

## NSA Photosequence 26 – 110 metres Hurdles: Roger Kingdom

Sequence by Helmar Hommel  
(© Hommel AVS 1992)

The sequence shows Roger Kingdom (USA) at the 10th hurdle of the second semi-final at the Games of the XXIVth Olympiad, Seoul, 1988, a race he won in 13.37 sec.

### Roger Kingdom (USA)

Born: 26 August 1962  
Height: 1.87m  
Weight: 91kg  
Best mark: 12.92 sec. 1989 (World Record)

Olympic Champion 1984 and 1988.

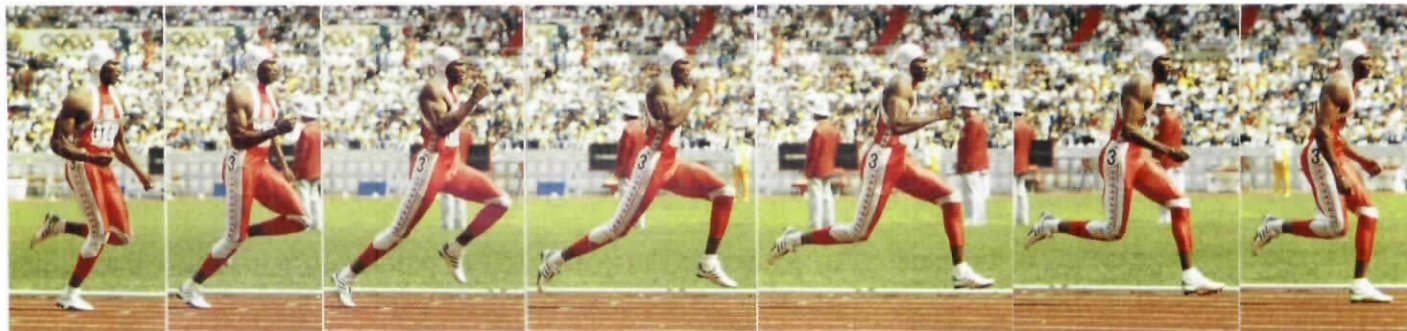
Progression:	1987	13.51 sec. (aged 25)	
1982	14.07 sec. (aged 20)	1988	12.97 sec. (aged 26)
1983	13.44 sec. (aged 21)	1989	12.92 sec. (WR) (aged 27)
1984	13.16 sec. (aged 22)	1990	13.21 sec. (aged 28)
1985	13.14 sec. (aged 23)	1991	injured
1986	13.40 sec. (aged 24)	1992	13.29 sec. (aged 30)

## Commentary Malcolm Arnold

*Malcolm Arnold, who is interviewed on pages 61-64 is the personal coach of Colin Jackson, the 1990 European and 1990 Commonwealth 110 metre Hurdles champion, who assisted with the preparation of this article.*

All good sprint hurdlers must be good sprinters. For example, the personal bests over 100 metres of recently successful sprint hurdlers are: Mark McKoy – 10.08 sec., Tony Dees – 10.15 sec., Renaldo Nehemiah – 10.16 sec., Greg Foster – 10.22 sec., Colin Jackson – 10.29 sec. and Roger Kingdom – 10.36 sec.

However, this sprinting speed must be allied to a good hurdling technique. Hurdlers and their coaches must note that hurdling is not just the posed position over the hurdle as seen in photo 22 of this sequence. Speed hurdling means a fast, aggressive approach to the hurdle, and more importantly, a resumption of fast sprinting immediately upon landing after each hurdle. Photos 1-12 and 29-47



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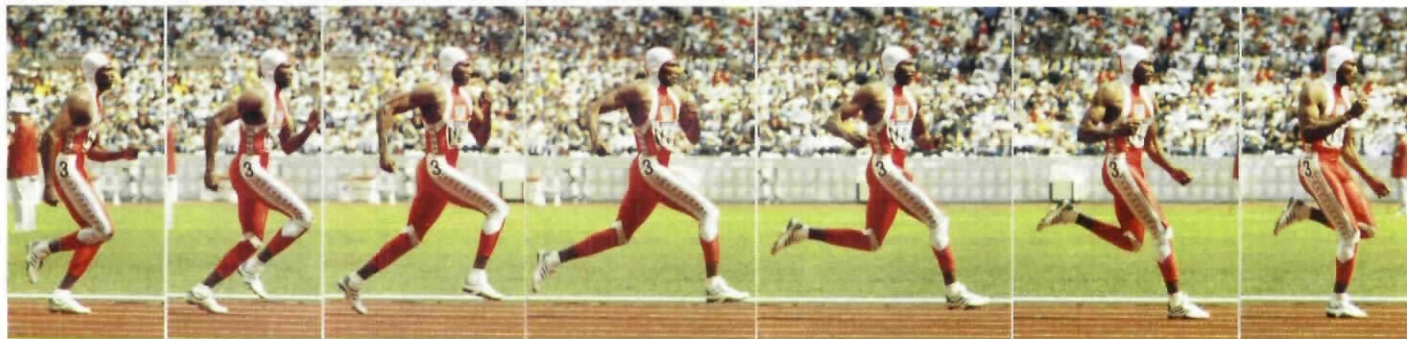
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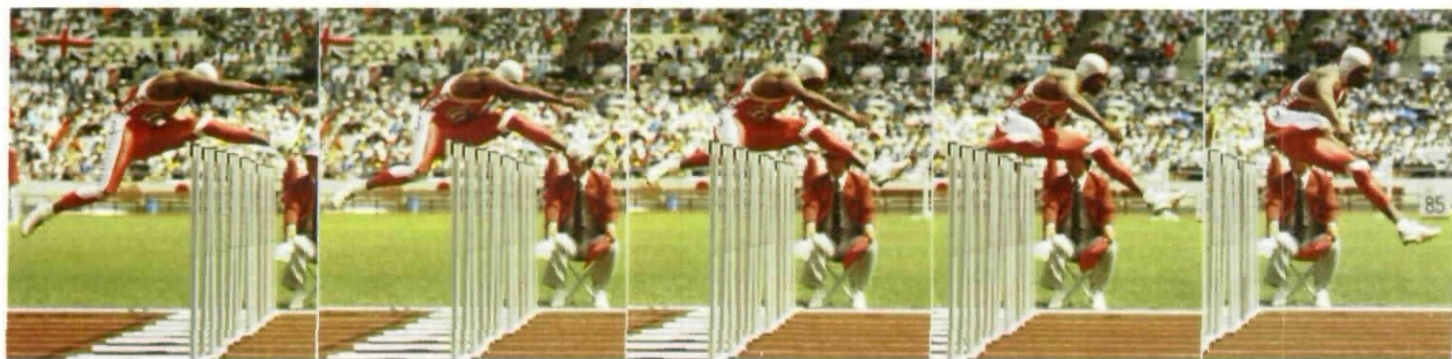
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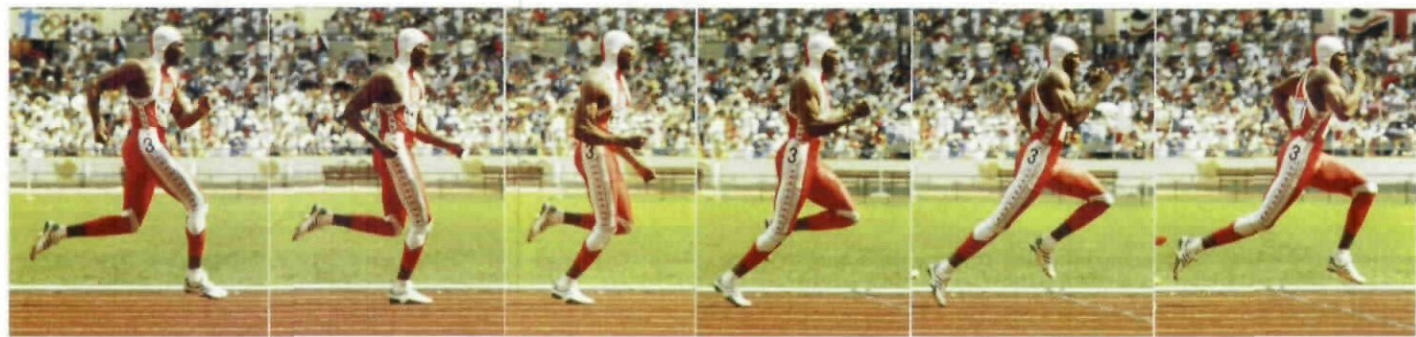
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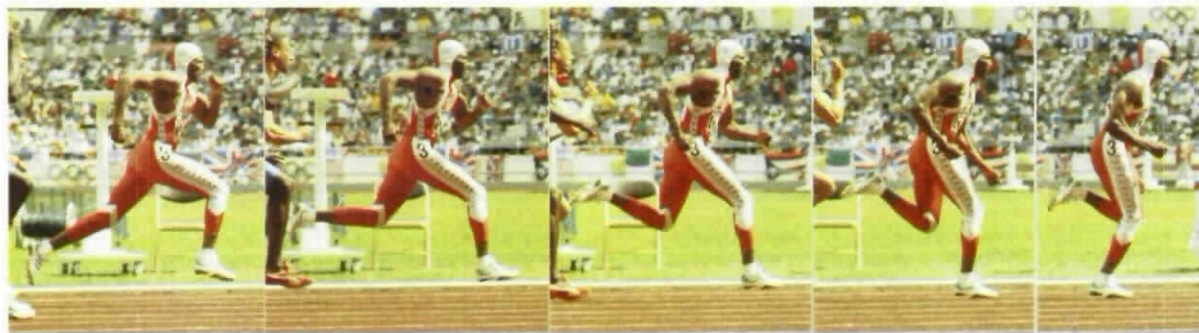
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show Kingdom in excellent sprinting mode before and after the hurdle. Ultimately, it is the speed generated on the ground between hurdles which leads to fast hurdling times.

Photos 14-30 show the barrier clearance of the sequence. The take-off stride before the hurdle is longer than the landing stride after the hurdle. This allows the athlete to flatten out during the hurdle clearance. Too close a take-off means the hurdler will 'pop up' during his take-off and spend too much time in the air during the clearance. Consequently, the landing will be slow, as will the transition into sprinting between hurdles. On average, the take-off stride is approximately 2 metres long and the landing stride 1.2 to 1.4 metres long. Obviously, this will vary from athlete to athlete, depending on their physical stature.

Photos 14-19 show a very active lead leg. It opens out a little too quickly at photo 17 and locks out too much at photo 19. Photos 20-26 show the descent of the lead leg and this is excellent. Athletes must be encouraged to return the lead leg to the ground quickly after the heel has passed the barrier (photo 20). As the lead leg is driving at the barrier, the trail leg is still on the ground, emphasis moves to the knee of that leg. The knee folds (photos 18-24) and the athlete should think of the knee pulling the foot through behind it, very quickly.

During clearance, particularly as the lead leg rises, Kingdom flattens his trunk (photos 15-22). This allows the path of the centre of gravity (CG) to remain as low and smooth as possible during the clearance. The posture of the trunk is dependent upon the relationship between the height of the athlete's CG and the height of the hurdle. Tall hurdlers running over low hurdles will have a relatively upright posture, whilst shorter hurdlers running over high hurdles really have to flatten their trunks over the hurdle.

All top class hurdlers are impressive when they leave the hurdle and resume their sprinting. Kingdom is particularly impressive. Photos 27-47 show him leaving the hurdle. His fellow competitors have commented on his ability to get into his running immediately

after clearing the hurdle and especially his ability to put extra speed into this aspect of his hurdling towards the end of the race. Novices and improving athletes should be asked to land quickly and run away from hurdles in this phase of each clearance. 'Land and Run' are the key words.

Although this is a 'side on' photo sequence, coaches must also observe from behind and in front of the hurdle. It is particularly important when resuming flat out sprinting after leaving the hurdle, to run in a straight line. There is a great danger of athletes wandering from side to side off the hurdle. This must be resisted, because it does not encourage fast sprinting. In training, move hurdles across, so that a lane line runs through the centre of the hurdle. The athlete then has a good guide to follow in his quest for 'straightness' while sprinting between hurdles.

In sprint hurdling, the arm action complements the legs. Alternate arm action is best. I would never advocate a 'double arm shift.' Kingdom's arm action into, over and after the hurdle is exemplary. It is strong, compact after the hurdle and allows him to resume good sprinting very early after the hurdle. I have seen few better examples of hurdling arm action than in photos 26-46.

Roger Kingdom is a legend among sprint hurdlers and their coaches. He was Olympic Champion in 1984 and 1988 and is still the Olympic record holder. In Zurich in 1989 he set the present World Record of 12.92 secs. Only he, Renaldo Nehemiah (12.93 secs. World Record in Zurich in 1981) and Colin Jackson (12.95w secs. in Barcelona at the IAAF World Cup final of 1989) have run faster than 13 seconds.

Standing at 1.87m and weighing 91kg, Kingdom is a giant of a man. As a comparison Colin Jackson stands at 1.81m and his racing weight is 75kg. On the occasions when Kingdom and Jackson were drawn in adjacent lanes in the same race (Jackson right leg lead, Kingdom left leg lead), Jackson came off worst when they clashed! On that basis alone, coaches should consider asking their athletes to run down the middle of their lane

rather than down the side of the lane. Coaches should also impress on beginner athletes that if they hit hurdles during the race, it will slow them down. However, in Kingdom's case, hitting hurdles did not seem to slow him down at all!

Colin Jackson regards Kingdom as his toughest ever opponent, a man who was very

strong and very precise in his landings off the hurdle.

Even when he was seemingly not at his best, he could still perform well if he needed to. The 1989 IAAF World Cup in Barcelona was a particular illustration of this, when he ran a wind assisted 12.87 sec., the fastest ever 110 metre hurdles.

