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The spread of coronavirus disease 2019 (COVID-19) has had a far-reaching impact not only on everyday life, but also on the sport of swimming across the globe.

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### by Dan D'Addona

While the coronavirus pandemic put a halt to sports around the world, the full financial impact of the pandemic will not be known for some time—especially in college sports, which could lead to uncertain and even a fearful future for the sport of swimming.

#### **024** TIMING IS EVERYTHING

## by David Rieder

Everyone knows how important timing is—races can be won or lost by hundredths of a second. For swimmers competing at the NAIA and NJCAA Championships, the most important timing was measured in days. Both associations were able to complete their championship meets just before other major sports championships were being canceled due to the threat of coronavirus.

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Dave Durden, University of California and U.S. national team coach, simply refers to himself as a swim coach. But he's also a leader, an expert at maximizing performance, removing doubt, instilling confidence and navigating young men through demanding situations.

## **034** CHASING THE ULTIMATE DREAM... TOGETHER

## by David Rieder

Alex and Gretchen Walsh have worked their way up the pecking order of American swimming, and in 2021, the talented sisters from the Nashville Aquatic Club and two-time national champion Harpeth Hall School in Nashville, Tenn., will get their shot at their greatest goal: the Olympics!

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## by John Lohn

During the Olympic campaign of 2000, Jenny Thompson and Dara Torres—complete opposites out of the pool, but with few differences as competitors—were engaged in a friendly, but not-so-easy rivalry—one that brought out the best in both swimmers.

## **042** TAKEOFF TO TOKYO: MISTY'S MAGICAL MOMENT

#### by John Lohn

The United States' Misty Hyman turned in one of the biggest upsets in Olympic swimming history, beating Australia's Susie O'Neill—the defending Olympic champion, world record holder and the host country's favorite—in the women's 200 fly at the 2000 Olympics in Sydney.

### **046** ISHOF: A DUKE, A MERMAID, A WAR AND THE FLU

### by Bruce Wigo

COVID-19 isn't the first pandemic disease to have brought the world of competitive swimming to a halt, and the 2020 Olympic Games are not the first to be postponed or canceled. This is the story of the years between 1914 and 1918, when the world was suddenly and unexpectedly turned upside down by events not so different from what our sport is experiencing today.

## **048** ISHOF: TRAGEDY & TRIUMPH AT U.S. TRIALS...60 YEARS AGO

## by Bruce Wigo

Every U.S. Olympic Swimming Trials, since they were first held in 1904, has always seen favorites fail and underdogs rise to the occasion.

## COACHING .....

# **016** SWIMMING TECHNIQUE CONCEPTS: THE VALUE OF HAND FORCE ANALYSIS: PART II—BACKSTROKE

#### by Rod Havriluk

Synchronized video and hand force data is an essential tool for optimizing technique. A coach can use the force data to pinpoint limitations, refer to the corresponding video images to explain changes and monitor a swimmer's progress in improving technique.

# **018** SWIMMING TECHNIQUE CONCEPTS: THE VALUE OF HAND FORCE ANALYSIS: PART III—BREASTSTROKE

## by Rod Havriluk

The two previous articles in this series (Part I—Butterfly and Part II—Backstroke) presented information about the value of using hand force analysis to identify specific technique elements that limit performance, and in many cases, substantially. This month's article includes more general information about force analysis with a breaststroke example.

## **052** MOTIVATING SWIMMERS TO NEW HEIGHTS

## by Michael J. Stott

Memorable are the sporting events where an athlete or team is "on fire." *Swimming World* checks in with two high school and two age group coaches for insight into how that happens. Spoiler alert: the common denominator is "buy-in" from athletes who connect with a coach.

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USA Swimming master coach consultant Bob Steele provides some favorite change-of-pace exercises that are designed to insert spice and fun into in-season training.

## **060 SPECIAL SETS: STARTING OVER**

## by Michael J. Stott

Bruce Gemmell, head coach at Nation's Capital Swim Club (Georgetown Prep site in North Bethesda, Md.) provides some sample sets—and some guidelines—for when it's time to return to the water for training.

## **066** Q&A WITH COACH DOUG FONDER by Michael J. Stott

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## **063** GOLDMINDS: THE MOST POWERFUL FORCE IN SWIMMING

## by Wayne Goldsmith

The greatest power that swimmers can possess is the power of choice. With that one power, all swimmers—regardless of age, experience or level of swimming capability—can accelerate their improvement and realize the full extent of their potential.

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by Shoshanna Rutemiller

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ON THE FRONT COVER: (From left) Gretchen and Alex Walsh have had success in both high school and national/international swimming. With the Olympics rescheduled for 2021, both girls have their sights set on making the U.S. Olympic and the Company of the Alexandra page 44, IMPLOTO PROVIDED BY THE WALSH EARDLY!

ON THE MAY COVER (PAGE 2): In 2021, Coach Dave Durden will be getting his Call Bears ready to repeat as NCAA men's champions, and as the U.S. Olympic men's coach, he'll be helping his swimmers do their best ploudd the American tradition of swimming excellence at the Olympics.

# **RON & DON HEIDARY**

Ron and Don Heidary shared an incubator at birth, a fraternity room in college and now the pool deck with their club team, Orinda Aquatics in Moraga, Calif. In addition, each coaches a high school team (Ron, Campolindo; Don, Miramonte). All programs are grounded in the enduring values of positive culture and character development.

### BY MICHAEL J. STOTT

Q. SWIMMING WORLD: How have you two stayed together for 40-plus vears?

A. COACHES HEIDARY: We simultaneously volunteered for a summer league assistant coaching position at age 16 and have been coaching together since. We are very like-minded in our pursuit of high-level swimming and character development, and we support one another unconditionally.

## SW: Your staff has been with you almost from inception.

CH: This has been a cornerstone of the team's success. Matt Ehrenberger, a friend for more than 40 years, is a great age group coach and an "all-in" partner. Marc Cavallero, a team captain at UC Santa Barbara, was an original Orinda Aquatics swimmer and works with both groups. And recent hires Dom Patterson, a former Orinda Aquatics swimmer, and Kati McDermott are outstanding additions.

## SW: How is your club organized?

CH: We're different than most. Our community has a strong summer league system. There is a county rule that precludes kids from competing at the club level and in the rec system, so kids must choose one or the other. As a result, the average age of our joining swimmers is 13. Organizationally, we are a 501c3 non-profit corporation with a strong board of directors and a very supportive parent group.

## SW: What is your training philosophy regarding long-term development and collegiate swimming?

CH: Our ultimate goal is to elongate careers, keep kids highly motivated and excited to continue in the sport, and to support athletes to reach their potential. We want to create an environment that supports that.

We assume everyone in our program will pursue collegiate swimming. Our primary daily training emphasis is to develop stroke balance and efficiency in the water. We communicate stroke specifics verbally and with constant video. We repeatedly stress stroke counts, stroke rates, turn and underwater speed. Kids frequently break into specialty or stroke groups and match up and race.

## Q & A



## **Coach Ron Heidary**

Co-Head Coach/Founder **Orinda Aquatics** Moraga, California

- University of California-Berkeley, B.A., economics, 1984
- · Coach of Campolindo High School, 1995-present; swim team director for Sleepy Hollow Swim & Tennis Club, 1994-2005
- 16x California North Coast Section high school champions; top three 18 of the last 20 years
- Pacific Swimming Age Group Coach of the Year, 1998; California North Coast Section Honor Coach, 2005
- Recipient of Positive Coaching Alliance Double-Goal Award, 2013
- Co-author, Character First guidebook (donated to ASCA)
- Speaker on culture, character and team building
- ASCA Level 5 coach

Campolindo finished third overall and first among public schools in Swimming World's 2013 boys' national high school championships. Ron has coached national high school record holders Kim Vandenberg and Steven Stumph, and was selected California High School Coach of the Year in 2006.

## Coach Don Heidary

Co-Head Coach/Founder **Orinda Aquatics** Moraga, California

- University of California-Berkeley, B.A., international relations, 1984
- Coach of Miramonte High School, 1990-present: head coach/swim team director at Meadow Swim & Tennis Club, 1984-99
- Pacific Swimming Age Group Coach of the Year, 2017; California North Coast Section Honor Coach, 2004; East Bay Coach of the Year, 2012
- President, ASCA board of directors, 2013-19
- Member, Pacific Swimming board of directors-Club Development (previous senior vice chair)
- Recipient, Positive Coaching Alliance Double-Goal Award, 2013
- Co-author, Character First quidebook (donated to ASCA)
- International speaker on culture, character and team building
- ASCA Level 5 coach

As swim coach of Miramonte High School in Orinda, Calif., Coach Don Heidary's Matadors have captured the California North Coast Section High School Championships five times and have placed among the top three 27 times. Most recently, his girls finished fourth at the 2019 CIF (California) State Championships.

# MADDIE SMITH AND EMILIA BARCK

BY MICHAEL J. STOTT

on Heidary has been Orinda Aquatics national team coach since the program's inception. Don Heidary hones swimmer skills in preparation for senior swimming.

## **Maddie Smith**

A Campolindo High School senior, Maddie Smith is headed for UCLA in the fall. In March, she was ranked 21st in California by CollegeSwimming.com. As a junior at the 2019 California North Coast Section Girls' High School Championships, she contributed to the Cougars' second-place finish by placing second in the 200 yard IM (2:01.50) and seventh in the 100 fly (55.15). Campolindo finished a respectable seventh in the subsequent CIF state meet.

"Maddie represents one of the greatest examples of swimmer development in our team's history," says her coach, Ron Heidary. "She has been an impeccable leader, role model, team servant and recipient of our OA (Orinda Aquatics) Inspirational Award.

"Maddie joined the team in eighth grade from summer league as a mid-level swimmer (AA times). The focus from ninth grade on has been to perfect all strokes, turns and to train underwater. Her development has been the result of her resilience (through challenges and setbacks), punishing work ethic and attention to every detail. Even now, at near junior national level in all strokes and IM, she is just beginning to break out.

"Maddie takes full responsibility for every aspect of her swimming career and life. She has worked consistently on:

- Lengthening all strokes—working on catch and distance-per-stroke
- Training aggressively with stroke counts and rates
- Working ALL walls and underwaters for each stroke (10 kicks for fly and back)
- Challenging herself in EVERY set (even off-strokes) and knowing all set expectations
- Always looking to mentor and support younger swimmers."

## **Emilia Barck**

A graduate of Orinda's fall swimming program, Barck, in just three years, is practicing five to seven times per week and competing at the Futures level. As a result, she is perched 11th in the 200 yard IM (2:06.42), 19th in the 100 back (57.35) and 34th in the 400 IM (4:30.21) in the NAG rankings for 13-year-olds.

"Emilia is an extraordinary workout swimmer, outstanding student and an accomplished violinist," says her coach, Don





Maddie Smith

Heidary. "Her training focus is on balance and DPS in all strokes, with yardage limited to 4,000 and 4,500 yards. Emilia knows the technical keys in each stroke and works on them daily and aggressively.

"Other areas of emphasis for her and her group are:

- Minimum stroke counts for DPS and balance (i.e., 800 free with paddles, slow motion, 10 strokes per lap, breathing every 3rd)
- Stroke rates for pace in all strokes and distances (with stroke counts and controlled UW)
- Peer support—we partner up to have swimmers watch each other for key stroke flaws
- All Junior 3 swimmers learn the back-to-breast crossover turn, at which she is perfect on both sides."

## **SAMPLE SETS/FOCUS: MADDIE SMITH**

Post warm-sets: 4x (3 x 100) - IM order by round. "Maddie works as if it is a main set, and she always descends to race pace or better, working at race quality.

**Pace/Speed:** 3 x 50 fly - 200 pace @ :50, followed by 3 x 100 fly @ 1:30 all-out, trying to hold under 1:00 (with kick counts, breathing pattern, race turns). "She can do this set well for any stroke," says her coach, Ron Heidary.

## **SAMPLE SETS/FOCUS: EMILIA BARCK**

Pace ladder: 20 x 25 back ladder (1 pace/1 EZ, 2 pace/1EZ @ :25 with 8 KUW, 10 strokes per lap into turn at 1.5 tempo.)

Challenge/endurance: 100 IMs @ 1:15 with race maturity and discipline—i.e., breathing patterns, kick counts, etc. Goal is 20. She is approaching 15 and has done three on 1:10. ❖



TOTAL ACCESS MEMBERS CLICK HERE TO SEE MADDIE SMITH'S AND EMILIA BARCK'S PROGRESSION OF TIMES. YOU'RE JUST A CLICK AWAY: SWIMMINGWORLD.COM/VAULT

This general training philosophy, coupled with a very positive team environment, has led to extraordinary retention, national development and has produced a large number of college swimmers.

## SW: What contributes to your senior-level success?

CH: In addition to training and coach and culture continuity, another driving force is perpetual senior swimmer leadership. Seniors work very hard in all program aspects and set the tone and expectations that motivate younger swimmers.

## SW: What is the basis of your age group program?

CH: We have a great deal of technique work from base drills for balance in the water...to personal stroke development...to subtle stroke changes. We sacrifice yardage for efficiency and race maturity. We have developed many Sectional and Futures qualifiers with this model, and it sets kids up for accelerated development in the senior group.

## SW: Character pursuit is a foundational Orinda mission. How does that manifest itself in team performance and in the lives of your athletes?

CH: For 25 years, this has been the most significant aspect of the program. The character focus has changed the direction of many kids' lives. This is evident in the "Letters to the Team" that our graduates write and in testimonials from parents.

We ask swimmers to model integrity, respect, humility, effort and a positive attitude, believing that these characteristics/virtues as a swimmer, a teammate and as a human being will have lifelong benefits. It has become our life's work.

We have weekly meetings with this as the primary focus. A character pursuit ultimately translates into enhancing every aspect of our program. The kids are very responsive and appreciative, and feel empowered. And it remains a meaningful part of their lives.

## SW: Talk about age group leadership implementation.

CH: We also have weekly meetings and mostly talk about character and leadership. We try to create a vision for younger swimmers as future leaders and role models. It creates a foundation for them to understand technical growth, effort expectations, team commitment and their role in the leadership spectrum. We impress upon all younger swimmers that they must be committed to these things, regardless of age.

## SW: How have you balanced club swimming and high school swimming?

CH: We have coached the local high school teams for the past 25 to 30 years. This has allowed a seamless blend of both programs with continuity in language, philosophy and pursuit of success—and avoidance, or navigation of, the pitfalls of club and high school swimming. It has also fostered a highly competitive rivalry.

## SW: Travel trips without chaperones?

CH: We travel regularly with 35-75 teenagers (coach-run) and strive to make it the defining aspect of our program—in character and performance. We believe travel and athlete protection/oversite is built every day on the pool deck. With mutual respect/implicit trust, leadership, accountability expected and shown in daily practice, travel simply becomes a byproduct.

Ron does a tremendous amount of detailed planning for every aspect of the trip—from seat assignments to strategic hotel room organization to daily time management. We are very clear and aggressive about expectations. We have extraordinary team captains and "room captains" who are all accountable to ensure every athlete is on time, in team attire, prepared, recovered, are never alone, etc. We also have extremely supportive parents who take care of athlete meals, various team needs and are ready to assist if any need arises.

On all trips, we have numerous meetings about performance,

attitude, process, the big picture, the purpose and practice of mature travel, etc. Our travel trips are highly productive, very efficient and inspiring. (Editor's note: see 2019 ASCA World Clinic presentation.)

## SW: You assist your swimmers with college admissions and college swimming prep.

*CH*: We have several swimmer and parent meetings to evaluate and narrow choices, bring in advisors, call or write coaches and write letters of recommendation. We feel a great deal of responsibility to help kids find the right or best fit, swimming or not.

## SW: Don, five years as ASCA President.

CH: Serving ASCA will always be the greatest privilege of my coaching career. It was truly humbling and inspiring to see the incredible commitment that so many at ASCA and USA Swimming make. I have also seen the great need for an elevated role of the coach in the leadership and governance of our sport. The coach's voice must go beyond the pool deck.

## SW: What would others say you two do best?

CH: I hope they would say we care for—and connect with—all of our athletes on a macro (life) and micro (swimming) level. We value our swimmers as people and want them to grow personally and emotionally in our program. We celebrate extraordinary "life skills" over performance. We feel if they haven't grown significantly in our program, we have failed them.

Athletic achievement is exciting and rewarding in the moment, but the true value of sports is who you become from it. ❖

Michael J. Stott is an ASCA Level 5 coach whose Collegiate School (Richmond, Va.) teams won nine state high school championships. A member of that school's Athletic Hall of Fame, he is also a recipient of NISCA's Outstanding Service Award.

## **ORINDA AQUATICS CLUB CAPSULE**

- Founded 1995. Team trains in a 50-meter pool at SODA Aquatic Center in Moraga, Calif.
- Average team size is 125 athletes: 70 senior (high school) and 60 junior swimmers (6th-8th grade)
- Perennial Silver and Bronze Medal Club in USA Club Excellence Program
- One of the top two clubs under 200 members in the Virtual Club Championships over the past 10 years
- Notable team finishes: Junior Nationals-West champions, 2000;
   Sectionals champion, 2001; Far Westerns champion, 2000;
   Summer Juniors, second in 2004 and third in 2012;
   Western Zone senior champions, 2019
- 26 Olympic Trials qualifiers—12 in 2008, five for 2020
- Developed more than 200 national-level swimmers/high school All-Americans
- Annually average 8-12 junior national swimmers (16 in 2017), 8-10 Scholastic All-Americans and more than 40 Sectional swimmers
- Forty-six Orinda Aquatics graduates have been selected as collegiate team captains
- 80% of graduates swim in college, with more than 40 competing annually
- Senior group (70) has an average GPA near 4.0
- $\bullet$  Team supports swimming in Swaziland, Africa as a part of its outreach efforts, as well as local swimming needs  $\diamondsuit$