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THE HISTORY OF WOMEN RELAY...4X100M, 4X400

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Abstract*

Aim. Female runners were first accepted in the Olympic Games for the 100m, 800m and 4x100m relay in Amsterdam in 1928, but the distress of some 800m runners at the finishing line - comparable to some men - was perceived indicative of their frailty and the event was not re-established at Olympic level until 1960 in Rome. In London in 1948 the 200m was introduced, the 400m in Tokyo in 1964, the 1500m and 4x400m relay not until Munich in 1972. As for longer distance, where women's hair might cling to their perspiring foreheads and shoulders, the 3000m was not to be admitted, together with marathon and 400m hurdles, until Los Angeles in 1984; the 10.000m in Seoul in 1988, the 5000m (replacing 3000m) in Atlanta in 1996.

Keywords: Olympic Games, relay, female, athletics.

Introduction

Sport tends to be a reflection of society. This can be seen to have existed in the status of women in sport. Before relating women's middledistance relays, it is worth reflecting on the patronizing attitude of male administration of track and field at the turn of the 19^{th} and well into the 20^{th} century. Although considering it acceptable for women to spend fourteen hours a day in domestic service or to bear them ten children, it was though inelegant, undesirable and even potentially threatening to their reproductive function to participate in energetic sport.

This attitude was even evident in the founder of the modern Olympics, Pierre de Coubertin persistently resisting the inclusion of women and even publishing in 1920 his treatise The Crisis of Marriage and the New Woman in the United States.

In respect of the Olympics, he declared: 'Women have but one task, crowning the winner with garlands'. Indeed, there ought to be erected a statue in honour of Alice Milliat and her campaign in the Twenties, with her creation of Federation Sportive Feminine Internationale (FSFI) in pursuit of equality - belatedly begun to be acknowledged by Siegfried Edstrom, President of the IAAF 1912 - 1946. Women's middle-distance relay records are thin on the ground solely because of delayed acceptance that they were capable of doing more than run for the tram.

Female runners were first accepted in the Olympic Games for the 100m, 800m and 4x100m relay in Amsterdam in 1928, but the distress of some 800m runners at the finishing line comparable to some men - was perceived indicative of their frailty and the event was not reestablished at Olympic level until 1960 in Rome. In

London in 1948 the 200m was introduced, the 400m in Tokyo in 1964, the 1500m and 4x400m relay not until Munich in 1972.

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In the Twenties, while Suzanne Lenglen of France was being met with acclaim for spectacular dominance on the tennis court, her compatriot Alice Milliat was confronted with hostility. In spite of the campaign by FSFI, 100m records were ratified by the IAAF until 1934, 200m the following year, 400m in 1957. Their recognition of women's 1500m records began in 1967; of 3000m in 1972, of 5000m and 10.000m not until 1981. It had taken a long time for such as Grete Waitz and Ingrid Kristiansen of Norway and Paula Radcliffe of Britain to become celebrity figures.

4 x 100m

Excluded by men's clubs, the real boost to athletics for women came from France, more exactly from a fervent 'suffragette' named Alice Milliat, who aged 33 in 1917 founded the Federation Feminine Sportive de France (FFSF). That organization started with three clubs but by 1925 the number was 400. In 1919 her request to have women's events included in the Olympic programme was refused by the IOC so the tenacious French pioneer and her associates went ahead by themselves and decided to organize the first multi-national women's meet.

This was held in Monte Carlo in March 1921 on a rough and ready grass track in front of the celebrated Casino and athletes from France, Britain, Italy, Norway and Switzerland took part.

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Later in 1921, Madame Milliat put on a match between France and England and the following day she and her colleagues founded the Federation Sportive Feminine Internationale (FSFI), which organized its first 'World Games' a year in Paris and would govern women's athletics at the international level until merged with the IAAF in 1936.

The FSFI was the body which ratified women's world records and one of the earliest was a time of 51.4 for the 4x400m relay (en route to 51.8 for 4x100m yards) at the inaugural World Games in Paris in 1922 by an English team of Mary Lines, Nora Callebout, Daisy Leach and Gwendoline Porter. Although only five nations were represented (England, USA, France, Czechoslovakia and Switzerland) the meeting was a huge success with over 20.000 spectators attending the one-day event.

Lines was the first star of women's athletics. She was a 27-year-old London waitress when she started running in 1921 and between then and 1924 she was credited with 33 world records at distances ranging from 60m to 880 yards, not to mention diverse hurdling and relay events.

It was at the second edition of the World Games in Gothenburg in 1926 that 50 seconds was broken for the first time. An England team of Doris Scoular, Eileen Edwards, Florence Haynes and Rose Thompson combined for a 4x110 y time of 49.8, worth 49.5 for 4x100m.

The officially ratified world record remained at 49.8 until women athletes were admitted to the Olympic Games for the first time in Amsterdam in 1928.

The Canadians won their heat in 49.3 and the final in 48.4, the team comprising Fanny Rosenfeld, Ethel Smith, Florence Bell and Myrtle Cook. Betty Robinson, a 16 year-old schoolgirl, who anchored the USA to second place in 48.8, had earlier become the inaugural 100m champion in 12.2 ahead of Rosenfeld and Smith while a tearful Cook, who had set a world 100m record of 12.2 the month before, was disqualified for two false starts (Kiriţescu, 1985).

The speedy development of women's sprinting was evident from the winning time at the next Olympic celebration, in Los Angeles in 1932. Thanks to much the slickers final change-over, the American foursome of Mary Carew, Evelyne Furtsch, Annette Rogers and Billie Von Bremen scored a narrow victory over Canada, 46.9 to 47.0. There the world record stayed until a German team, preparing for the Berlin Olympics in August, clocked 46.7 and 46.5 on the same day in June 1936.

Their victory seemed assured after winning their heat in 46.6, the inaugural IAAF

world record for 4x100m, and in the final they were around eight meters clear approaching the final change only to drop the baton! Helen Stephens (Bourdon, Gozzoli, 2006)

An easy winner of the 100m title in a wind-assisted 11.5 (in fact she never lost a race during her brief career), ran a storming anchor leg to win the race for the USA in 46.9 well clear of Britain and Canada. Stephen's team-mates were Harriet Bland, Annette Rogers and Betty Robinson. It was utterly remarkable that Robinson should win another gold medal, for in 1931 she was so badly injured in a plane crash that she was unable to walk properly or bend comeback, she wasn't able to use a crouch start in the 100m and yet still made the Olympic squad. (Koski, Tahvanainen, 2004).

The first European team to strike Olympic gold was from the Netherlands at the London Games of 1948, which was hardly surprising as Fanny Blankers-Koen had already won the 100m, 200m and 80m hurdles and was not only the undisputed star of those Games but the greatest female athlete the world had seen. In addition to her sprinting and hurdling exploits, she also held the world records for the high jump and long jump! Some six meters behind the leading team at the final change-over, the 'Flying Dutchwoman' charged through to win by a narrow margin over Australia, 47.5 to 47.6.

But to witness the fall of the world record (46.4 by Germany in 1936) one had to wait until the 1952 Olympics in Helsinki, when an Australian team clocked 46.1 in a heat. However, as in 1936 disaster befell the favorites. In the final the Aussies led until the last exchange, when in the words of a witty reporter, 'the shapely knee of incoming Winsome Cripps knocked the baton from Marjorie Jackson's grasp'.

The latter, winner of the 100m/200m double, was as fast as lightning in retrieving the baton, yet by the time she got underway other teams were too far ahead and the USA won from Germany in a tight finish, both clocking a world record 45.9 (auto-times, 46.14 and 46.18) and Australia were fifth in 46.6. Running second leg for the Americans was Barbara Jones, who at 15 years and 123 days became the youngest ever Olympic gold medalist.

There was sweet revenge for the Aussies at the 1956 Olympics. Running before a huge crowd in Melbourne, a team consisting of 80m hurdles gold medalist Shirley Strickland (the world 100m record holder at 11.3), Norma Croker, Fleur Mellor and the 18 year-old 100m/200m champion Betty Cuthbert made no mistakes and won in the record time of 44.5 (auto-time, 44.65).

It was no walkover, though, as the British team of Anne Pashley (later a noted opera singer), Jean Scrivens, June Paul and Heather Armitage



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finished a mere 5/100ths behind in European record time. The bronze medals went to the USA, the third leg run by a little known 16 year-old by the name of Wilma Rudolph.

It was Rudolph, now the Olympic champion at 100m and 200m who anchored the US team to a new world record of 44.4 (auto-time, 44.51) in the heats and victory in the final in 44.5 at the 1960 Olympics in Rome.

The next three Olympics also yielded new world relay records. First across the finish line in Tokyo in 1964 was Ewa Klobukowska in 43.6 (43.69) and she and her team mates Teresa Ciepla, Irena Kirszenstein (later Szewinska) and Halina Gorecka have always been designated Olympic champions, but in 1966 Klobukowska failed a sex chromosome test and the IAAF deleted Poland's time as a world record. That went instead to the American silver medalists (Willye White, 100m champion Wyomia Tyus, Marilyn White and 200m champion Edith McGuire) whose time was 43.9 (43.92).

The high altitude of Mexico City for the 1968 Games assisted the victorious US team of Barbara Ferrell, Margaret Bailes, Midrette Netter and Tyus (who had become the first athlete to win a second 100m title) to a time of 42.8 (42.88). By 1972 a new force had arrived in the shape of the GDR and at the Munich Olympics the East Germans, anchored by 100/200m champion Renate Stecher, clocked 42.95, but that was not quite good enough for victory as the West German (FRG) quartette of Christiane Krause, Ingrid Mickler, Annegret Richter and long jump champion Heide Rosendahl held on for a quickest ever electronic time of 42.81 although the official hand time of 42.8 merely equaled the world record (Tifrea, 2002).

The East German school dominated the sprint relay from 1973, setting a world record of 42.6 that year and improving to 42.5 (42.51) when winning the European title in 1974 and 42.50 in 1976, having to run almost as fast (42.55) to prevail over the West Germans (42.59) at the Montreal Olympics. Between 1976 and 1985 the GDR accounted for nine world records - astonishingly, all of them featuring Marlies Gohr (born Oelsner), who in 1977 clocked a remarkable 10.88 in becoming the first woman to crack 11.00. The teams, coached by Horst-Dieter Hille, invariably displayed great cohesion and altogether won two Olympic, one World and five European titles.

The first sub-42 clocking came a couple of weeks before the 1980 Moscow Olympics when Romy Muller, Barbel Wockel, Ingrid Auerswald and Gohr recorded 41.85 in Potsdam, and the same team progressed to 41.60 at the Games. The next improvement occurred in 1983 when Silke Gladisch, Marita Koch, Auerswald and Gohr

clocked 41.53 in East Berlin, the same formation capturing the inaugural IAAF World Championships title in Helsinki in 41.76, almost a full second clear of the British runners-up (Rosenbaum, 2012).

One title to elude the East Germans was at the 1984 Los Angeles Olympics as the GDR was part of the Soviet bloc and others who decided to boycott those Games, but they needed to have been at the top of their game against the Americans whose team of Alice Brown, Jeanette Bolden, Chandra Cheeseborough and 100m champion Evelyn Ashford (timed in 9.77 for her flying anchor leg) won by a dozen metres over Canada in 41.65 (Predescu, 2010).

What would prove to be the last world record in this event for 27 years came to pass at the World Cup in Canberra in 1985 when the GDR's Gladisch, Sabine Rieger, Auerswald and inevitably Gohr produced a time of 41.37. However, on the next two major occasions the East Germans had to play second fiddle to the Americans. At the 1987 World Championships in Rome the USA won, 41.58 to 41.95, although it was a closer affair at the Seoul Olympics of 1988 when the Americans (Brown, Sheila Echols, the sensational 100m and 200m winner Florence Griffith Joyner and Ashford, won 41.98 to 42.09). Two years later Germany was reunified and the GDR - whose methods had long been a controversial issue in athletics - was no more.

The 1991 World Championships in Tokyo welcomed Jamaica (41.94) to the top spot on the medal rostrum with Merlene Ottey timed at 9.71 for her anchor leg although Germany's second-stage Katrin Krabbe was even quicker at 9.70. A pulled muscle ended Jamaica's bid for the 1992 Olympic title in Barcelona and that honour went to the USA in 42.11 with anchorwoman Gwen Torrence timed 9.73.

For sheer excitement, the greatest battle of the decade unfolded at the 1993 World Championships in Stuttgart. The feud between Russia (Olga Bogoslovskaya, Galina Malchugina, Natalya Voronova, Irina Privalova) and USA (Michelle Finn, Torrence, Wendy Vereen, Gail Devers) was as close as a sprint race could ever be. The naked eye just could not tell who had won. Russia was finaly declared the winner and both teams were credited with 41.49 a mark surpassed at that time only by the GDR's world record.

The record withstood all assaults throughout the Nineties. The closest approach occurred at the 1997 World Championships Athens, where a US team consisting of Chryste Gaines, Marion Jones, Inger Miller and Devers sped to a nifty 41.47 for a comfortable victory over an Otteyless Jamaica (42.10).



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As per tradition, the Americans had been practising in that line-up for a relatively short time and their passes ranged from 'safe' to 'conservative' (Alexei, 2005).

Men from the Bahamas would win the World 4x400m title in 2001 and Olympic gold in 2012, but the tiny nation's women got in first as global champions for in Seville in 1999 Savatheda Fynes, Chandra Sturrup, Pauline Davis and Debbie Ferguson lifted the 4x100m crown in 41.92 and at the Sydney Olympics of 2000 the same foursome triumphed again in 41.95, followed home by Jamaica, who were anchored by Ottey who won a record ninth Olympic medal over a 20-year span.

Jamaica stepped up to gold in the Athens Olympics of 2004, the team of Tanya Lawrence, Sherone Simpson, Aleen Bailey and Veronica Campbell clocking 41.73, but the USA finished ahead of Jamaica in the World Championships of 2005 (41.78 – 41.99) and 2007 (41.98 – 42.01). However, neither team was a factor at the Beijing Olympics of 2008. The Americans failed to finish in their heat and the same fate befell Jamaica in the final, won by Russia in 42.31 – the slowest Olympic winning time since 1976. (Barbu, 1999).

The Americans suffered further misfortune at the 2009 World Championships in Berlin. Their team had recently run a swift 41.58 but an injury ended their chances in the heats. Jamaica, with Shelly-Ann Fraser on the second leg, took advantage to win in 42.06 from the Bahamas (42.29), but the Americans struck back at the 2011 Worlds in Daegu. Bianca Knight, Allyson Felix 9in her eight race of the meeting) and Marshevet Hooker handed 100m champion Carmelita Jeter a three-meter lead and she held on for victory in 41.56 as Shelly-Ann Fraser-Pryce, Kerron Stewart, Sherone Simpson and 200m winner Veronica Campbell-Brown finished a metre and a half down in 41.70.

4x400m

The history of this event effectively began as recently as 1969., the year the IAAF started to accept official world records and the event was introduced into major international championships. That inaugural title race was at the European Championships in Athens...and it was a cracker. Two days earlier there had been a sensational 400m final, in which Nicole Duclos has beaten her French compatriot Colette Besson, the 1968 Olympic champion, by 2/100ths of a second as both were credited with a world record breaking time of 51.7 (51.77-51.79). France thus entered the relay as strong favourites and that seemed justified as at the half distance they were almost 2 sec ahead of the British team, Bernadette Martin (53.5) and Duclos (50.9) against Rosemary Stirling (54.2) and Pat Lowe (52.1). However, on the third leg Janet Simpson ran 52.1 only 53.8 by Eliane Jacq and so Besson moved off only just ahead of Lillian Board. At the 300m mark she had misjudged her pace and was starting to drown in lactic acid. Board, who had passed 200m in 24.2, gradually reeled in her opponent and overtook her in the final stride of one of the most thrilling races ever. Board's time was 52.4, Besson's 52.6, and Britain had won by 3/100ths, 3:30.82 to 3:30.85, although both teams were credited with a hand timed world record of 3:30.8.

The GDR began to dominate the event from 1971 with a world record of 3:29.3 and after improving to 3:28.8 and 3:28.48 (in their Olympic heat!) the East Germans cut loose in the inaugural Olympic final in Munich in 1972 with 3:22.95. The team was Dagmar Kasling 52.2, Rita Kuhne 50.0, Helga Seidler 50.5 and Monika Zehrt, Beson's successor as 400m campion, 50.3.

An average of inside 50 dec per leg was achieved by the defending champions at the Montreal Olympics of 1976. Followed home at a distance by the USA, as four de years earlier, the GDR clocked 3:19.23 and the splits were 50.5 for Doris Maletzki, 49.5 for Brigitte Rohde de and Ellen Streidt and 49.7 for Christina Brehmer, who and finished second to Irena Szewinska's world record shattering 49.29 in the individual 400m.

The next Olympic clash, in Moscow in 1980, was a much closer affair as a great last leg of 48.27 by Marita Koch for the GDR (3:20.35) wasn't quite enough to overhaul the USSR's Irina Nazarova, who ran 48.95 to cross the line first in 3:20.12.

The East Germans gained their revenge at the 1982 European Championships in Athens when not only did they win but the Soviet team could finish only third.

The GDR broke their own world record with 3:19.04, the split times being 51.0 for Kirsten Siemon, 50.0 for Sabine Busch, 50.2 for Damar Rubsam and 47.9 for Marita Koch, who three days earlier had won the individual 400m in a world record 48.15. Astonishingly though, Koch wasn't the fastest as Jamila Kratochvilova, the 400m siver medallist in 48.85, anchored the Czechoslovak team to second place in 3:22.17 with a leg timed at 47.6, still the fastest split on record over 30 years later.

Gesine Walther, Busch Rubsam and Koch (47.70) combined in Erfurt in June 1984 to bring the world record down to 3:15.92 but suffered the frustration of knowing they would almost certainly have won back the Olympic title hat their country not boycotted the Los Angeles Games. The title went to the USA in 3:18.29 with Valerie Brisco Hooks adding a third gold medal to those obtained



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in the 200m and 400m. The race's fastest split came from Sherri Howard with 48.83.

Curiously, 3:18.29 was precisely the time registered by the GDR in what turned out to be their last Olympic appearance, in Seoul in 1988, but it sufficed for only a distant third place as the USSR and USA fought it out. The USA (Denean Howard 49.82) got the better of Tatyana Ledovskaya (50.12) on the lead-off leg but Olga Nazarova, the 400m bronze medallist, ran a blinder (47.82) against Diane Dixon (49.17) to open up a substantial lead. The was practically wiped out by Valerie Brisco's 48.44 against Maryia Pinigina (49.43), but Olympic 400m champion Olga Brygina ran a resolute anchor in 47.80 to hold Florence Griffith Joyner (48.08) at bay.

The times were 3:15.17 witch remains the world record, and 3:15.51, still the second quickest ever time. Flo-Jo's leg was remarkable, coming as it did only 40 minutes after victorious race in the 4x100m relay. This was her eleventh labour in the space of a week, and the only non-winning one!

The fastest time of the Nineties was 3:16.71 by a US team at the 1993 World Championships in Stuttgart – the fourth best on record (Gwen Torrence 49.0, Maicel Malone 49.4, Natasha Kaiser Brown 49.48, Jearl Miles 48.78). Russia, with Irina Privalova timed in 48.47 for the anchor leg, was second in 3:18.38.

Most of the subsequent global titles have also been won by the USA: at the 1995 Worlds (3:22.39) and 1996 Olympics (3:20.91), Germany at the 1997 Worlds (3:20.92), Russia at the 1999 Worlds (3:21.98), USA at the 2000 Olympics (3:22.62), Jamaica at the 201 Worlds (3:20.65), SA at the 2003 Worlds (3:22.63) and 2004 Olympics (3:19.01), Russia at the 2005 Worlds (3:20.95), SA at the 2007 Worlds (3:18.55), 2008 Olympics (3:18.54) and 2009 (3:17.83) and 2011 (3;18.09) Worlds.

The closest approach to the world record since the turn of the century is 3:16.87 by the USA in the London Olympics of 2012. The team comprised Deedee Trotter 50.3, Allyson Felix 48.2, Francena McCorory 49.39 and Sanya Richards – Ross 49.10. The reigning World champions from Moscow in 2013 are Russia, who sent the fans home happy y winning in 3:20.19 ahead of the USA and Britain.

Conclusions

In 1974, East Germans reset their own record won in 1973 (42,6), winning the European title with 42,51 and in 1976 with 42,50 as they had to perform as well as they could and to maintain the level in order to prevail the West Germans at Montreal Olympics.

Despite the efforts paid to draw the winner of the 1993 World Championships in Stuttgart, The USA and Russia, the organizers and the umpires decide to confer the same timing to both countries (41,49), and the first place. This slip is not possible nowadays anymore due to the development of the time measurement devices and the photofinish method.

Due to the advancement of the trainings and the development of the equipment, the difference between the results in the Melbourne Olympic Games in 1956 and the ones in Tokyo in 1964 was of 0.9 seconds in the 200 meters women's attempt.

Women who have the fastest known split times:Jarmila Kratochvilova (TCH) 47.6, Marita Koch (GDR) 47.70, Olga Bryzgina (URS) 47.80, Olga Nazarova (URS) 47.82, Florence Griffith Joyner (USA) & Sanya Richards (USA)48.44, Irina Privalova (RUS) 48.47, Grit Breuer (GER) 48.63.

The pendulum swung back in Jamaica favour at the Moscow World Championships in 2013. Winning by easely the widest magin in any global championships in this event, some 15 metres, the Jamaican team of Carrie Russell, Stewart, Schillonie Calvert and the indomitable Fraser Pryce romped home ahead of the USA in 41.29, the second fastest time ever.

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