# COACHING FACTSHEETS

# OFF THE BLOCK

# **BUTTERFLY STARTS**



#### LONG WHISTLE WARNINGS

'Track' start: Immediately on mounting the block place one foot forward with the toes curled over the front edge. If the block has a raised rear 'footrest' place the other foot **firmly** on the rest so that it is pressed into a fixed position.

If the block has no rear rest place the 'back' foot in a comfortable position towards the rear of the platform.

Balance by locating the center of gravity **equally** between both legs.

'Grab" start: You are allowed to place both feet at the front of the block but this is not as powerful a position as the Track start.

# "TAKE YOUR MARKS"

At the "Take your marks" command lean down and hold the platform with both hands either near to the centre of the front edge, towards the outside, or at the sides (stay near the front edge).

The thumbs are best placed at the front of the block (gripping) rather than resting on top of the block.

The hips should be raised and the knees comfortably bent. Avoid deep knee bend. Pull down slightly with the hands in order to produce 'elastic' energy ready for the start signal.



# "GO!"

- Immediately you hear the start signal drive hard with the back foot to drive the hips **forwards** and **pull down ® forward** with both hands. This hand movement is neglected by many swimmers who simply lift their hands off the block; a complete waste of opportunity.
- When the body has started the 'launch sequence' they should also drive with the front foot and sharply move the head forward while elongating the spine.
- The focus should be on "hips-hands-head".
- The hands should be quickly brought forwards with no swinging up or down.
- The swimmer should be at full extension when the feet leave the block with the body in a **near-horizontal** position.
- The push duration should be short to ensure maximum force.





#### **FLIGHT**

- The hips should stay high throughout the flight phase.
- The legs should be lifted as the hands approach the water to ensure a streamlined entry.
- The top thumb should 'hook' the bottom hand and both arms should squeeze ('hide') the head while the torso and legs continue to extend.
- The swimmer should strive to dive **out**, not **up**. However, while distance from the block is a consideration the ability to prepare for a 'clean' entry is more important.







# **ENTRY**

- The goal should be to enter with no splash! This is not possible but it's a great goal to strive for.
- The hands, arms, head, shoulders, torso, hips, thighs, legs and feet should all enter through the same 'hole'.
- A small dolphin kick **during** the entry is beneficial.
- Once underwater, hold the tight, squeezy, 'streamline' do not break the hands or relax at the elbows, shoulders, hips or knees. Do not allow the feet to sink after the entry.



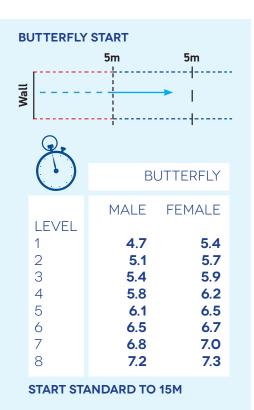


# PHYSICAL REQUIREMENTS

- · Hamstring and calf flexibility.
- Gluteus maximus (butt) strength. Shoulder & arm strength.
- · Shoulder flexibility.
- Agility.

## **TESTING & MONITORING**

- **'Sergeant' (vertical) jump.** Stand with one arm extended upwards and mark the height of the fingertips on the wall. Jump and touch the wall as high as possible above the mark. Measure the difference.
- Two-footed long jump. Lie the swimmer down on the floor and make one mark at the feet and one at the top of the head. Then ask the swimmer to extend both arms above the head and mark to where the finger tips reach. The swimmer then stands with both feet together behind the first mark and jumps as far forward as possible, landing with both feet. The minimum target distance should be the second mark (equal to the swimmer's height), while a good standard is beyond the third mark (height plus arms).





#### THE RULES

- SW 4.1 The start in Freestyle, Breaststroke, Butterfly and Individual Medley
  races shall be with a dive. On the long whistle (SW 2.1.5) from the referee
  the swimmers shall step onto the starting platform and remain there. On the
  starter's command "take your marks", they shall immediately take up a starting
  position with at least one foot at the front of the starting platforms. The position
  of the hands is not relevant. When all swimmers are stationary, the starter shall
  give the starting signal.
- SW 4.4 Any swimmer starting before the starting signal has been given, shall be
  disqualified. If the starting signal sounds before the disqualification is declared,
  the race shall continue and the swimmer or swimmers shall be disqualified
  upon completion of the race. If the disqualification is declared before the starting
  signal, the signal shall not be given, but the remaining swimmers shall be called
  back and start again. The Referee repeats the starting procedure beginning with
  the long whistle (the second one for backstroke) as per SW 2.1.5.

#### COACHING PROCESS & CONTROL

- · Remove all unnecessary movements.
- Prepare the swimmer to "be ready" for the start signal.
- **Increase propulsion** (force) during 'drive' from the block. **Decrease resistance** (maintain speed) during entry and initial 'glide' phase.
- Ensure power transfer during the leg drive from the block is forwards (not upwards) and is through the hips.
- The best start is the one that maintains the fastest speed **after** the swimmer enters the water. **Remember**, **it's about how they get off the block fast**; **not how fast they get off the block**.
- Experiment with the footrest position most swimmers use setting #4. Teach the swimmer to check the footrest position and to 'bang' the rest with both fists before mounting the block to make sure it is fixed. Insist that they hit the rest strongly when placing their 'back' foot in position.



## LAND EXERCISES

- Basketball.
- Plyometric jumps.
- Bounding.
- 'Streamline' squat jumps (arms held tightly overhead, squeezing the head).
- Single leg squats.
- Place two very heavy or immovable objects about shoulder width apart. Ask the swimmer to adopt a start position with one hand at the front of each object. On the signal press back with the hands/arms and force the body forwards as fast and as far as possible.
- Tie a bungy cord around the swimmer's waist and ask them to perform dive starts into a crash mat. Adjust the tension of the cord to increase resistance.



#### SKILLS DEVELOPMENT

- Over-riding consideration: it's about how they get off the block fast; NOT how fast they get off the block.
- Jump from block for distance.
- Dive through a hoop. Reduce the hoop diameter. Move the hoop further way from the block.
- Dive with hands at the sides at entry/with one hand extended, other by the side.

## INTERPRETING THE RULES

The rules are clear that the starter should not give the start signal until all the swimmers are 'stationary'. However, there are numerous examples of swimmers being disqualified because they adjusted their position instead of immediately finding their preferred position. The rule prohibits 'starting' before the signal whereas adjusting is 'merely' movement and obviously not a start. However, to be safe, make sure your swimmers can go straight into their well-practised, preferred position with no fidgeting or fumbling.

## COMMON FAULTS & FIXES

- Inability to hold high hip and knee flex position easily.
- Hands removed from block with no pull down (n.b. this is very common).
- Weak leg drive back/front foot.
- Head lifted before legs drive.
- Arms thrown upwards and/or outwards.
- Dive trajectory upwards.
- Weak, relaxed body position during flight.
- Weak, relaxed body position at entry (especially legs).
- 'Flat' entry, lots of splash.
- Weak, relaxed arm and/or body position after entry.
- Head lifted not in streamline position at entry.
- Head lifted after entry.

#### **DESCRIPTIVE WORDS & IMAGERY**

Explode, Power, Superman, Fly, Arrow, Missile.

#### **SEE ALSO**

British Swimming: britishswimming.org

ASA: swimming.org

SASA: scottishswimming.com

WASA: swimwales.org

• BSCA: gbswimcoaches.co.uk











