

## NSA Photosequence 23: The Sprint Start

### Grace Jackson

#### Sequence by Helmar Hommel

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The sequence shows Grace Jackson's start in the second round of the 200 metres at the Games of the XXIVth Olympiad, Seoul in 1988. She finished the race in 22.24 sec.

#### Grace Jackson (JAM)

Born: 14 June 1961  
Height: 1.83m  
Weight: 59kg  
Best marks: 100 metres – 10.97 sec (1988)  
200 metres – 21.72 sec (1988)  
400 metres – 49.57 sec (1988)

Silver medallist in the 200 metres at the Games of the XXIVth Olympiad in Seoul, 1988.

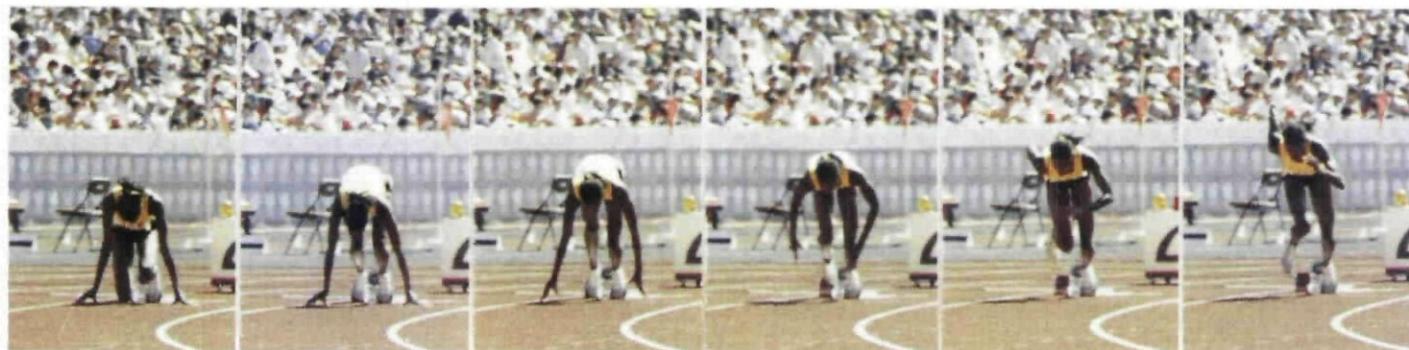
### Commentary

#### Don Quarrie

*Don Quarrie is a member of the IAAF Grand Prix Commission. Representing Jamaica, he was the Olympic gold medallist in the 200 metres in 1976, silver medallist in the 100 metres in 1976 and bronze medallist in the 200 metres in 1980. He presently works in Los Angeles as an athletics consultant advising Grace Jackson among other athletes*

Grace's starting blocks are placed more to the outside of the lane at an angle pointing towards the inner line of the lane. This means that, in the set position, her right hand is on the starting line while the left hand is a few inches behind. This enables her to run straight to a point which is no more than 12 inches from the inside of the lane. She gets to this point between her third and fourth step (photos 16-21) and does this without leaning or making any sudden change in direction to run closer to the line.

On the set position (photo 2) Grace is poised and ready to react but her hips are a little bit too high. This causes her hips to drop just before she has completed her first step (photo 7). Her first step should be taken



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with her head pointing slightly downwards and a relaxed neck. A sudden raising of the head creates tension. This tension travels down to the spine and to the hips. The result is that the athlete will have a sitting action when leaving the blocks or 'pop-up' as Grace can be seen to do (photo 8).

When she reacts to the gun, Grace (photo 3) should have emphasized a more forward and backward thrust of the arms. Instead she brings them up slightly (photo 4) causing the elbows to go outwards. She then drives out from the blocks (photo 5).

Photos 6-9 show Grace losing power and forward momentum because she has become upright too suddenly. The body has to adjust too quickly to a sharp change in body angle. Note that she has taken only one step at this stage.

Photo 9 shows Grace landing slightly flatfooted while photo 10 shows the result of running flatfooted with low hips. If the hips are too low it is hard to get the knees up.

Photos 11-13 show Grace swaying her shoulders slightly. This sometimes causes unnecessary hip movement which will result in a side to side rocking motion. Her arms need to be closer to her body with her elbows driving straight back.

Photos 14-15 show that Grace has a good driving angle in preparation for lifting up and reaching out with her stride. Because of her height it takes her a little longer to reach an angle of efficiency.

Photos 16-18 shows Grace landing flatfooted. To avoid this an athlete should: (a) try to prevent their heels touching the ground and (b) try to have their feet perpendicular to the track or pointed slightly downwards just before impact.

Photo 19 shows Grace suspended in mid-air. During this period proper control and good balance will enable an athlete to flow smoothly. At the same time he/she should be preparing to make the next stride with a light but powerful 'touch and go' action.

Photos 21-22 show Grace has a nice, relaxed motion with her shoulders square. She is on her toes and her right arm is at a

good angle. Note the similarities of photos 19 and 23. In both instances the foot of the trail legs is bent inwards and appears to be dragging. This may be because Grace is pushing off harder with the outer edges of her feet. A more efficient way would be to push off with the entire ball of the feet (review photos 16-18).

Photos 25, 27 and 38 show that Grace has gained more control of her movement now that she is moving faster. Photos 29 and 32 demonstrates a great angle of efficiency and 'Grace.'

Photos 30-31 show control, strength and readiness to change.

Photos 33-34 show that Grace seems to be more relaxed because she is in control and has no problem 'lifting' at will (photo 36).

Note once again the similarity of photos 30-31 and 37-38.

To conclude, I believe that the faster Grace went, the more she was able to execute and produce the style of running that makes optimum use of her height (1.83m), and that she was able to run a very good bend.

The ability to start and run the bend effectively is important in the 200 metres race. The sprinter must learn to attack the bend with as even a stride as possible. Therefore, the distribution of body weight is vital. Some athletes tend to lean too much into the bend. This tends to put more pressure on the left leg, causing an uneven stride pattern. Working the bend a little at a time makes a big difference. To achieve this, I would suggest trying the following in training:

a) place a marker halfway around the bend. Then have the sprinter run towards the marker keeping it in focus,

b) place three markers 15-20 metres apart. Have the sprinter run to the last marker but focus on each marker one at a time. The athlete should run a lot more efficiently by following drill b).