

# SUIT YOURSELF

*For now, the techsuit era has come and gone. Effective Jan. 1, 2010, FINA banned the new-and-improved polyurethane speed suits that many believed were making a mockery of the sport because of the onslaught of world records that were set over the past couple of years. Did FINA make the right decision? Following are four guest editorials that offer differing points of view: pro-techsuit, anti-techsuit, the swimmers' point of view and the coaches' point of view.*

## **PRO-TECHSUIT** **(R)Evolution: Swimming** **Turns Its Back on the Future**

BY DAVID GUTHRIE

What we've witnessed during the past two years is swimming's most recent transformation. Most evolutionary steps are smaller, incremental and more easily digestible. But in the sport's history, large, disorienting leaps are not unusual.

It is odd that the guardians of swimming's history and continuity don't seem to have much knowledge or interest in either. Evolution is the process of transformation, and there is no better term to describe swimming's history.

Swimming's history is a checkerboard of constant change. Change is not the enemy of continuity; rather, it is continuity itself.

### **ARGUMENTS AGAINST THE TECHSUITS**

Following is a brief list of the common arguments put forth *against* the techsuits:

1. The suits are buoyant.
2. The suits create an economic barrier of entry into the sport.
3. Wearing a suit "enhances performance"—just like taking illegal drugs.
4. The suits turn any mediocre swimmer into a world record setter.
5. The suits make swimmers lazy and cause their technique to deteriorate.
6. The suits have disrupted the sport's otherwise uninterrupted continuity.
7. The suits rendered records meaningless, making a mockery of the sport's history.
8. Covering the skin disconnects the swimmer from the water, diluting the purity of the sport.

First, the polyurethane suits worn inter-

nationally throughout the 2009 season are objectively non-buoyant. They *all* passed a series of stringent buoyancy tests developed specifically to regulate these suits, which were administered by the Swiss Federal Institute of Technology. Insisting that these suits are buoyant in the face of clear scientific evidence to the contrary is no different than believing the earth is flat because it seems that way.

A thorough and objective analysis of the real costs of participating in the sport would prove that the price of racing suits is not a determining factor. The past decade proved that swimmers are able and willing to pay \$300 or more, even for racing suits with marginal effectiveness and longevity. With the exception of the Speedo LZR, the new suits offered a far better value than any of their Lycra predecessors.

As 2009 progressed, swimmers were more and more eager to buy polyurethane suits—not less. Astonishingly, even in the midst of a global economic meltdown, a thriving new industry blossomed, competition drove prices down, and consumers enjoyed unprecedented choice and value, proving the new technology's success in the marketplace.

The most cynical of the opinions on this anti-suit list are aimed at the work ethic, integrity and character of the swimmers. Saying that faster suits create a disincentive to work hard speaks more about the people who make such derogatory statements about swimmers than it does about the suits. It's sad that some coaches hold their swimmers in such low regard that they passionately parade these negative opinions in public. Again, the intense competition and achievements of 2009 proved that these fears of suit-aided laziness are baseless and insulting.

Equating faster suits with steroid use is nothing short of slanderous. By implication, anyone who disagrees with this comparison is not just an abject cheater, but morally bankrupt. Every self-respecting swimmer should be offended by these indirect, but personal assaults.

Just like the countless other technological advancements that significantly improved times, wearing a polyurethane suit doesn't "enhance" performance. Enhancement adds something extra. The suits do the opposite. They take something away: resistance.

Reducing drag doesn't give a swimmer added strength or stamina. It simply allows the athlete to apply them more efficiently, just like shaving down, wearing a cap or competing in a fast pool. All of these things follow the exact same principle—one embraced by the sport since its inception.

### **NATURAL VS. PURE**

We often confuse natural and pure. They are not the same thing. Pool competition is anything but natural: it is purely artificial. Those

**PICTURED »** The techsuits help reduce drag, but reducing drag doesn't give a swimmer added strength or stamina. It simply allows the athlete to apply them more efficiently, just like shaving down, wearing a cap, or competing in a fast pool. (Pictured: Alain Bernard, Arena X-Glide swimsuit)

who insist that swimming is not an "equipment" sport neglect to recognize that swimming is more dependent on equipment than almost any other sport. The pool itself is an essential piece of precision equipment (not to mention the array of other required apparatuses). It is also 100 percent artificial.

Even the water is totally manipulated—filtered, heated, chemically treated, tamed by lane lines, gutter systems and pool depth—all calibrated to create the ideal conditions for performance. You won't find that in "nature." Swimming is not pure because it is natural. It is pure because it is artificial.

A *purist* is someone who wants something to remain true to its essence, free from adulterating or diluting influences. That definition pretty accurately describes my approach to every endeavor that is important to me. As a photographer, architect, designer or teacher, I am a purist. As a swimmer, I am definitely a purist.

The sport is defined at its core by the unaided pursuit of speed in ideal conditions.

To me, that fleeting sensation of slipping through the water freshly shaven-down is a more pure swimming experience than struggling against drag—whether from hair, clothing, waves, turbulence—whatever.

Rather than detaching me from the water, the lowered resistance connects me to the element's energy more directly. It allows

me to feel exactly where I end and the water begins and to measure the effectiveness of my effort. Moving efficiently through water is all about balancing dynamic forces. It has nothing to do with the sensation of being wet. Powering through the pool sheathed in a slippery bodysuit is—by far—the purest form of swimming I've ever experienced.

The challenge we face now is that a not-so-new innovation actually produced across-the-board results. (Rubber is hardly new or high-tech. "Techsuit" should really stand for *low-tech*.) In the 1930s, Lastex, an elastic material that combined synthetic rubber with fibers, was used for competition swimsuits. The latest application of non-absorbent materials in racing-suit design didn't change the game so much as recalibrate its limits.

Swimming finally

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achieved a goal that it desired and pursued for more than a century. And rather than celebrating this achievement, the current leadership has not only rejected it, but has taken extraordinary steps to prevent its revival.

### A DENIAL OF SWIMMING'S HISTORIC PAST

Banning bodysuits is anathema, a denial of swimming's own historic past. In 1896, Alfréd Hajós, the first Olympic swimming champion of the modern era, wore a bodysuit with short legs and short sleeves. For the next 50 years, bodysuits—for reasons of modesty—were not only allowed, but *required*. Women had to compete by wearing full-length leotards. Throughout their Olympic careers, legends such as Duke Kahanamoku and Johnny Weissmuller wore a one-piece racing suit that covered the torso—not by choice, but by rule.

Although it was well known that suits created drag, it wasn't until 1937 that decency laws were relaxed enough to allow men to bare their chests in public. Men began wearing briefs, and from that moment forward, men's suits shrank as much as social norms and fashion trends would allow.

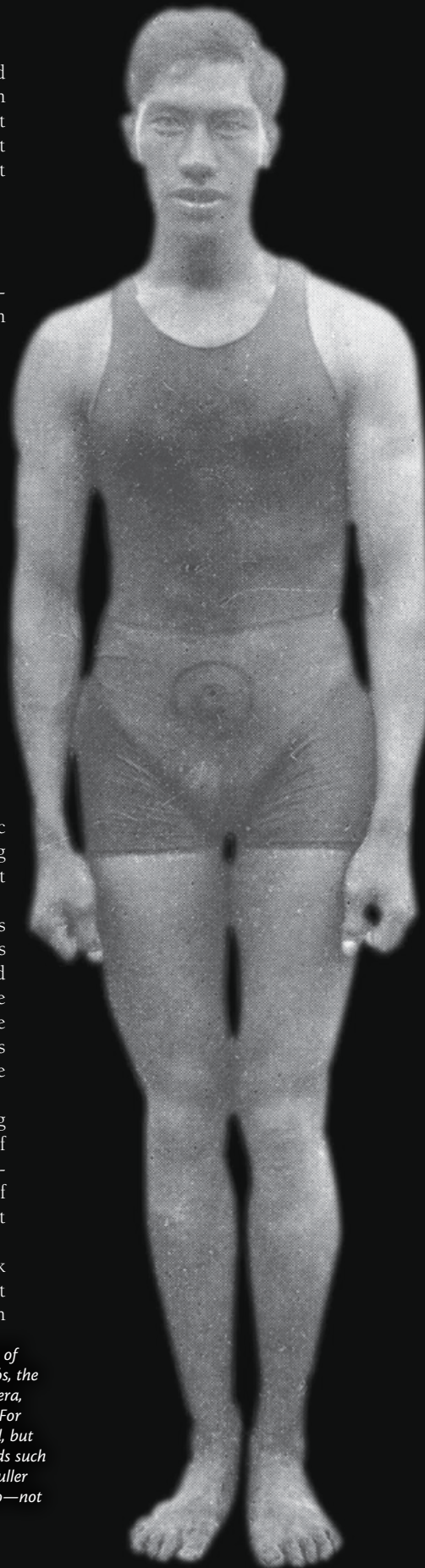
Men's suits were at their microscopic limit by the 1980s, not because exposing more skin made swimming more pure, but for the sole purpose of minimizing drag.

The introduction of the jammer was purely a product of changing fashion trends that shifted from short shorts to long and baggy. When materials and designs were developed that no longer meant that more coverage was slower, many swimmers embraced the return to the new streamline version of the original bodysuit.

When new materials lowered the drag coefficient further, the vast majority of competitors quickly switched to the full-length futuristic suits. Wearing one of the polyurethane suits felt like the 21st century.

Then the powers in charge turned back the clock. Because its form is a product of an outdated fashion trend rather than

**PICTURED »** Banning bodysuits amount to a denial of swimming's own historic past. In 1896, Alfréd Hajós, the first Olympic swimming champion of the modern era, wore a bodysuit with short legs and short sleeves. For the next 50 years, bodysuits were not only allowed, but required. Throughout their Olympic careers, legends such as Duke Kahanamoku (right) and Johnny Weissmuller wore a one-piece racing suit that covered the torso—not by choice, but by rule.



performance, the move backward to the jammer as the new standard is not only arbitrary, but retrograde.

While USA Swimming and other governing bodies succeeded in pressuring FINA to ban bodysuits for men—and polyurethane altogether—astonishingly, neither organization has clearly articulated an adequate or reasonable explanation for these radically retrograde decisions.

Inconsistent logic and arbitrary parameters are unmistakable signs of any ill-conceived rule. Rather than putting the controversy behind us, the over-reaching step to outlaw bodysuits for men creates severe and complex repercussions that the anti-suit chorus apparently failed to consider.

### THE SPORT HAS A RESPONSIBILITY

It is the sport's responsibility to have an open and honest debate on the relative merit of arguments for and against the so-called "techsuits" or any other emerging technology, but that hasn't happened. Instead, one side dominated the media and shaped public opinion to support its agenda.

If this orchestrated tidal wave of negative press wasn't enough to override sound judgment, Bob Bowman's public threat to hold the sport hostage by holding Michael Phelps out of international competition until the already-approved ban was put into place clearly influenced FINA's actions. The resulting draconian decision to rewrite one of the sport's fundamental rules, at the very least, deserves a clear explanation.

The truly alarming issue here is how this situation exposed a hopelessly politicized and inadequate rule-making process. Even more disturbing is the fact that these glaring deficiencies seem to go unnoticed and unchallenged by the greater swimming community who were pro-techsuit. ♦

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*David Guthrie is a Masters swimmer from Houston, Texas, who has more than 30 Masters national titles and more than 40 Masters world records.*

### ANTI-TECHSUIT The FINA Leadership Disaster

BY STEVEN V. SELTHOFFER

**T**he debut of the FINA-approved techsuits at the 9th FINA Short Course World Championships held in Manchester, England, in 2008 unveiled a greater threat to the sport of competitive swimming than doping.

By the end of the competition, 18 world records had fallen. The gloating

was irrepressible. The celebratory shouting and the soft “ting” of the toasting champagne flutes of FINA bosses and sponsors at the Manchester (accredited admittance only) evening parties drowned out the alarm bells and warning signals that instantly surfaced.

Earlier in the decade, convicted BALCO boss Victor Conte, after having pled guilty for steroid distribution and now an anti-doping advocate, helped explain the situation in sports.

“Doping could only give you a slight, unmeasurable advantage,” Conte said. “We had to convince an athlete that all the others were doing it, to get them to go along. We had to make them believe that unless they used it (THG), they might lose to someone who used something else, and that they would be at a disadvantage.”

“Doping could never take you from the Top 50 into the Top 30,” Conte continued, “or from the Top 20 and make you a Top 10 athlete. But it *might* move you up from ninth to seventh, or from fifth to third.”

But the techsuits could. Easily. And everybody knew it.

Distinguished Australian sport legend Forbes Carlile, in an open letter, called the impact of techsuits “technological doping” and “prostituting the sport.” Results and later developments proved he was 100 percent right.

By December 2009, 255 world records were set in 22 months, making a mockery of the sport and bringing untold misery and heartache to numbers of dedicated, hardworking athletes. Secret doping labs could never have dreamed of developing drugs that could have outperformed two suits of buoyant, air-trapping, ultrasonically welded neoprene and polyethylene.

### AN OPEN-AND-SHUT CASE

Removing and banning the techsuits from the sport was a no-brainer. And it seems to me that no brains were used in approving them and letting them in.

It wasn't about “the natural evolution of the sport” or “technology.” It was about a FINA leadership that was reactive—not proactive—and that refused to enforce the rules of the sport for the good of the athletes.

“Something has to be done,” Serbian Milorad Cavic said. “They (FINA) don't listen to us (athletes and coaches).”

Cavic's comment was a sentiment shared by the overwhelming majority

of swimmers and coaches at the World Championships in Rome. The fault for the debacle was not the manufacturers'. It was with the FINA leadership.

It was about a sport leadership that permitted sponsorship money to cloud its judgment, while ignoring its mandate to observe FINA rule SW 10.7 to place the interests of the athletes first, to protect them and their performances as a priority and to protect the integrity of the sport:

*“No swimmer shall be permitted to use or wear any device that may aid his/her speed, buoyancy or endurance*

*during a competition (such as webbed gloves, flippers, fins, etc.). Goggles may be worn.”*

The techsuits and the sponsorship money, during a large portion of this crisis, made FINA impotent. It refused to enforce the rules and their application for fear of upsetting the business/sponsor relationships.

### GOOD THING TECHSUITS ARE GONE

The techsuits came about wrongfully, permitting the implementation of unbridled space and defense technologies in combination with a constant search and use of new, exotic, non-permeable, high-tech materials without controls or independent testing for rule compliance that broke the rules in spirit and letter.

The techsuits produced buoyancy and air-trapping, and used devices such as non-permeable chest patches on “hotspots” to reduce drag. They permitted built-in compression girdles and permitted underwater exterior air-films on the suits that added buoyancy. On televised footage, they looked like large sponges being squeezed, as air escaped the suits from the body cavities of some swimmers. It was about wearing two air-trapping suits, while competitors wore one, and setting world records that could not have been achieved without them.

FINA wrongly permitted the manufacturers to customize (out of necessity) the techsuits for a very limited number of their top sponsored athletes, while permitting the same benefits to its competitors to be ignored, resulting in some swimmers having “suit failures” with zippers opening up, even during the Olympic Games, World Championships and European Championships.

All compromises are deadly to the sport and will kill off any meaningful historical comparisons while simultaneously masking the tell-tale signatures of doping concerns.

“I'm done with this,” Bob Bowman, U.S. men's coach, said at the World Championships in Rome. “The sport is in

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**PICTURED »** Distinguished Australian sport legend Forbes Carlile, in an open letter, called the impact of techsuits “technological doping” and “prostituting the sport.” By December 2009, 255 world records were set in 22 months, making a mockery of the sport. (Pictured: Kathleen Hersey, TYR Tracer)



[PHOTO BY PETER H. BICK]



shambles right now, and they better do something or they're going to lose their guy who fills these seats... The mess needs to be stopped right now."

**HISTORICAL COMPARISONS  
ELIMINATED**

With FINA permitting the entrance of the techsuits, swimming became an equipment-based/technology-based sport with corresponding single-generation leaps in results and world records that

could never have been achieved in years without them.

The essence of our sport is competitive, historical comparisons of times per stroke, per event, per distance. The new techsuits obliterated the Top 50 results from the past decades, making records and personal bests from hard work and talent virtually meaningless.

Improvements of five percent, 10 percent or *more* per 200 meters were not uncommon. One Berlin coach, watching his own swimmer make finals, and posting a world-class time, was dismayed: "I know she works hard, but she is not a world-class athlete."

"It's a carnival. It's a joke," said Dr. Joel Stager, director of the Counsilman

Center for the Science of Swimming at Indiana University. "There is absolutely no rationale for allowing these suits to be used beyond yesterday."

Stager is also the editor-in-chief of the *Journal of Swimming Research*. His studies and research made their way to the desks of the FINA Bureau in Lausanne, among other places.

Why are the swimmers going so fast? "It's mostly about flotation," Stager said.

**NO FINANCIAL IMPACT STUDIES**

Were any FINA financial impact studies done on the negative financial effects to NCAA university teams and minority swim programs? No—at least none of which we know.

The techsuits had an immediate and deleterious financial effect on USA Swimming clubs, NCAA universities, minority swim programs and family households around the



**PICTURED »** The techsuits had an immediate and deleterious financial effect on USA Swimming clubs, NCAA universities, minority swim programs and family households around the world. NCAA universities with men's and women's teams—at 20 swimmers per team for both conference and NCAA championships—faced higher annual costs of nearly \$40,000. That was an immediate, additional annual expense unheard of for any sport. (Pictured: University of Georgia women's 200 medley relay at 2009 NAAs, Blueseventy and Speedo LZR)

world—from Melbourne to Santa Clara, from Eindhoven to Rijeka—hitting the pocket books of swimming families of age groupers having to shell out from \$280 to \$580 per suit, per child, to keep up with the competition. The cost of outfitting two children jumped to nearly \$2,000 per year, per family, making the sport as costly as polo—the one with horses!

NCAA universities with men's and women's teams—at 20 swimmers per team for both conference and NCAA championships—faced higher annual costs of nearly \$40,000. And for high schools, it was around \$20,000 per championship. That was an immediate, additional annual expense unheard of for any sport.

That was a huge blow to NCAA universities and USA swim clubs with minority and inner city programs. In a sport already dedicated and working overtime for racial equality and minority inclusion and advancement, having to pay nearly \$1,000 per athlete turned many talented, minority athletes and families away.

**THE BIG LIE**

We were told by admitting the techsuits it would result in more sponsorship money coming to the sport. At

costs of roughly \$300 to \$500, the athletes would benefit. That was a lie. There has been no economic “trickle-down” effect that has been supported by professional review or that we have observed informally.

However, the \$300 to \$500 price for suits made junkies out of intoxicated manufacturer sales representatives. They're now addicted. They ran the numbers and saw the potential sales figures during a five- and ten-year period for the USA alone.

It is a serious mistake to take a half-measure in banning the techsuits and not go all the way with the waist-to-knee/quad

coverings. The newly approved suits—jammers—will emerge with price tags of well over \$200 to possibly \$350 or more over time.

**PROTECTING THE ATHLETES**

The most important thing to remember was the immense harm done to tens of thousands of athletes who were the victims of the unfairness and the lie of “availability” and the lack of custom-fitting—and who often had their lifetime best efforts wiped out in a single meet, who were the victims

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[PHOTO BY PETER H. BECK]

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[PHOTO BY CHRISTINNE MUSCHU, REUTERS]

**PICTURED »** While there are mixed emotions and uncertainty about what the next two years will bring, one thing is certain: whether swimmers wear techsuits, textile suits or chicken suits—when they hit the water, they are going to race their hearts out. (Pictured: Dara Torres, Jaked)

**SUIT YOURSELF** — *continued from 15*

of the admittance of these new technologies without receiving any financial benefit, and who were the victims of the lack of enforcement mechanisms by a sport leadership that was initially deaf to the athletes' concerns.

Removing the techsuits is a good first step. But the FINA leadership structure needs to change to prevent such a crisis from ever happening again. ♦

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*Steven V. Selthoffer, senior European correspondent, Swimming World Magazine, is a leader in sports governance and athletes rights. He is a communications specialist based in Germany who has coached a number of Olympic swimmers and who served as a commentator for swimming for the 2000 Sydney Games.*

**SWIMMERS' POINT OF VIEW**  
*It's All About the Racing*

BY TRENT STALEY

**O**ver the last two years, I have really enjoyed hearing quotes from well-known swimmers who quipped that they threw their techsuit in the water and it didn't go anywhere or that they are the ones who woke up every morning at 5 a.m. for work-out—not their suit.

These are wry, but honest statements from athletes who shouldn't have to justify their success, let alone have their efforts marginalized when abiding by the rules they were given. Just as with morning finals at the Beijing Olympics or sub-par lane lines at an age group meet, swimmers time and again dive in and race their hearts out—no matter the circumstances.

**IT'S PERSONAL**

These quotes always remind me that the techsuit debate is a very personal one for the athletes caught in the middle.

Some swimmers have pointed out that suits have evolved over the last decade. From the moment suits became faster than shaved skin, we entered a new era in the sport, so drawing the line today feels arbitrary.

Other athletes see the techsuits as having cast a spotlight on swimming in a year when typically we would have been an afterthought, recognizing that this attention is hugely positive for the sport and the individual athlete.

Some record-setting swimmers have called for those times to be tossed out because they were done with an unfair advantage over previous generations. Other



swimmers believe that the techsuit shifted what made them successful, moving from being technique-centric to pure power-centric, and in doing so, changed the focus of the sport.

Clearly, these thoughts and opinions don't all fit in one neat little box.

For more than a decade, I have worked within swimming's governance to help make the sport better by representing the athlete's opinion, yet I stumbled when I sat down to write this article because there isn't a singular point of view from the athletes. More stringent drug testing, personal advertising rights and the U.S. Junior Nationals have put a weighty majority of swimmers on one side of the debate or the other, but those topics are all far less personal in nature than the impact on performance of a swimsuit.

### REASONS FOR DIVISION

I've tried to find some good reasons why there is such a division among athletes, and I've heard people suggest things such as:

- Swimmers who are sponsored by companies that make the latest and greatest suits don't want the suits to go away because they give these swimmers an advantage. But the swimmers who are sponsored by companies that are perceived to make a less advanced product do—because they want “an even-playing field” again.
- Swimmers who swam prior to the techsuit era want the suits out because they feel their performances are diminished by “techsuit times,” while those who swam with techsuits and posted new best times want them to stick around because they are proud of their accomplishments.
- Swimmers with certain body types and/or techniques benefit most from the techsuits, so they want them to stay, but swimmers who saw little or no improvement when wearing them want techsuits to go the way of the dinosaurs.

These are all good points, but coaches, who also have to deal with these same issues, seem to have a more consistent opinion on the techsuit era. In my opinion, the difference between the coach and the athlete is the athlete's intimate relationship with his or her individual accomplishments.

Coaches work with multiple athletes



[PHOTO BY PETER H. BICK]

and have seen swimmers come and go. Some days their athletes succeed, and some days they fail. Witnessing this makes it slightly easier for a coach to take an objective approach to the suit controversy.

A coach's emotional investment is spread out and seasoned, while a swimmer's is hyper-focused and personal. An athlete's time in the sport is fleeting, so having an asterisk next to two years of their accomplishments is a tough pill to swallow—even for the swimmers who have called for a return to textile swimwear.

### UNCERTAINTY LIES AHEAD

Every swimmer faces uncertainty with the passing of the techsuit era.

Will I ever swim faster? If I don't swim faster, what does it mean? Do I consider my best time to be the best time I did pre-techsuit or my best time...period? Was I a swimmer who benefited more or less than the average athlete? Will I ever swim at the same level again?

Swimmers know, all too frequently, that they worked hard for what they achieved these past two years. They know that they are the ones who woke up early to stretch before workout, said no to dessert, kept their heads down inside the flags and left their lunches in the gutter.

After all that hard work and sacrifice, some went to the junior nationals, the state champs, the Olympic Trials or the World Championships—and for some, all that investment paid off. Some swam their best times and won tight races, but not everyone was that successful. Some swimmers didn't win the close race or achieve a personal record or feel so great about themselves when they climbed out of the pool. Techsuits weren't magic—they aided many swims, but they didn't reinvent the

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**PICTURED »** When asked how the change from techsuits to textile suits will affect preparation for the season and year-end competition, Brett Hawke (coach of men's NCAA D-I national champion Auburn) answered, “I always prepare my athletes to be highly competitive and swim with enormous amounts of confidence. My job is to help them believe that anything is possible. The suits were one element of competition. Now that they have been removed, we will focus on what is truly important: the art of winning under any circumstances.”



sport. The fabric of swimming wasn't ruined during two years of techsuits—swimmers learned lessons in and out of the pool, progress was made and fun was had just as it was 10, 15 or 20 years ago; no swimsuit can dictate otherwise.

So, while there are mixed emotions and uncertainty about what the next two years will bring, one thing is certain: whether swimmers wear techsuits, textile suits or chicken suits—when they hit the water, they are going to race their hearts out. ♦

*Trent Staley was an All-American, national champion and team captain while swimming at the University of Southern California. In addition to his accomplishments in the pool, Staley has served on the USA Swimming Board of Directors since 2004 and was the chair of the USA Swimming Athletes Committee from 2006-08. Staley now works as a marketing consultant in Los Angeles and Seattle, and continues to serve USA Swimming on the National Team Steering Committee and the International Relations Committee.*

## COACHES' POINT OF VIEW

### Slow Speed

BY MICHAEL J. STOTT

Walter Cronkite used to speak of days filled with “events that alter and illuminate our times.”

The venerable journalist would have loved the swimming days of 2009 in which techsuits induced a seismic shift that influenced training, meet expectations, race management, mediocre performance and even college recruiting evaluations...plus more than 250 world records!

“The suits fouled up things badly for several years,” says Don Easterling, a member of the ASCA Hall of Fame. “You could miss a taper with those fancy suits and still go fast.”

With FINA's Jan. 1 deadline reducing suits to fabric, jammers and onesies, national governing bodies and other swimming organizations have embraced—yea, welcomed—the return to ground zero. “Now we are back to coaching, teaching and the shave-down,” says Easterling.

While major meets that were held in December such as the U.S. Junior and Senior Short Course Nationals and the Texas Invitational have given swimmers a preview of what to expect come March, Matt Kredich, women's coach at the University of Tennessee, still rues the time spent last year deciding what suit to wear.

“It drove people crazy and negated a lot of things coaches pride themselves on doing, which is teaching how to hold technique under the pressure of big competition. I think it just makes swimming more competitive to have the suits gone,” he says.

To calculate the effect of the suit roll-back, *Swimming World* polled college, club and high school coaches to learn how they are working to recapture the confidence and speed athletes last saw in textile suits. Those coaches included:

- Kredich, whose Tennessee women finished 13th at 2009 NCAAAs;
- Kim Brackin, head women's coach at University of Texas;
- Brett Hawke, coach of men's D-I national champion Auburn;
- Jim Steen, coach of Kenyon men and women and winner of 49 D-III national titles;
- Todd Schmitz, coach of Colorado Stars, 2009 U.S. Junior Nationals

long course champions;

- Paul Silver, coach of the Marlins of Raleigh and head coach of the 2009 USA Swimming Boys Select Camp; and
- John Little, coach of Friendswood (Texas) High School and 2007 Texas 4-A Coach of the Year.

### How will the reversion to non-technical suits affect training?

**Kredich:** “That depends upon the coaches and swimmers. Each person has the option either to try to apply what we learned from wearing the suits or to ignore it. The biggest thing we learned is that efficiency in any part of the race has an enormous payoff. Easy speed at the beginning of a race means more energy at the end. Compression from the suits made it easier for people to hold an efficient body line at the end of a race, yielding more forward progress for every unit of energy put into the water.

“We learned that body position and alignment have a tremendous effect on economy. Some people had already created great alignment and others acquired the skill through putting the suit on. We're working constantly in practice this year on ways to create such awareness in every part of a swim.”

**Hawke:** “It won't affect Auburn sprint training. We are always pushing the limits of speed endurance and speed power in training in order to achieve phenomenal performances in competition. We used the latest technology suits very minimally for training purposes.”

**Steen:** “I don't think it will affect training substantially over what most coaches did last year. However, had the high-tech suits remained in place, I do believe training would have changed substantially and

## DISABLED SWIMMERS OF THE YEAR

**Mallory Weggeman** of the United States and **Daniel De Faria Dias** of Brazil are *Swimming World's* 2009 Disabled Swimmers of the Year. Both had outstanding outings at the IPC World Championships held late last year.

Weggeman set world records in the 50 meter free (32.87, 32.17), 100 free (1:11.45, 1:08.56), 400 free (5:16.15, 5:08.53) and 50 fly (35.17) as part of the S7 category. Meanwhile, Dias downed world records in the 50 free (32.01), 100 free (1:08.17), 200 free (2:29.85), 50 fly (36.12, 34.02), 100 breast (1:31.49), 50



ABOVE » Mallory Weggeman

back (36.48, 35.06) and 200 IM (2:45.94) in the S5 division.

Weggeman trains with the University of Minnesota, and is an incomplete paraplegic who was paralyzed from her L4-L5 vertebrae down. Dias, who lives and trains in Sao Paulo, Brazil, has a congenital malformation of the upper limbs and right leg.



## WORLD RECORDS

Besides all of the world records that fell at the Duel in the Pool and the European Short Course Championships in December, two additional



ABOVE » Daniel De Faria Dias

Lane 9

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would have required a certain emphasis shift on how we prepared our swimmers.”

**Little:** “The reversion to non-technical suits is a potential shock and letdown for the swimmers who used them with the wrong mindset—for example, swimmers who looked for a quick fix and replacement for good preparation.”

**Silver:** “At MOR, we train with two Lycra suits on for drag. That has not changed. Most of our swimmers used the Speedo FS Pro last year. Only six-to-eight used LZRs. This year, we have a younger group. We’ll work a little harder, increase volume a bit and rest the same as always.”

### **How will the change affect preparation for the season and year-end competition?**

**Kredich:** “We will wear the suits in training basically as an aid to help refine awareness of body position and core stability under fatigue.”

**Hawke:** “I always prepare my athletes to be highly competitive and swim with enormous amounts of confidence. My job is to help them believe that anything is possible. The suits were one element of competition. Now that they have been removed, we will focus on what is truly important: the art of winning under any circumstances.”

**Steen:** “Athletes will be competing for place and less so for time. Those who are exclusively focused on ‘bettering their best’ may be outdone by those who just want to win! Preparation shouldn’t change for most good programs that have consistently pushed the envelope in sport-specific training and fitness.”

**Brackin:** “We have a very strong, fit team of really athletic women. They will hold their own without the techsuits. We always expect to better ourselves in terms of technique, training and different dry-

land. We will work as hard as we can to get faster.”

**Little:** “We will train basically in the same manner as we always have.”

### **Will athletes who had those suits be able to match last year’s times?**

**Kredich:** “I think every athlete came into this season with the ability to go faster than ever. If that’s the goal, however, there is much less room for error. There’s nothing wrong with being held to a higher standard or facing changes that you must make if you want to get faster.”

**Hawke:** “As a coach, I ask, ‘Have you done everything possible in order for you to be as fast as possible at the end of the year?’ Can they do it? Yes. Will they do it? Some will. It will take an enormous amount of belief, but someone will pull it off. It may take a few seasons for the rest of them to catch on.”

**Steen:** “Around the world, some will—many won’t.”

**Brackin:** “We talk about times in our goal meetings and say, ‘I don’t know what to expect without the suits.’ We don’t ever want to expect to go slower. I expect if we do everything right and engage the plan that Jim (Henry) and I have set up, we’ll have some pretty good swims at the end of the season.”

**Silver:** “I think it may be a challenge at first for some of the older athletes to match times worn in Jaked/Arena and even LZR. You have to look at what you are doing in practice, and if your practice times are improving, you should do OK.”

**Schmitz:** “A lot of kids are going to take a step back.”

### **What do you see as the mental obstacle/opportunity for these swimmers?**

**Kredich:** “The biggest challenge/

opportunity is no different from what we deal with every year—separating the things we can control from the things we cannot control. Suit rules, we can’t control; how we train and execute races, we can control. We do some very specific race pace training, and every person’s training plan is designed to train them to go faster than ever. If they don’t, it will be because we did not execute something well enough, not because we didn’t wear a suit.”

**Steen:** “Certainly the exceptional times we witnessed last year now serve as a target for which to strive and hopefully exceed in the near future. The high-tech suits further underscored the importance of body position, core strength and drag forces, and encouraged us to address these issues further in preparing our swimmers.”

**Schmitz:** “Some kids read articles and believe that the suits produced those swims. I’ve never seen a suit swim a race by itself. It still takes a motivated individual. It’s going to take a lot more motivation and work on mental preparation.”

**Little:** “Athletes who used the suits may find themselves disappointed with their results if they don’t realize that it all comes down to preparation. That’s the coach’s job—to prepare swimmers mentally and instill a mindset about being fast.”

**Silver:** “This is a real opportunity to let swimmers know they will have to work hard. That will lead to better practices that will lead to better swims. Many coaches are bracing their swimmers for the adjustment. I am going to focus our kids on racing. If they win heats, they will generally be happy with the more level-playing field.” ♦

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global marks took a tumble in the final month of 2009, marking the end of the techsuit era.

Shortly after the U.S. foursome of **Nick Thoman, Mark Gangloff, Michael Phelps** and **Nathan Adrian** set the short course meters world record in the men’s 400 medley relay with a 3:20.71 at the Duel in the Pool in Manchester, England, Russia bettered the record during the Salnikov Cup, Dec. 19-20, in St. Petersburg. **Stanislav Donets** (49.63), **Sergey Geybel** (56.43), **Evgeny Korotyshkin** (48.35) and **Danila Izotov** (44.75) clocked a 3:19.16 to finish the year with the record.

In long course action, **Cesar Cielo** downed the men’s 50 free world record at the Brazil Championships in Sao Paulo. After turning in a 21.02 during evening prelims, Dec. 17, Cielo clocked a 20.91 during finals the next morning to break **Fred Bousquet’s** global mark of 20.94 set in April 2009.

### **CORRECTION**

In *Swimming World Magazine’s* January issue, it was stated that USA Swimming’s **Jim Wood** was the president of the “government-funded national governing body” as part of the “Most Influential People in United States Swimming” article. In fact, USA Swimming does not draw its funding from the government.



### **SOME U.S. RECORDS WON’T BE RATIFIED**

USA Swimming announced that American records set in techsuits after Oct. 1, 2009—when USA Swimming implemented the techsuit ban domestically—would not be ratified. This is the case even for times swum legally in international events—such as the Duel in the Pool in December—in which the techsuits had not been banned until Jan. 1, 2010. To view a list of ratified and non-ratified times for events that are affected, go to [http://www.swimmingworldmagazine.com/results/records/AmericanRecords\\_SCM.pdf](http://www.swimmingworldmagazine.com/results/records/AmericanRecords_SCM.pdf) ♦