

# THE NLSC DAILY

Workouts | Articles | Useful Information

**So Yesterday** - excerpts  
from Dryland with Coach Cliff

**Ab warm-up**

5 x on 1:15  
    {20 R-knees  
    {20 Russian Twists  
    {10 Sit ups

**Crunch Challenge:**

How Many Crunches Can You Do?

3 x :90 seconds crunches on the 2:00

Rnd 1 straight up, Rnd 2 right side, Rnd 3 left side

**Main Set AMRAP 2:00 on/  
1:00 off**

5 x {6 Burpees  
    {8 Squats  
    (10 lateral hops

**Dryland Resources**

[Swimming Specific Yoga](#)

[Pacer Step Challenge](#)

[Coach Cliff's Zoom Dryland](#)

[Weekdays Live @ 2:20p](#)

[Recordings](#)

[The NLSC Daily Archives](#)

[100 Push-up Challenge](#)

[25 Pull-up Challenge](#)



## Race Phase Training: Training Elements

From Coach Matt

Welcome to part 3 of our Race Phase conversation. In part 2 we labeled the three phases of a standard race structure; Easy Speed, Power, and Finish. We dove into some of the main stress factors in each phase, as well as some focus points a racer should engage to combat the possible effects of that stress. Today, we will be discussing some training elements. We will be draw distinctions in focus between aerobic, lactic, and speed elements.

Because stress changes and shifts predictably throughout the evolution of a standard race structure, I find it valuable to ask the training swimmer to change and shift focus often in a particular set. We will seldom have a simple “aerobic set” or “lactic set.” Most of the work we do might have a heavier focus on the elements of one training family or another (determined by the training phase), but will almost always includes opportunities to shift focus to another family, and back again. Many sets will comprise elements from all three training families: Aerobic, Lactic, and Speed. Lets break



## Animals Swimming - from Your Coaches

Coach Samantha - (She Wins)

16 Golden Retrievers

Swimming PIGS!

Coach Ryan - (2nd place I think)

Swimming Kangaroo

Coach Jerry -

Animal Water Fails

Coach Matt -

Swimming Sloth

Coach Cliff

Snow Monkeys, Chimps, Dogs, and  
Tigers...oh my

Polar Bears

Swimming Tigers

Platypus

## Picture Book Video Challenge - from Coach

Samantha

This is not a swimming video! It is a video of a girl interpreting the pictures in her cat picture book...and it is definitely hilarious. Send us your video of you "reading" the pictures in one of your picture books!

Kittens Inspired by Kittens

Send your video to  
[coachcliff@nlsca.org](mailto:coachcliff@nlsca.org)

down the important elements in each family.

### Aerobic:

**Heart/Lungs:** A strong focus on target heart rate (how long to get there; how long to stay there). Managing the breathing for work, and breathing for recovery recovery at all times.

**Full-Body Stress:** No single muscle or region is breaking down significantly faster than another. Everything gets gradually heavier and heavier. Darker and darker.

**Stroke Length and Turnover:** Choosing the appropriate stroke length (short, medium, long) and appropriate turnover rate to reach target heart rate as quickly as possible. Reestablishing through every breakout to achieve seamless transitions.

**Power Cycle:** Length of power cycle determined by overall stroke length & compatible recovery cycle sufficient to maintain target stress level.

**Solid Stroke/Body Structure and Supporting Kick:** Body is one unit moving in one direction, fully supported by kick and the water itself through simple movement.

**Full Set Focus:** Energy is budgeted to last ideally through 80-90% of the set as a whole, requiring a more personal investment to finish.

### Lactic:

**General Muscle Focus:** Focus is more on series of strong pushes, intended to tax the muscle system to failure in a specific space/time.

**Energy Management:** Perfect burn, Full oxygen dump, or Quick start & recover.

**Single Distance Focus:** Often designed to reach target failure every repeat, not cumulative stress building throughout the whole set.

**Single Muscle/Region Breakdown:** While a repeated full-system failure is often the goal, breaking large regions first can often speed the onset of the larger breakdown.

### Speed:

**Specific Muscle Engagement:** Activating or recruiting one or more particular muscle groups at a particular time (or in a specific sequence) to move through each phase of the stroke cycle and transitions (Base, Power, Exit, Recovery).

**Solid Stroke/Body Structure and Supporting Kick:** Body is one unit moving in one direction, fully supported by kick and the water itself through simple movement.

**Stroke Length and Turnover:** Choosing the appropriate stroke length (short, medium, long) and appropriate turnover rate to reach Top Speed as quickly as possible. Reestablishing through every breakout to achieve seamless transitions.

**Hand and (Compatible) Foot Speed:** Structure & kick allow free & constant flow of movement at desired rate for both hands and feet.

**Boundaries and Space Occupied:** Using only the space needed for each stroke phase (Base, Power, Exit, Recovery). Unnecessary space is shaved off.

**Specific Speed Generation:** Generating speed through Quickness & Precision, Power, or Turnover. (or a crafted combination of one or more speed generators)

**Single Distance/Small Chunk Focus:** Generating and maintaining Top Speed throughout a designated distance.

Knowing the list of focus elements for each training family, the training swimmer is able to shift focus immediately and repeatedly throughout a blended set. Furthermore, knowing the standard breakdown of a race structure, the training swimmer will be able to link the changes in focus they are making to specific parts of a specific race. When the swimmer is working with elements in the Aerobic family, they know that they are strengthening the first 60-75% (Phases 1-2) of the race unfolding in their mind. Element focus from the Lactic family will strengthen the last 25-30% of their race (Phases 2-3). Speed elements are most useful in strengthening the first 25-30% of that race, as well as every major transition (Start, Turn, Breakout) (Phases 1-3). When the swimmer knows when, where, and for how long they are to focus on one particular family of elements, then shift, then shift again, in a controlled, systematic, and repeated fashion, they can come out of every single set knowing which part of which race they have just improved that day. They are not mindless movers rolling the dice on race day, waiting to see if they are faster and stronger. They become masters of their progress. They know that each race is crafted, honed, and polished **by them** for a specific purpose. That purpose will become evident to the rest of us on race day when we see what they have built.



## The Breaststroke Pull:

### Improve your power with the Loop Technique

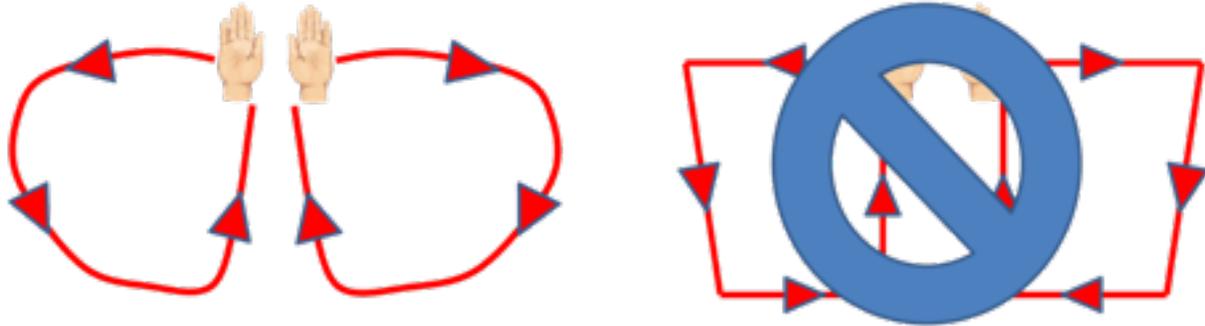
From Coach Cliff

This week we have covered our kick, our body position during the extension of the stroke, and our body position during the recovery phase of the stroke. Today we will go over the pull of the stroke.

We will start with a wider pull. If you watch the best breaststrokers, they begin with an outward sweep and then bring that pull toward the body. The pull has 2 purposes: 1) Generate propulsion, 2) Put the body in the recovery position. The shape of the path of your pull matters. Too big and you introduce more drag. Too small and you don't generate enough power to accomplish either of the two purposes outlined above.

With a distinct out sweep, the pull is best accomplished with the pull leading just outside the shoulders (see the picture above). The out sweep, sets up for the propulsive phase of the stroke. The propulsive phase comprises the inward catch which sees the hands carve down and inward. This is most effectively performed with high elbows (above the hands) that stay near the surface.

The shape of your pull governs your propulsion and recovery body position. The shape of an effective pull resembles loops, hence it's name the Loop Technique.



Mistakes that all breaststrokers should avoid include:

- 1) Allowing the elbows to go too far back. This results in an introduction of more drag and potentially can cause the torso to become too upright.
- 2) Pulling with elbows too narrow. Now your arms don't have enough space to complete an effective pull. Essentially, the arms get in the way of the rest of the body.
- 3) Square pull, or a pull with corners. The rounder shape allows power to transfer into speed more effectively and consistency. Sharp corners allow for loss of energy into the system.

Seeing this technique is helpful when learning. Below are a couple of great underwater videos demonstrating the Loop Technique.

- Adam Peaty: [Video #1](#) - [Video #2](#)
- Yulia Efimova - [Video](#) (start watching at about :57 seconds)

## Workout Inspiration: What you might have done today

From Coach Grant, pool workout

100 Kick/50 Swim; 6-10(:40 sprint wall kick, :20 Pressout)

6x[ 1x50 fins opt. Choice Kick, Focus: Straight Body Line R:05 - :10  
2x25 fins opt. Choice Swim, Focus: Consistent Breakouts and Breathing R:05-:09  
2x50 fins opt. Choice Swim, Focus: Consistent Stroke Count R:05 - :09]

2x25 fins opt. Sprint no breather under water no breather streamline dolphin. Focus: use entire body @1:00

4x25 fins opt. Sprint Swim, mid pool breakout focus: maintain your speed of the wall@ :45, 1:00 r:30 or more

6x25 fins opt. Odds: sprint 1st 1/2, technique 2nd 1/2. Evens: Sprint Focus: Race @ :45,1:00 R:25 or more

1x500 For Time, Focus: Maintain Balanced Breathing R 3:00 – 10:00

5x[ 4x50 Fins Opt. Choice Swim, Focus: Reset Stroke Count @ Odd Rounds R:05  
Even Rounds R:05  
4x50 Fins Opt. Strong Swim, Focus: Control your Breathing @ Odd Rounds R:05  
Even Rounds R:10  
4x50 Fins Opt. Fast Swim, Focus: Start Legs at Speed @ Odd Rounds R:05  
Even Rounds R:15]

2x25 No Breather @1:00

1x100 Best Technique

Thank you



From Coach Bryan, dry-land workout

5 Rounds for time!

100 Jump Rope Skips or Air Skips ( same as a jump rope skip just no JR!)  
40 Sit ups  
20 Push UPS  
10 Burpees

Make sure to time yourself and do it again a week apart and see if you can beat your time!