiring? I ne retired after finishing 53rd in the International cross country at San Sebastian in 1963. I thought I'll give myself five weeks to Leyton, and if I run badly there I'll pack it. But, of course, I ran a blinder at Leyton and that was the turning point of my career.

Which race has caused you the most suffering? The AAA six mile this year. There must have been something wrong with me because the sweat was running off me at home at 12 o'clock at night. I was in a terrible state; I've never felt so bad after a race. I was grey. I took 4:54 for the last mile--and I don't even remember the last three laps.

I assume that winning the European marathon is your most pleasing performance? Yes. As Gaston Roelants told me, "Look, Jim, if you never again win a race you've won the gold. They can't take it off you." It's made up for all the disappointments.

Tell us about that race, please. On the Tuesday before I left for Budapest I ran a 15 mile course that includes three big hills. Usually, going at a fairly good pace I do 78 minutes but this time I went around in 76. I thought then that if anyone's going to beat Hogan in Budapest he'll really have to be motoring. Then on the Friday, the day before I left, I ran my fastest time on a six-mile course. On the Sunday in Budapest (Aug. 28), I trained with some of the boys, including Jim Alder and Dick Taylor, and they said I was running well. On the Monday I trained with Derek Graham. We ran five miles fast and he said he had never run so fast in training, and yet I wasn't really going all out. From then on I just took it easy. I didn't train on the Friday but trained for 40 minutes on the Saturday the day before the race. I had been eating a lot all week trying to get as strong as I could. I warmed up for 25 minutes before the marathon and got a stitch. But I got rid of it by doing some exercises. I think warming up before a long distance race is vital. I had no worries at all once the race had started. At the turn I wasn't even breathing hard, yet the other five or six around at that stage were all running hard. A 30 kilometers there were five of us jostling for position and I decided to go through--I didn't need the drink. I got about 25 yards and decided to increase my speed at all. After about three-quarters of a mile I realized they weren't closing it. Let's go Hogan, I said, and put on the pressure. The gap opened. At 35 kilometers I went for a drink though I didn't want to slow down because when you're tired you don't like to break stride. I grabbed it and it slipped. But it didn't matter.

for I grabbed a sponge, which is just as good as a drink, about 60 yards down the road. The worst part was between 23 and 25 miles. There was two miles of dead straight road; you couldn't see the end. But I was going at a good pace and although I wouldn't look back I realized I had the race.

What is it you like best in athletics? The feeling that you're running well, and the travelling. The blokes you mix with are good blokes--99 percent of them.

Any dislikes? The condition of some English tracks is bad and the White City is terrible. People were getting blisters while wearing shoes, and that's bad. In Finland they roll the track before every top event. I remember when I first came to England they used to do that at the White City but not now. It's not fair to the six-milers at the AAA that the race goes on after about four hours of competitions and no one puts a brush to it. I don't think the athlete gets a fair crack of the whip in this country where running tracks are concerned. On the Continent the athlete's needs come first and that's as it should be. You've got to encourage them. And they are water shy over here. They water the track on a Thursday for a Saturday meet but when the sun comes down it turns the top inch of cinder into dust. The right time to water the track is the morning of the meeting.

What are your plans for the future? After the Japanese marathon, if I get the trip, I'm not interested in any races until the national cross country. I have this ambition of getting into the English team although I would like to race indoors in the US. I've got a couple of other ambitions left. I want to run 27:20 for six-miles and 13:15 for three-miles. It will have to come next year if at all. Also, I'd like to go for a world record at 30,000-meters. I think I can run faster than Tim Johnston over 18 miles. As for 1968, that seems a long way off. The big question is what are the British going to do about the marathon? Are they going to send any marathon runners to Mexico? If I'm good enough to go and they are prepared to send me then I'll go but I've been told by a lot of clever people that have been there that European marathoners haven't any chance at all.

Splits in World Records Since 1946

compiled by Roger Gynn

This is the first in a series of features devoted to the splits in running events and series in field events in world record performances since 1946. Complete information pertaining to each record effort is provided. Those performances which equalled or bettered ratified world records but were never officially accepted by the IAAF have been noted here by an asterisk (*) so long as the mark was statistically acceptable.

The author will welcome any amendments to this compilation, sent in care of T&FN. He is missing the series of four field event world records, which T&FN will appreciate receiving before they are published in a coming issue of TN: Bob Fitch, 180'2³/₄", 6/8/46; Rink Babka, 196'6¹/₂", 8/12/60; Cliff Blair, 216'4¹/₂", 7/4/56; Bud Held, 268'2¹/₂", 5/21/55.

400 METER DASH

46.0y	Herb McKenley (US) (21.2y, 24.8y)	PAAAU, Berkeley	6/ 5/48
45.9	McKenley (20.9, 25.0)	AAU, Milwaukee	7/ 2/48
45.8	George Rhoden (US) (20.9, 24.9)	Intl, Eskilstuna	8/22/50
45.4	Lou Jones (US) (21.1, 24.3)	PAG, Mexico City	3/18/55
45.2	Jones (21.3, 23.9)	FOT, Los Angeles	6/30/56
44.9	Otis Davis (US) (21.7y, 23.2y)	OG, Rome	9/ 6/60
44.9n	Carl Kaufmann (WG) (21.7y, 23.2y)	OG, Rome	9/ 6/60
44.9y	Adolph Plummer (US) (21.7y, 23.2y)	WAC, Tempe, Ariz	5/25/63
44.9	Mike Larrabee (US) (22.4, 22.5)	FOT, Los Angeles	9/12/64

440 YARD DASH

46.2*	Herb McKenley (US) (20.9, 25.3)	AAU, Champaign, Ill	6/ 1/46
46.2*	McKenley (20.8, 25.4)	NCAA, Salt Lake City	6/21/47
46.3	McKenley (21.0, 25.3)	AAU, Berkeley	6/28/47
46.0	McKenley (21.2, 24.8)	PAAAU, Berkeley	6/ 5/48
45.8	Jim Lea (US) (22.8, 23.0)	Cal R, Modesto	5/26/56

45.8	Glenn Davis (US) (22.4, 23.4)	Big 10, Lafayette	5/24
45.7	Davis (22.0, 23.7)	NCAA, Berkeley	6/14
44.9	Adolph Plummer (US) (21.7, 23.2)	WAC, Tempe, Ariz	5/25

800 METER RUN

1:45.7	Roger Moens (Bel) (52.0, 53.7)	Intl, Oslo, Norway	8/ 3
1:44.3	Peter Snell (NZ) (50.8, 53.5 est)	Intl, Christchurch	2/ 3

880 YARD DASH

1:49.2	Mal Whitfield (US) (50.5, 58.7)	Jr Olympics, Berea	8/19
1:48.6	Whitfield (53.5, 55.1 est)	Intl, Turku, Finland	7/17
1:48.6	Gunnar Nielsen (Swe) (53.4, 55.2 est)	Intl, Copenhagen	9/30
1:47.5	Lonnie Spurrier (US) (51.6, 55.9)	Triangular, Berkeley	3/26
1:46.8	Tom Courtney (US) (52.2, 54.6)	Col R, Los Angeles	5/24
1:45.1	Snell (51.0, 54.1)	Intl, Christchurch	3/ 2
1:44.9	Jim Ryun (US) (53.3, 51.6)	USTFF, Terre Haute	6/10

World "Spectacular" Track Records

compiled by Andrew Huxtable

This is a list of world "spectacular" records. Do you know what all these athletes have in common? If you can't decide, the answer is at the foot of this feature. Amendments will be appreciated.

100y	Bill Woodhouse (US) 9.3	Abilene, Tex.	5/ 7
	Charlie Greene (US) 9.3	Columbia, Mo.	5/11
	Charlie Greene (US) 9.3	Bloomington, Ind.	6/11
100m	Bill Woodhouse (US) 10.2	Abilene, Tex.	4/11
220yt	Bill Woodhouse (US) 20.7	Abilene, Tex.	5/ 7
440	Wendell Mottley (Trin) 45.0	Kingston, Jam.	8/11
800m	Bill Crothers (Can) 1:45.6	Tokyo	10/11
1500	Ken Wood (UK) 3:42.6	London	7/11
Mile	Ken Wood (UK) 3:59.3	London	7/11
2Mile	Mike Freary (UK) 8:43.6	Gateshead	6/31
3Mile	Mike Freary (UK) 13:23.6	London	5/27
5000	Mike Freary (UK) 13:59.2	Helsinki	6/ 7
6Mile	Mike Freary (UK) 27:30.0	Stockholm	9/11
10,000	Mike Freary (UK) 28:26.0	Stockholm	9/11
3000st	Chris Brasher (UK) 8:41.2	Melbourne	11/11
110H	Eddy Ottoz (It) 13.6	Budapest	8/27
400IH	Jan Gulbrandsen (Nor) 51.5	Gjovik	8/27
HJ	Hank Wyborne (US) 6'11"	Eugene, Ore.	4/ 7
PV	Fred Burton (US) 16'6"	Des Moines, Ia.	4/ 7
LJ	Vladimir Goryayev (SU) 24'10"	Moscow	7/ 7
TJ	Vladimir Goryayev (SU) 54'7 ¹ / ₂ "	Kiev	6/ 7
SP	Joe Marchiony (US) 57'8"	New York	5/ 7
DT	Cees Koch (Hol) 190'5 ¹ / ₂ "	Rotterdam	5/ 7
HT	Noboru Okamoto (Jap) 218'1"	Tokyo	6/ 7
JT	Matti Jarvinen (Fin) 253'4 ¹ / ₂ "	Helsinki	6/ 7

As far as can be determined, all these athletes wear corrective lense glasses; Livio Berruti and Bill Toomey don't qualify.

Errata, Addenda

These are amendments to information appearing in recent issues of Track Newsletter.

1. British Empire Games three-mile finals: 6. Taylor 13:12.4; 7. B. Wilkinson (Eng) 13:15.4; 8. Graham (N Ire) 13:18.6; 9. Pyne (NZ) 13:18.6; 10. Studd (NZ) 13:25.8; 11. Nyakwoyo (Ken) 13:31.0; 12. Stewart (Scot) 13:40.0; 13. Kogo (Ken) 13:42.2; 14. Tulloh (Eng) 13:46.4; 15. Mfyomi (Tanz) 13:48.2; 16. Blackwell (Aus) 13:51.6. Places were off by one place. 880 (Heat III), M (Jam) dnf--injured; mile (Heat II), 2. Wilkinson 4:05.7; 440IH Sherwood--scratched.

2. University of Missouri was inadvertently omitted from list of schools which scored in the 1966 NCAA championships. Missouri scored points on point distribution by conferences. Missouri scored points for a tie in 42nd position in the school standings.

3. Marks for the Queen of Peace meet were apparently omitted as a joke. Fortunately, this type of humor creeps into publications very infrequently. Thanks to those who wrote to clarify the situation.

Greatest Career World Record Breakers

compiled by Jack Shepard

Listed below are the 25 world record holders who lowered the world standard by the greatest percentage during their career. This may include setting several consecutive records or the athlete may have set a record, lost it to others, and then regained it. A second list of 25 is provided for the modern day records since 1920.

*-prior to official records.

40.039%	Erik Lemming (Swe)	JT	1899-12	146'0"-204'5½"
27.072%	John Flanagan (Ire)	HT	1895-09	145'¾"-184'4"
21.898%	James Mitchell (Ire/US)	DT	1890-92	119'0"-145'¾"
13.226%	William Barry (Ire)	HT	1885-88	114'2"-129'¾"
11.966%	William Van Houten (US)	PV	1879-80	9'9"-10'11"
11.330%	Martin Sheridan (Ire/US)	DT	1902-09	129'4"-144'0"
9.515%	Richard Sheldon (US)	DT	1896-99	11'8"-122'¾"
8.759%	Matti Jarvinen (Fin)	JT	1930-36	232'11⅝"-243'4½"
8.413%	James Duncan (US)	DT	1911-12	144'0"-156'1⅝"
8.337%	Matt McGrath (Ire/US)	HT	1907-11	172'11"-187'4"
8.098%	John Pennel (US)	PV	1963-66	16'2½"-17'6¼"
7.943%	Mikhail Krivonosov (SU)	HT	1954-56	204'7"-220'10"
7.409%	Jack Torrance (US)	SP	1934	53'1¼"-57'1"
7.388%	Dallas Long (US)	SP	1959-64	63'2"-67'10"
7.363%	Hal Connolly (US)	HT	1956-65	217'9"-233'9½"
7.521%	Parry O'Brien (US)	SP	1953-59	58'10⅜"-63'4"
7.162%	Fortune Gordien (US)	DT	1949-53	181'6"-194'6"
6.504%	Charles Bookins (US)	200LHst	1924	24.6-23.0
6.399%	Harold Osborn (US)	Dec	1924	6262-6468
6.343%	Charles Henneman (US)	DT	1897	111'8"-118'9"
6.069%	Jonni Myyra (Fin)	HT	1914-19	204'5½"-216'10⅝"
6.050%	Marshall Brooks (GB)	HJ	1874-76	5'10¼"-6'2½"
6.015%	J. Mooney (Ire)	220LHst	1888	26.6-25.0
5.976%	C. Tosswill (GB)	LJ	1868-69	20'11"-22'2"
5.806%	D. Lundic (GB)	SP	1871	38'9"-41'8"

MODERN DAY CAREER RECORD BREAKER

8.759%	Matti Jarvinen (Fin)	JT	1930-36	232'11⅝"-253'4½"
8.098%	John Pennel (US)	PV	1963-66	16'2½"-17'6¼"
7.943%	Mikhail Krivonosov (SU)	HT	1956-56	204'7"-220'10"
7.409%	Jack Torrance (US)	SP	1934	53'1¼"-57'1"
7.388%	Dallas Long (US)	SP	1959-64	63'2"-67'10"
7.363%	Hal Connolly (US)	HT	1956-65	217'9"-233'9½"
7.251%	Parry O'Brien (US)	SP	1953-56	58'10⅜"-63'2"
7.162%	Fortune Gordien (US)	DT	1949-53	181'6"-194'6"
6.504%	Charles Bookins (US)	200LHst	1924	24.6-23.0
6.399%	Harold Osborn (US)	Dec	1924	6267-6668
5.757%	Hans Sievert (Ger)	Dec	1934	6896-7293
5.750%	Terje Pedersen (Nor)	JT	1964	284'7"-300'11"
4.890%	Eino Penttila (Fin)	JT	1927	218'6⅞"-229'3⅞"
4.889%	Dutch Warmerdam (US)	PV	1940-42	14'11"-15'7¼"
4.641%	Eric Krenz (US)	DT	1929-30	160'¼"-167'5⅝"
4.577%	J. K. Norton (US)	440IH	1920	56.8-54.2
4.294%	Rafer Johnson (US)	Dec	1955-60	7731-8063
4.176%	Bob Mathias (US)	Dec	1950-52	7421-7731
4.085%	Randy Matson (US)	SP	1962	67'10"-70'7¼"
4.000%	Earl Thompson (Can)	120HH	1920	15.0-14.4
3.977%	Gert Potgieter (SA)	440IH	1957-60	51.3-49.3
3.890%	Bud Held (US)	JT	1953-55	258'2"-268'2½"
3.875%	Adolfo Consolini (It)	DT	1941-48	174'9¼"-181'6"
3.846%	John Thomas (US)	HJ	1960	7'½"-7'3¼"
3.737%	Charles Hoff (Nor)	PV	1920-25	13'5"-13'11¼"

Greatest World Record Breakers

compiled by Jack Shepard

Listed below are the 25 world record holders who lowered the record by the greatest percentage. A second list of 25 percentages is provided for the modern day era since 1920. *-prior to official record.

10.830%	Erik Lemming (Swe)	JT	1899	146'0"-161'9⅜"
7.950%	William Barry (Ire)	HT	1888	119'9"-129'¾"
7.081%	James Duncan (US)	DT	1912	145'9½"-156'1⅝"
6.624%	William Van Houten (US)	PV	1879	9'9"-10'4¼"
6.504%	Charles Bookins (US)	200LHst	1924	24.6-23.0
6.399%	Harold Osborn (US)	Dec	1924	6267-6668
6.343%	Charles Henneman (US)	DT	1897	111'8"-118'9"
6.015%	J. Mooney (Ire)	220LHst	1888	26.6-25.0
5.806%	D. Lundic (GB)	SP	1871	38'9"-41'0"
5.757%	Hans Sievert (Ger)	Dec	1934	6896-7293
5.751%	Frantisek Janda-Suk (Czech)	DT	1900	122'3½"-129'4"
5.447%	James Gibbs (US)	6Mile	1877	33:58.0-32:07.0
5.274%	Terje Pedersen (Nor)	JT	1964	285'10"-300'11"
5.010%	William Van Houten (US)	PV	1880	10'4¼"-10'11"
4.890%	Eino Penttila (Fin)	JT	1927	218'6⅞"-229'3⅞"

4.577%	J. K. Norton (US)	440IH	1920	56.8-54.2
4.545%	George Farran (Ire)	Mile	1862	4:46.0-4:33.0
4.505%	Peter Fraser (US)	PV	1868	9'3"-9'8"
4.065%	Erik Lemming (Swe)	JT	1912	191'2¼"-198'11½"
4.065%	Alvin Kraenzlin (US)	220LHst	1898	24.6-23.6
3.906%	C. Tosswill (GB)	LJ	1869	21'4"-22'2"
3.827%	James Mitchell (Ire/US)	HT	1891	136'1"-141'3¼"
3.788%	Owen Harte (Ire)	HT	1884	110'0"-114'2"
3.535%	Erik Lemming (Swe)	JT	1903	170'5¼"-176'5¾"
3.531%	Eric Krenz (US)	DT	1929	158'1¼"-163'8¼"

MODERN DAY RECORD BREAKERS

6.504%	Charles Bookins (US)	200LHst	1924	24.6-23.0
6.399%	Harold Osborn (US)	Dec	1924	6267-6668
5.757%	Hans Sievert (Ger)	Dec	1934	6896-7293
5.274%	Terje Pedersen (Nor)	JT	1964	285'10"-300'11"
4.890%	Eino Penttila (Fin)	JT	1927	218'6⅞"-229'3⅞"
4.577%	J. K. Norton (US)	440IH	1920	56.8-54.2
3.531%	Eric Krenz (US)	DT	1929	158'1¼"-163'8¼"
3.475%	Gyula Zsivotzky (Hun)	HT	1965	233'9½"-241'11"
3.180%	Bob Mathias (US)	Dec	1952	7453-7690
3.008%	Jack Torrance (US)	SP	1934	55'5"-57'1"
2.952%	John Gibson (US)	440IH	1927	54.2-52.6
2.837%	Forrest Towns (US)	HHy&M	1936	14.1-13.7
2.830%	James Carlton (Aus)	220t	1932	21.2-20.6
2.703%	Earl Thompson (Can)	120HH	1920	14.8-14.4
2.560%	Ludvik Danek (Czech)	DT	1964	206'6"-211'9½"
2.500%	Tommie Smith (US)	220, 200sl	1966	20.0-19.5
2.456%	Egil Danielson (Nor)	JT	1956	274'5½"-281'2⅞"
2.421%	Lauri Lehtinen (Fin)	3Mile	1932	14:11.2-13:50.6
2.404%	Hal Connolly (US)	HT	1960	225'4"-231'11"
2.385%	George Lermont (US)	3000St	1932	9:21.8-9:08.4
2.380%	Newark AC	440R-1	1927	42.0-41.0
2.380%	US National Team	400R-2	1924	42.0-41.0
2.358%	Dallas Long (US)	SP	1964	66'3¼"-67'10"
2.370%	James Carlton (Aus)	200t	1932	21.1-20.6
2.322%	Charles Hoff (Nor)	PV	1923	13'6x"-13'6⅞"
2.322%	US National Team	MileR	1928	3:18.0-3:13.4

Answers to Track Quiz

US: 1. Teammate Wayne Hermen in a dual meet at Stanford when Tommie eased up. 2. 880 yards: 1:48.6; 1:50.2; 1:50.4; 1:50.6. 3. Albert Stinson of Arkansas A&M 46.3 to 46.7 (deduct 5 points if you said "Arkansas A&M"). 4. Rex Tull, Steve Herndon, Jim Johnson, Stan Albright, Clarence Johnson, Don Pierce, Chris Burrell, John Dobroth, Ed Caruthers, John Hartfield, Chris Pardee, Frank Costello, and Gene Johnson. 5. 2000-meters. 6. Waverly Thomas-Lamar Tech; Larry Smith--Oklahoma; Carl Hight--LSU; Pat Murphy--Tennessee; Frank Murphy--Villanova; Ken Gaines--Kansas. 7. Smith in the 100-yard dash: Tommie--9.3; Eli--9.4; Gil and Ronnie Ray--9.5. 8. Harvey Nairn, Grundy Harris, Webster Johnson, and George Anderson. 39.6 at Modesto. 9. Cary Weisiger. 10. Elvin Bethea--60'2½".

HS: 1. Carl Reed, Dave Jackson, Larry James, Otis Hill. 2. Wayne Meyers of Foothill HS. 3. Reginal Robinson, who ran a windy 9.1 in May. 4. Brebeuf of Indianapolis. 5. Chip Kell of Avon, Ga. 6. Voigt--67'0" in Madison, Wisc., April 9. 7. 100--Kirk Layton of Baton Rouge; Discus--Mark Lumpkin of Lake Charles; Javelin--Terry Bradshaw of Shreveport. 8. Fred and Ed Norris of Brockton, Mass. 9. Fred Dwyer. 10. 440 yards.

FOREIGN-GENERAL: 1. Wladislaw Komar, Detlef Thorith, Henri Kalocsai, Jean Cochard, Jacques Madubost, Anatoliy Kuryan. 2. a 4:02.0. 3. Stockholm, July 5. 4. Friedel Schirmer. 5. They are all top-notch track and field photographers. 6. Kudinskiy, Klim, Tummler, Nordwig, Lulis. 7. Kenji Kimihara led a 1, 2, 3 Japanese sweep. 8. Vilmos Varju in the shot. 9. 200m--Allotey (Ghana); or and three miles--Keino (Kenya); six miles--Temu (Kenya); triple jump--Samuel Igun (Nigeria). 10. Igun (TJ & second in HJ); Les Mills--won discus, second in shot put.

Hammer Throwing

The hammer, as thrown today, is a metal ball and handle weighing together not less than 16 pounds. The spherical head is of solid iron or other metal not softer than brass, filled with lead or other material. The center of gravity coincides with the center of the sphere. The handle, which is connected to the head by means of a swivel, is made of a single unbroken and straight length of steel wire. The total length of the complete hammer is approximately four-feet. The implement is thrown from a circle seven-feet diameter and it must land within a 60° sector. Competitors are allowed to wear gloves.

(Reprinted from Melyvn Watman's Encyclopedia of Athletics)

Greatest World Record Breakers by Events

compiled by Jack Shepard

The following list indicates the athlete who broke the world record by the greatest amount at one time as well as the percentage by which the athlete improved the old record in each of 45 events. If this mark was made prior to the acceptance of official world records then an additional mark is listed for the official record period. This list also represents the athlete who improved the world mark by the greatest amount during a career. This may include setting several consecutive records or the athlete may have set a record, had it broken by others and then regained the record. If the career record was attained in a single record performance it is listed in the first study; if the career record for each event is made up of more than one performance it is listed in a supplement. * = prior to official records.

Event	Athlete (Country)	Improve	Percent	Year	Inclusive Marks
100y	*John Owen (US)	.2	2.00%	1890	10.0-9.8
	*Arthur Duffey (US)	.2	2.04%	1902	9.8-9.6
	Eddie Tolan (US)	.1	1.042%	1929	9.6-9.5
	Frank Wykoff (US)	.1	1.053%	1930	9.5-9.4
	Mel Patton (US)	.1	1.064%	1948	9.4-9.3
	Frank Budd (US)	.1	1.075%	1961	9.3-9.2
	Bob Hayes (US)	.1	1.086%	1963	9.2-9.1
100m	*Luther Cary (US)	.2	1.818%	1891	11.0-10.8
	*Knut Lindberg (Swe)	.2	1.852%	1906	10.8-10.6
	Charles Paddock (US)	.2	1.887%	1921	10.6-10.4
200mst	Tommie Smith (US)	.5	2.50%	1966	20.0-19.5
220y	Tommie Smith (US)	.5	2.50%	1966	20.0-19.5
200mt	*James Carlton (Aus)	.5	2.37%	1932	21.1-20.6
	Henry Carr (US)	.2	0.976%	1964	20.5-20.3
	Tommie Smith (US)	.2	0.990%	1966	20.2-20.0
220yt	*James Carlton (Aus)	.6	2.83%	1932	21.2-20.6
	Henry Carr (US)	.2	0.976%	1964	20.5-20.3
	Tommie Smith (US)	.2	0.990%	1966	20.2-20.0
440y	*Lon Myers (US)	1.2	2.381%	1879	50.4-49.2
	Ben Eastman (US)	1.0	2.110%	1932	47.4-46.4
400m	Ted Meredith (US)	.8	1.639%	1916	48.2-47.4
800m	Rudolf Harbig (Ger)	1.8	1.661%	1939	1:48.4-1:46.6
880y	Peter Snell (NZ)	1.7	1.591%	1962	1:46.8-1:45.1
1500m	*Harold Wilson (GB)	5.6	2.241%	1908	4:05.4-3:59.8
	Stanislav Jungwirth	2.1	0.953%	1957	3:40.2-3:38.1
	Herb Elliott (Aus)	2.1	0.963%	1958	3:38.1-3:36.0
Mile	*George Farran (Ire)	13.0	4.545%	1862	4:46.0-4:33.0
	Herb Elliott (Aus)	2.7	1.134%	1958	3:57.2-3:54.5
2Mile	*Richard Webster (GB)	10.5	1.706%	1865	10:15.5-10:05.0
	Elvin Wilde (Swe)	8.2	1.491%	1926	9:09.6-9:01.4
3Mile	*James Gibbs (GB)	22.6	2.487%	1877	15:08.6-14:46.0
	Lauri Lehtinen (Fin)	20.6	2.421%	1932	14:11.2-13:50.6
5000m	Hannes Kolehmainen	24.6	2.73%	1912	15:01.2-14:36.6
6Mile	*James Gibbs (GB)	1:51.0	5.447%	1877	33:58.0-32:07.0
	Ron Clarke (Aus)	32.0	1.925%	1963	27:43.8-27:11.8
10,000m	Ron Clarke (Aus)	34.6	2.042%	1965	28:14.0-27:39.4
3000St	*George Lermond (US)	13.4	2.385%	1932	9:21.8-9:08.4
	Jerzy Chromik (Pol)	4.2	0.80%	1955	8:45.4-8:41.2
	Sandor Rozsnyoi (Hu)	4.2	0.808%	1956	8:39.8-8:35.6
10Mile	*W. E. Fuller (GB)	1:34.6	2.733%	1875	57:41.6-56:07.0
	Viljo Heino (Fin)	33.4	1.108%	1945	50:15.0-49:41.6
120yHH	Earl Thompson (Can)	.4	2.703%	1920	14.8-14.4
	Forrest Towns (US)	.4	2.837%	1936	14.1-13.7
110mHH	Forrest Towns (US)	.4	2.837%	1936	14.1-13.7
200mLHs	Charles Bookins (US)	1.6	6.504%	1924	24.6-23.0
220yLHs*	J. Mooney (Ire)	1.6	6.015%	1888	26.6-25.0
	Alvin Kraenzlin (US)	1.0	4.065%	1898	24.6-23.6
200mLHt*	*Heye Lambertus (US)	.4	1.681%	1934	23.8-23.4
	*Fred Wolcott (US)	1.4	1.712%	1939	23.3-22.9
	Charles Tidwell (US)	.1	0.440%	1959	22.7-22.6
	Martin Lauer (Ger)	.1	0.442%	1959	22.6-22.5
220yLHt*	Heye Lambertus (US)	.4	1.681%	1934	23.8-23.4
	(no one has lowered first official record of 22.7)				
400mIH	*Charles Bacon (US)	1.4	2.482%	1903	56.4-55.0
	John Gibson (US)	1.2	2.220%	1927	52.1-52.6
	Glenn Hardin (US)	1.6	3.077%	1932-34	52.0-50.6

SP	*D. Lundie (GB)	2'3"	5.806%	1871	38'9"-41'0"
	Jack Torrance (US)	1'8"	3.008%	1934	55'5"-57'1"
DT	Jack Duncan (US)	10'3 ⁷ / ₈ "	7.081%	1912	145'9 ¹ / ₂ "-156'
HT	*William Barry (Ire)	9'6 ¹ / ₄ "	7.95%	1888	119'9"-129'3"
	Gyula Zsivotzky (Hun)	9'1 ¹ / ₂ "	3.475%	1965	233'9 ¹ / ₂ "-241'
JT	*Erik Lemming (Swe)	15'9 ³ / ₄ "	10.83%	1899	146'0"-161'9"
	Terje Pedersen (Nor)	15'1"	5.274%	1964	285'10"-300'
Dec	Harold Osborn (US)	401 pts	6.399%	1924	6267-6668
400mR-2US	National Team	1.0	2.380%	1924	42.0-41.0
440yR-1	Newark AC	1.0	2.380%	1927	42.0-41.0
440yR-2	Stanford	.2	0.502%	1965	39.9-39.7
380yR	Southern California	1.6	1.831%	1927	1:27.4-1:25.5
1600mR	US National Team	4.4	2.279%	1932	3:12.6-3:03.3
MileR	US National Team	4.6	2.322%	1928	3:18.0-3:13.3
2MileR	Georgetown	5.6	1.198%	1925	7:47.6-7:42.2
6000mR	English National	15.8	1.627%	1931	16:11.4-15:55.5
4MileR	Illinois AC	23.6	2.216%	1923	17:45.0-17:22.2

SUPPLEMENTAL--CAREER

100y	Bob Hayes (US)	.2	2.150%	1961-64	9.3-9.1
100m	Harold Anderson (Sw)	.2	1.818%	1890-96	11.0-10.8
200mt	Henry Carr (US)	.3	1.463%	1963-64	20.5-20.2
220yt	*Willie Applegarth (GB)	.6	2.752%	1912-14	21.8-21.2
	Henry Carr (US)	.3	1.463%	1963-64	20.5-20.2
440y	*Lon Myers (US)	1.6	3.175%	1877-85	50.4-48.8
880y	Ben Eastman (US)	1.8	1.613%	1932-34	1:51.6-1:44.4
1500m	Gunder Hagg (Swe)	4.8	2.107%	1942-44	3:47.8-3:40.4
Mile	Gunder Hagg (Swe)	5.0	2.029%	1942-45	4:06.4-4:03.0
2Mile	*Walter George (GB)	16.0	2.791%	1882-84	9:33.4-9:11.1
	Gunder Hagg (Swe)	10.4	1.951%	1942-44	8:53.2-8:43.4
6Mile	Ron Clarke (Aus)	56.6	3.414%	1963-66	27:43.8-26:42.2
10,000m	Paavo Nurmi (Fin)	52.6	2.680%	1921-24	30:58.2-30:07.0
10Mile	*W. E. Fuller (GB)	2:51.4	4.844%	1873-75	58:58.4-56:07.0
	Viljo Heino (Fin)	52.8	1.751%	1945-46	50:15.0-49:41.6
3000St	*Sandor Rozsnyoi (Hun)	14.2	2.680%	1954-56	8:49.8-8:33.3
	Sandor Rozsnyoi (Hun)	14.0	2.642%	1954-56	8:49.6-8:33.3
120yHH	*Earl Thompson (Can)	.6	4.000%	1920	15.0-14.4
110mHH	Forrest Towns (US)	.5	3.521%	1936	14.2-13.7
400IH	*Charles Bacon (US)	2.0	3.509%	1908	57.0-55.0
	Glenn Hardin (US)	1.6	3.077%	1932-34	52.0-50.6
HJ	*Marshall Brooks (GB)	4 ¹ / ₄ "	6.050%	1874-76	6'10 ¹ / ₂ "-6'2"
	John Thomas (US)	3 ¹ / ₄ "	3.864%	1960	7'1 ¹ / ₂ "-7'3 ³ / ₄ "
PV	John Pennel (US)	1'3 ³ / ₄ "	8.089%	1963-66	16'2 ¹ / ₂ "-17'1 ¹ / ₂ "
LJ	*C. Tosswill (GB)	1'3"	5.976%	1868-69	20'11"-22'1"
	Ralph Boston (US)	8 ¹ / ₂ "	2.654%	1960-65	26'8 ¹ / ₄ "-27'1 ¹ / ₂ "
TJ	*Dan Ahearn (Ire/US)	1'11 ³ / ₄ "	4.044%	1910-11	48'11 ¹ / ₄ "-50'0"
	Adhemar de Silva (Br)	9 ¹ / ₈ "	3.473%	1950-55	52'5 ⁷ / ₈ "-54'0"
SP	Dallas Long (US)	4'8"	7.388%	1959-64	63'2"-67'1"
DT	*Martin Sheridan (Ire)	14'8"	11.330%	1902-09	129'4"-144'0"
	Fortune Gordien (US)	13'0"	7.162%	1949-53	131'6"-194'0"
HT	*John Flanagan (Ire)	39'3 ¹ / ₄ "	27.072%	1895-09	145'3 ¹ / ₄ "-194'0"
	Mikhail Krivonosov	16'3"	7.943%	1954-56	204'7"-220'0"
JT	*Erik Lemming (Swe)	58'5 ¹ / ₂ "	40.039%	1899-12	146'0"-204'0"
	Matti Jarvinen (Fin)	20'4 ⁷ / ₈ "	8.759%	1930-36	232'11 ¹ / ₂ "-244'0"

The following tabulation shows the decades in which the world record was lowered the farthest as well as the decade during which athletes lowered the records over an entire career. If a decade overlaps into more than one decade one-half or one-third of a point is given to each decade.

Decade	Single Record		Career Record	
	All-Time	Official	All-Time	Official
1860	3		2 ¹ / ₂	
1870	7		5	
1880	2		2 ¹ / ₂	
1890	3		3 ¹ / ₂	1
1900	4		5 5/6	1
1910	5	1	5 1/3	1
1920	10	17	5	7
1930	12	14	7	8
1940	2			4 ¹ / ₂
1950	7		1 ¹ / ₂	7
1960	5	16	5 ¹ / ₂	9 ¹ / ₂

TJ	Jesse Owens (US)	14'	2.689%	1911	57'9"-55'10"
	*Dan Ahearn (Ire)	1'11"	2.016%	1960	54'9"-55'10"
	Josef Schmidt (Pol)	1'11"			

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