

# At The Finals, it's survival of the fittest.

Only the best designs and colors are considered suitable for our suits.

We're rough on our fabrics, too: if they're not state-of-the-art, they don't make the cut.

You can't beat our value, either. Since you buy direct from us— at about half the price you'd pay in a store.

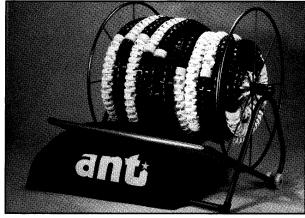
If you're as hard on your swimwear as you are on your strokes, we're the natural selection.

For our free, 48-page, full-color catalog, call tollfree 1-800-431-9111, 24 hours a day, 7 days a week. Or write us at: 21 Minisink Ave., Port Jervis, N.Y. 12771.

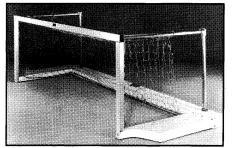


# You Have Frankly we don't think you should have to bear the cost in terms of increased product prices

because frankly we don't think you should have to bear the cost in terms of increased product prices. Compare our prices with the competition and see how much GOLD you have earned. And don't forget... Anti is the ONLY manufacturer of racing lanes, platforms, storage reels and water polo goals to offer a 3-year warranty. Why buy anything else?



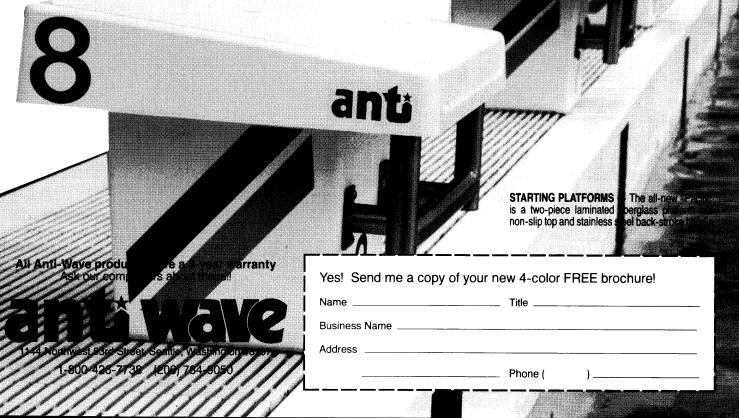
**STORAGE REELS** — The "Supreme" Storage Reel is anodized to a lustrous blue finish for optimum resistance to chemical, solar or environmental corrosion. **RACING LANES** — Our patented interlocking discs are molded in tough polyethylene with ultra-violet inhibitors and antioxidants for color stability and maximum durability. The cable is 1/8' stainless steel crosswoven aircraft cable with 2000 lb test strength.



**POLO GOALS** — The Floating Goal, with redesigned light-weight ABS vacuumformed floatation panels, gives maximum flexibility. Wall goals are also available for deep and shallow ends.



MINI LANES — Sold as a kit, this inexpensive lane can be used for training as a pool divider, or water polo field demarcation.





THE NATIONAL MAGAZINE FOR COMPETITIVE AQUATICS/AGE GROUP • HIGH SCHOOL • COLLEGE P.O. Box 45497, Los Angeles, Calif. 90045 • 116 W. Hazel St., Inglewood, Calif. 90302 • (213) 674-2120

#### 21 GAMES OF THE XXIVth OLYMPIAD SEOUL 1988



# September 22, 1988 Women's 400 Free 38 Men's 100 Free 39 Women's 100 Back 39 Men's 200 Back 40 Women's 400 FR 41

#### September 23, 1988

Men's 400 Free	42
Women's 100 Fly	43
Men's 200 Breast	44
Women's 100 Breast	45
Men's 400 FR	46

# September 24, 1988 Women's 200 IM 47 Men's 200 Fly 50 Men's 50 Free 51 Women's 800 Free 52 Men's 100 Back 53 Women's 400 MR 54

#### September 25, 1988

Men's 200 IM 5	5
Women's 200 Fly 5	6
Women's 50 Free 5	7
Men's 1500 Free 5	9
Women's 200 Back 6	1
Men's 400 MR 6	1

#### 

September 21, 1988	
Men's 100 Fly	33
Women's 200 Free	34
Men's 400 IM	35
Women's 200 Breast	36
Men's 800 FR	37



#### SYNCHRO



#### 68 WATER POLO

### 73

65

DIVING



RESULTS

80



#### **DEPARTMENTS**

Editorial Side	6
Perspective 1	2
Newswave 1	4
U.S. Swimming 1	8
Classified Ads 9	0
Calendar 9	1
Looking Ahead 9	5
Index to Advertisers 9	6

#### CREDITS

Cover photography by All-Sport (Clockwise from top left): Kristin Otto (Photo by Tony Duffy), Matt Biondi (Photo by Simon Bruty), Greg Louganis (Photo by Pascal Rondeau), Janet Evans (Photo by Tony Duffy); Olympic flame (Photo by Gerard Vandystadt)

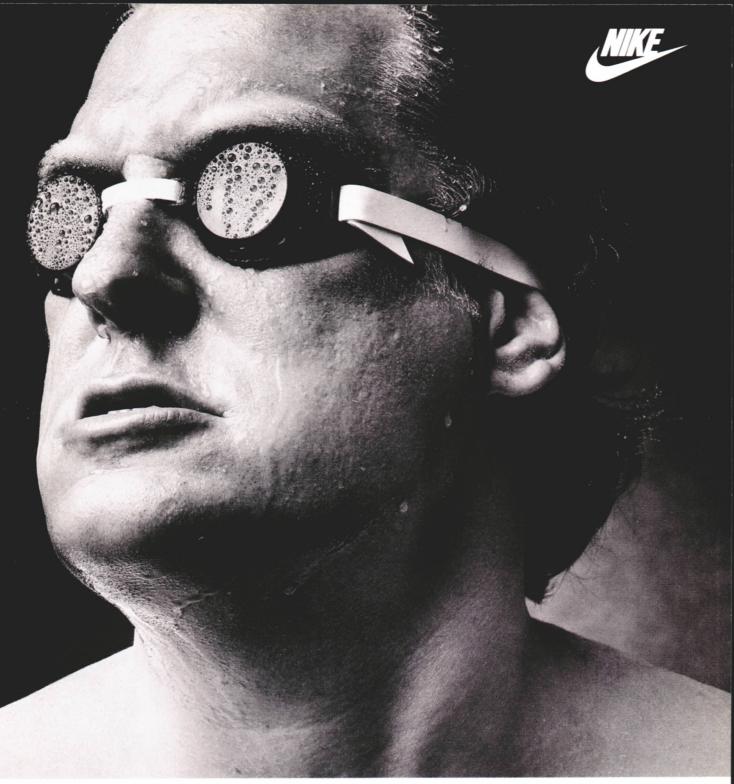
# SWIMMING WORLD AND JUNIOR SWIMMER (ISSN 0039-7431) is published monthly by Sports Publications, Inc., 116 W. Hazel, Inglewood, Calif. 90302. Second-class postage paid at Inglewood, Calif. and additional mailing offices. Rates: \$2.25 a copy; \$16 a year in U.S.; \$21 a year, all other countries. Foreign international money order in U.S. funds payable at P.O. Box 45497, Los Angeles, Calif. 90045. Postmaster send address changes to SWIMMING WORLD, P.O. Box 45497, Los Angeles, Calif. 90045. Subscribers send change of address six weeks before moving day. Please indicate zip code. Send label from last issue with address change. Request for missing issues older than two months from current date will be honored only when accompanied by payment. Note: permission to reprint articles or excerpts from contents is prohibited without permission from the publisher. Not responsible for errors in repeat advertisements after first insertion.

MICROFILM COPIES: Available from University Microfilms, 313 N. First St., Ann Arbor, Mich. 48103. SWIMMING WORLD is listed in the Physical Education Index.

**SWIMMING WORLD** IS Printed in the U.S.A.

© Swimming World and Junior Swimmer, November 1988

2 Swimming World/November 1988



# LEAD YOUR SHOES TO WATER AND MAKE THEM DRINK.

The Nike Aqua Sock is designed for men and women who prefer to spend more time in the water than out of it.

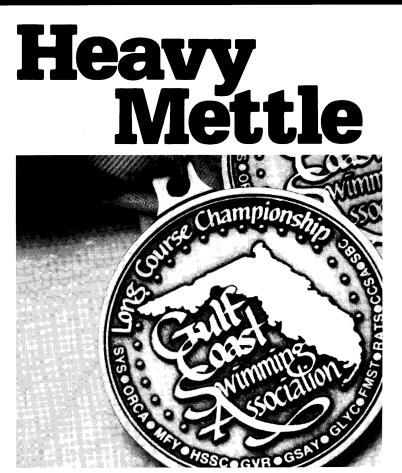
Doing almost anything. Which means that, unlike other shoes, you don't have to take it off just because you want to get wet.

Of course, if you've had a proper upbringing, this is all going to feel a little

rebellious your first time out. The fun things usually do.



To find the Nike Aqua Sock, call 1-800-344-NIKE.



#### Your special event deserves our special medals

You and your athletes have sweated it out together. You've shown grit, character, and a determination to succeed. Now that it's all come together, make sure the final detail is as good as you deserve. Custom medals from **Maxwell Marketing**.

#### You can see and feel our quality. And we offer service to match.

- Low prices, with no 1988 price increase
  - Low 50-piece minimum
  - In-house design staff
  - On-time delivery
  - 10 years' worth of satisfied customers

Call today for our **free** catalog and samples. Because your mettle deserves our custom medals.

**1-800-331-1383** In Michigan: 1-800-632-1188

Also available: stock medals, pins, ribbons and more.

P.O. Box 2336 1757 Barlow Rd. Traverse City, MI 49685



#### SWIMMING WORLD.

P.O. Box 45497, Los	Angeles, CA 90045
116 W. Hazel St., Inglewood,	•
Publisher	
Editor	
Circulation Manager	
-	
Special Projects Director	
Associate Editors	RUSS EWALD, MARK
MUCK	ENFUSS, SANDRA TODD
Art Director	KAREN McBRIDE
Production Assistant	JUDY JACOB
Illustrators	STEVE BENTLEY, ART
BRE	WSTER, AL LOWENHEIM
Office Manager	ROBERTA KLUMP
Advertising Coordinator	TONI BLAKE
Circulation Assistants	RUBY WATKINS,
	MARGE MARSHALL,
PENNY	E MONK, LYNN HOBSON
Printer	R.R. DONNELLEY & SONS
Advertising Representative.	PETER KOCH-WESER
	213-836-2642

OFFICIAL MAGAZINE OF:

United States Swimming The National Governing Body for Amateur Swimming in the United States



National Interscholastic Swimming Coaches Association



American Swimming Coaches Association



College Swimming Coaches Association of America

CONTRIBUTORS: Skip Bird, NISCA; Jeff Dimond, U.S. Swimming; Tony Duffy, photographer; Dick Guido, Masters; Phill Hansel, Perspective; Robert H. Helmick, FINA & USOC President; Nancy Hines, photographer; Linda Houtkooper, Nutrition; Eugene Keltner, YMCA; Greg Lockard, CSCAA; Tim Morse, photographer; Steven Munatones, Long Distance Swimming; Ron Neugent, Athletes Forum; Brent Rutemiller, Aqua-Zoids; David Salo, Physiology; Don Swartz, Mental Focus; Budd Symes, photographer.

REPRESENTATIVES: Rumen Atanasov, Bulgaria; Dawn Bean, Santa Ana, Calif.; M. Biegler, Brown Deer, Wis.; Anne Bloese, Plantation, Fla.; Helmuth Bock, West Germany; Georgia Burley, Falrview Park, Ohio; Ota Cernock, Washington, D.C.; Col. Bill Cope, Novato, Calif.; Leslie Cranfield, Great Britain; Buck Dawson, Fort Lauderdale, Fla.; Joe Domitrz, Whitewater, Wis.; John A. Dunnigan, Baltimore, Md.; Monika Forner, Apple Valley, Minn.; Michael Frank, New York, N.Y.; Viktor Judin, USSR; Robert Kersch, Long Island, N.Y.; Viktor Judin, USSR; Robert Kersch, Long Island, N.Y.; dL Liebfried, Exeter, N.H.; Dr. Gary Mihelish, Helena, Mont.; James Noyes, Lawton, Okla.; Jack Ryan, University, Ala.; Luigi Saini, Italy; Don Shycoff, Bowie, Md.; Mary Jo Swalley, Santa Barbara, Calif.; Nick Thierry, Canada; Larry Treadgold, San Jose, Calif.; Molly Turlish, Lewiston, Maine; Alfonso Victoria, Venezuela; Dorothy Welsh, San Antonio, Texas. Winning requires sacrifice... that is why when victory cornes, it is so sweet. Ocean understands. We make fast suits for serious swimmers. Designed for drag-free performance and maximal freedom of movement; constructed of high performance 5.4 lycra® 128 fabric. Designed to give you... the competitive edge.

See Ocean's exciting new '89 line at your local sporting goods dealer or swim shop. Or for more information, call Ocean direct.

"Team Ocean" now available in eleven team color combinations!

Ocean® is a registered trademark of Ocean Pool Company, Commack, N.Y.



Ocean is proud to be a sponsor of these national coaches associations.







"team ocean"... new for 1989

CLA

OCEAN POOL COMPANY, 45 Mall Drive, Commack, N.Y. 11725 Call Toll Free: 1-800-645-5316 or in New York: 516-543-1110

### **United States Swimming Needs Answers**

What is wrong with U.S. swimming? At Seoul, with the notable exceptions of Matt Biondi and Janet Evans, and the members of the men's relays, our swimmers left their best times at the Olympic trials.

It wasn't just the women who failed to better their Olympic team qualifying times, but the men were almost as disappointing. At Seoul, out of 13 individual events, 20 of the women swimmers failed to make their Olympic team qualifying times, one event had but one finalist and one event had no U.S. finalists. In the men's competitions, 21 swimmers did not make their team qualifying

About the Author

times in individual events, U.S. placed but one finalist in eight of 13 individual events and no finalists in one event.

What a far cry from the 1976 Games when there was no boycott. The men collected 12 of 13 gold medals, 11 world records, 25 individual medals out of a possible 33 and 1-2 finishes in 11 individual events. The men qualified 31 out of 33 possible finalists, and 25 won medals.

The women found the GDR arriving at world dominance. The GDR won 10 of 11 individual events and won 18 medals out of a possible 35. The U.S. women totaled seven medals and one gold, that in the 4 x 100 free relay.

So what happened in 1988? We have heard the rhetoric from U.S.



headquarters staff for so long we began to believe it. The U.S. coaches selected for the Olympic team were the ones who had placed their swimmers on the Olympic team. They can't swim for the kids. Our swimmers were counseled by psychologists, physiologists and the medical profession. We spared no expense in providing the best pre-Olympic training camp.

Here are some of the excuses reported by the media who were at Seoul: "The NCAA championships should be long course." Why? Did it hurt the swimmers in 1976 and 1984? "The swimmers can't come back after an all-out effort to make the team." It didn't hurt in 1976 or 1984. "The training camp is too long." It didn't hurt in 1976 or '84.

The results at Seoul need to be fully studied. After the 1988 Winter Games at Calgary when the U.S. failed to medal in many events, the USOC named George Steinbrenner to chair a commission to find out what was needed to get the United States moving again.

U.S. Swimming needs a similar commission completely autonomous from the national office, with coaches who were and are potential Olympic team staff. The commission must be sufficiently funded to do an in-depth study and come up with the answers at a given deadline.

A commission could be formed with successful Olympic professionals like George Haines, Doc Counsilman, Peter Daland—all who have vast international and Olympic Games experience and who are impartial. These three plus Olympians Matt Biondi, Mary T. Meagher, Donna de Varona and John Naber would make a viable commission. To make the commission work, it must be adequately funded. There has to be funding from a budget of close to \$5 million.

This isn't a project for the Planning Committee or the National Steering Committee. It must have an autonomy if it is to have a meaningful response.  $\Box$ 

Al Schoenfield is the former publisher and editor of *Swimming World*.

<sup>©</sup> COMPETITOR<sup>®</sup> COMPETITOR<sup>®</sup> COMPETITOR<sup>®</sup> C

# **'88 OLYMPIC SWIMMING RESULTS**

★ 11 NEW WORLD RECORDS ★ 23 NEW OLYMPIC RECORDS

CONGRATULATIONS! TO ALL THE ATHLETES WHO COMPETED AT THE RECENT GAMES IN SEOUL, KOREA.

**COMPETITOR** LANES HAVE AGAIN FINISHED WITH A GOLD MEDAL PERFORMANCE AS THE NUMBER 1 LANES IN THE WORLD. **COMPETITOR** HAS BEEN SELECTED 5 TIMES AS THE OFFICIAL SUPPLIER TO THE OLYMPICS, SINCE THE 1968 GAMES IN MEXICO CITY.

**COMPETITOR SWIM PRODUCTS** HAS ALREADY BEGUN WORK ON THE 1992 OLYMPIC GAMES, IN BARCELONA, SPAIN TO PROVIDE THOSE FUTURE OLYMPIANS WITH THE START OF THE ART ENVIRONMENT NEEDED TO PRODUCE THE RESULTS AS SEEN IN SEOUL.

**COMPETITOR** WOULD ALSO LIKE TO WELCOME A NEW MEMBER TO ITS FINE LINE OF PRODUCTS!

#### PHYSICIAN'S CHOICE "EAR PUTTY"

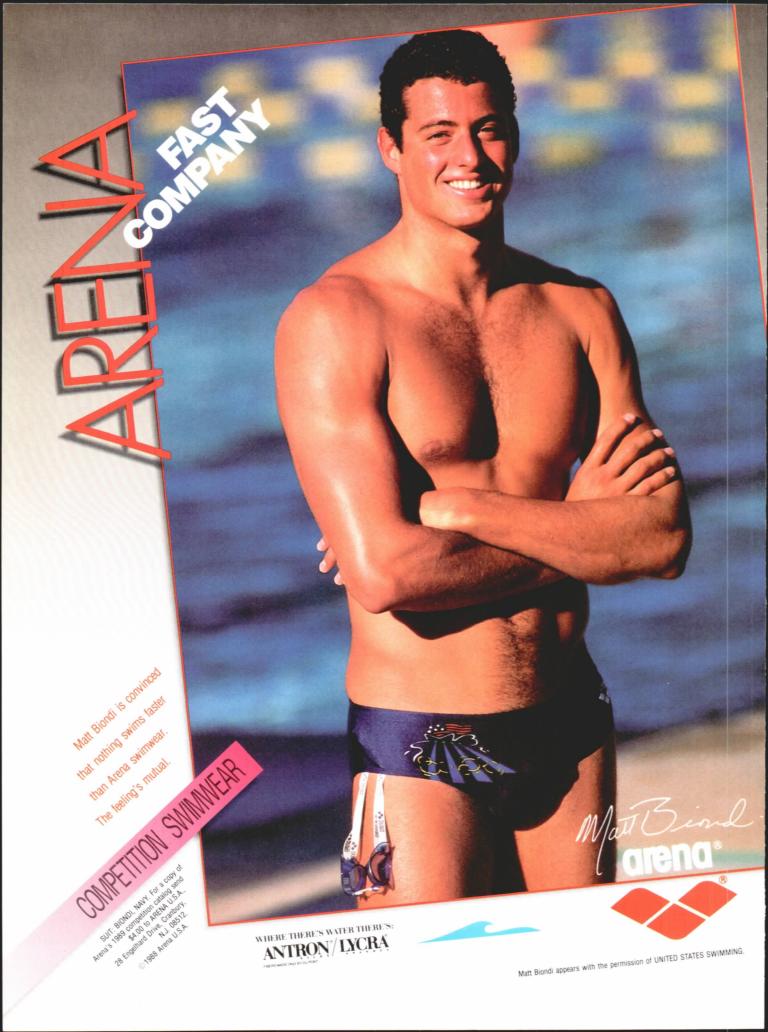
OFFICIAL SUPPLIER OF U.S. SWIMMING, IS NOW AVAILABLE AT YOUR COMPETITOR DEALER. BE SURE TO ASK FOR "EAR PUTTY" AND SUPPORT THE COMPANIES WHO SUPPORT YOUR SPORT!

DON'T SETTLE FOR SECOND BEST ASK FOR **COMPETITOR.** 



Richey Industries, Inc. dba Kiefer McNeil Box 928, Medina, Ohio 44258 (216) 725-4997

In Canada: Dizard of Canada Toronto, Ontario (416) 466-0064 In Europe: Malmsten Equipment Ahus, Sweden 044-24-30-67 In Japan: Mizuno Corp. Osaka, Japan (06)454-5221



# PUT YOUR MEDALS WHERE YOUR MOUTH IS!

# CONGRATULATIONS MATT BIONDI... THE FASTEST Swimmer on Earth...And All Those who made history in seoul In <u>Arena</u> Swimwear!

# 28 GOLD MEDALS · 21 SILVER · 23 BRONZE

72 of 94 swimming medals were won in **ARENA** swimwear.





Arena. Official Swimwear Licensee of the Games of the 24th Olympiad in Seoul 1988.

## Olympic Video Treasury

Relive the excitement and pagentry of the 1988 Summer Olympic Games with these spectacular, beautifully produced home videos from NBC Sports.

#### NBC Sports Highlights of the 1988 Summer Olympics—Seoul

The world's finest athletes... The world's fiercest competitors...in the pre-eminent event in the world of sports. All the excitement of the 1988 Summer Olympics is available to you in an exclusive 90-minute home video program.

An inside look at the biggest Olympics ever

- The awe-inspiring pagentry of opening and closing ceremonies
- Relive the dramatic and thrilling moments, again and again

\$29.95

#### **Olympic Water Sports**

A 45-minute home video program with a focus on the water sports. Video captures behind-the-scenes footage, close-up looks at some of America's star athletes, and great moments not included in the Highlights of the 1988 Summer Olympics-Seoul video cassette.

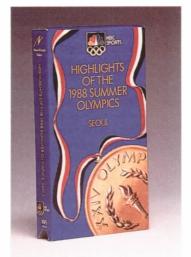
\$19.95

\$99.95

S

#### Olympic Commemorative Gift Collection

Handsomely packaged in its own librarystyle case, this gift set includes 4 videocassettes: Highlights of the 1988 Summer Olympics (90 minutes), Olympic Water Sports (45 mins.), Olympic Track and Field–Men (45 mins.), and Olympic Track and Field–Women (45 mins.)



end to:	Swimming World
	P.O. Box 45497
	Los Angeles, CA 90045

🗆 VHS 🛛 🗆 Beta

Olympic Water Sports \$19.95
 Olympic Highlights \$29.95
 Gift set of 4 tapes \$99.95

Total of order \$\_\_\_\_\_(postage and handling are included in price)

Address \_\_\_\_

Name\_

City/State/Zip \_

Phone \_\_\_\_

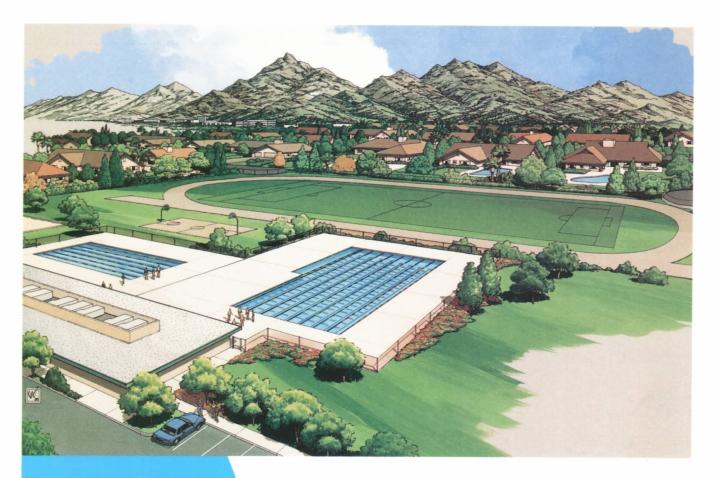
MasterCard/VISA\_

Exp. date\_

Personal checks must be drawn on U.S. bank in U.S. Dollars. Allow three weeks for delivery in the United States.







# PHOENICIAN RESORT SWIM TEAM



"Dedicated to the Pursuit of Excellence in Competitive Swimming"

- Unrestricted access to "state of the art" swimming and dry land facilities
- Sophisticated, computerized sports science program
- Internationally experienced coaching staff: Dennis Pursley
  - Jonty Skinner
- Pierre Lafontaine
- Brent Rutemiller
- Melissa Belote
- Program orientation directed toward the highest level of international competition

For more information, Contact: Phoenician Resort Swim Team 2902 E. Campbell Avenue Phoenix, Arizona 85016 (602) 957-7170

**Sponsored by American Continental Corporation** 

#### **More Than A Five-Ring Circus**

I have just returned from my seventh Olympic Games. Each Olympic Games has its own unique flavor



and atmosphere. Each has been a fantastic experience for me and for all the participants. I always leave the Games with the feeling that I have just participated (even as a spectator) in the world's greatest peace movement.

It is tremendous to be involved in an event that brings together people from all over the world, from different cultures, ideologies and beliefs. All are brought together to compete in various sports rigidly conforming to rules and regulations that govern that sport. Using the rules as guidelines, it makes it possible for everyone to meet once every four years and determine ability levels. It also provides a means of communication and understanding. It provides a common ground for respect and friendship.

#### About the Author

Phill Hansel, swimming coach at the University of Houston, began coaching in 1950 at the Multnomah Aquatic Club in Portland, Ore. He has served on numerous U.S. national teams and was the founder and first president of the American Swimming Coaches Association.







Phill Hansel

It is amazing how well everyone blends into just being athletes. A freestyler is a freestyler, a sprinter is a sprinter, a diver is a diver, regardless of nationality. We soon become individual people competing against other individuals; in so doing, we become equals, following the same rules, laying it all on the line. We all become winners because we are involved in the same process. We are striving for our own goals, the culmination and fulfillment of years of training and dreams.

There are so many different ways to look at the Olympic Games and so many facets to examine.

One can look at the Games strictly from the medal count aspect—like gold, silver or bronze is what it's all about. For some of the media, this seems to be all that matters. Fourth place on down is not worthy of consideration or mention. There probably is no greater thrill than winning a gold medal at the Olympicsknowing that for that one day and for all time, you were the best in the world. (I certainly will never know this feeling, but I can tingle with excitement when I see it happen.) Participating to the best of one's ability level is important too, even if not winning a medal. Everyone adds to the total spectacle. There are no

losers at the Olympics. There is so much more to the Games than just medals.

One can look at the Games to find heroes or stars. The media tends to pick their own and build or crush the individuals chosen. It's too bad that a participant can't be just a person who has strengths and weaknesses. We continually read the releases that say things like, "Joe Medal Winner is a nerd and will never cash in because he is not personable enough." Or so and so is the darling of the Games. There were 13,000 athletes at the Games, and I submit that each and every one of these individuals would make a tremendous story of sacrifice, dedication, sweat, tears, accomplishments and success.

One can look at the Games as money, the tremendous cost and the financial gain. We had athletes of all kinds from many different sports striving for medals because it might lead to big money for them. They strive for endorsements, sponsorships and, for some, even lifetime monthly checks from their nation's government. These Games were different than many in that we had several so-called amateurs striving to gain riches; and on the other hand, many of the tennis professionals, people already making big money, competing in the Games simply for the thrill of winning a medal.

One could observe these Games from the drugs and steroid scandals. Certainly, this part of the Games received a tremendous amount of media coverage. It cannot be overlooked and it must be dealt with properly. It's sad that people will cheat; it's great that they get caught. They should not get away with it. I resent the implications that everyone would cheat, if they could, or that we are all under suspicion because a few have cheated.

One can look at the Games as a means of national pride or as proof that one form of government is better than another. We are led to believe that the Iron Curtain countries participate to prove that their way is better than democracy. Certainly, they have a different financial support system and a stronger priority rating from their governments. Certainly they have more regimentation and control of their athletes. But I have never seen the connection between an athlete's performance and proof of political system being better because of it.

I prefer to think of the Games as people. One classic example of respect and understanding stands out as a personal high point of these Games for me. It was a very spontaneous and unique experience that happened with no fanfare: I am happy that I was present to take part.

It involved the great Soviet swimmer, Vladimir Salnikov. I do not know Vladimir personally, but I do respect his tremendous achievements through the years dating all the way back to the 1976 Olympic Games. He still holds the world record for the 1500 meter freestyle, which he last set in 1983. He was pretty much written off as a factor in these Games by performances at the European and World Championships the last two years. But he was in Seoul at age 28 to swim the 1500 one more time. He won the gold medal, just six seconds short of his own world record. He received a standing ovation from swimming fans throughout the entire award parade and ceremony. This was fitting and proper.

But the significant happening that I shall never forget happened about 11:30 p.m. that night in the dining hall at the athletes village. I was there getting a late-night snack along with athletes from all over the world from many different sports. There must have been 300 present. This room was about the size of a basketball court, people eating and visiting.

Vladimir walked in to get a snack. I could not even see him, but his name spread throughout the room quickly. Everyone started clapping and soon we were all standing and applauding this one man who had fulfilled his dream. Everyone in the room could relate to his accomplishment. It was a pure people-reachingout-to-people experience—strangers as we were, yet united with a common bond. Consider the 10 million residents of Seoul who were our hosts, the thousands of workers and volunteers that made the 24th Olympiad one of the greatest ever. We should consider the officials, consider the parents and loved ones of the athletes, consider the athletes themselves and consider the sport fans of the world—millions and millions of people drawn together in one place, with one focus. People make the

and gently remove chlorine from

original chlorine removal shampoo

the hair. In fact, UltraSwim is the

competitive swimmers. You'll find

UltraSwim Shampoo amazingly effective, yet gentle enough to use

developed especially for

every day.

Olympic Games the great happening that it is every four years. It's because millions of people care that the Olympic Games will continue.

The Olympic Games is the world's greatest showcase. It's the one arena that allows all of us to come together and just be people. It's vital to the survival of mankind that we all have this opportunity to learn about each other. Yes, the Olympic Games are more than a five-ring circus.



If you swim a lot, use UltraSwim Shampoo and Conditioner. UltraSwim gets the chlorine out.

(Official Supplier to U.S. Swimming National Teams)



### FINA Sinks "Submarine"

The backstroke "submarine" start, popularized by world  $\infty$ record holder David <u>Norce Conce</u> Berkoff and other world class sprint backstroke specialists, met an abrupt halt at the Olympics when FINA (Federacion International Natacion de Amateur), the international governing body of aquatic sports, redefined backstroke rules for international swimming regulations.

In May, FINA reviewed the underwater backstroke start and there was sentiment that submarining was not backstroke swimming. In addition, there were medical considerations, according to U.S. Swimming President and FINA Technical Committee Secretary Carol Zaleski. Knowing that some athletes were planning to use the technique if they made the Olympics, FINA decided at that time that it would be unfair to make an interpretation or ruling so close to the Games.

The FINA Technical Swimming Committee and the FINA Bureau met in Seoul following the swimming competition and interpreted a portion of swimming rule SW6.2 so that it reads: . . . they shall swim upon their backs throughout the race "means that some part of the body shall break the surface of the water except that after the start and after each turn the swimmer may be totally submerged for a distance of up to 10 meters from the wall," according to Allen Harvey, former Honorary Secretary of FINA.

The technical committee of 12 and the FINA Bureau, an elected group of 17, which accepted and ratified this interpretation by majority opinion, changed the rule, Harvey said. "When a meeting was held, a very large majority of the swimming federations involved considered the short-term aberration that took place when swimmers ducked underwater and swam with foot action only, totally submerged, that was not swimming backstroke. And by the large majority opinion, we determined that a rule must be so defined that people wouldn't do the sub-



marine story."

Safety reasons also entered the picture, Harvey said.

"Now the opinions contained the views, one, that this had an element of danger because going back 25 or maybe 30 years to when breaststrokers did this, it was found that those who had not done it for an extended period of time and who were not in the world's greatest condition were tempted to go beyond their safe range. Before the fellow came up from underwater, he quietly passed out, and since there was nobody in attendance, he sank to the bottom and stayed there."

The medical aspect was the greater concern in most of the committee's viewpoint, according to Zaleski. "They felt it wasn't a problem with the Olympic level athlete, however, there were major problems if large numbers of young people were taught to do hypoxic breathing and held their breath underwater."

"The other (part of the opinion) is, this underwater job displays a backstroke that was not envisaged when the backstroke was authorized and described in the fashion that it is in the rules," Harvey said. "And that from a spectator point of view, the backstroke race becomes a boring period of time when some young persons go underwater and disappear and after a length of time you have them emerge again and the time is established, but there's no physical race taking place."

After being read the FINA majority opinion, Berkoff responded, "That's the most stupid, asinine train of thought I've heard in a long, long time. I think they've just buried themselves.

"Personally, I think if I hadn't gotten the silver and I hadn't broken the world record, and if Polianski hadn't broken the record (beforehand) and Daichi Suzuki hadn't gotten the gold and we were all in the back of the pack in the final, that no one would be judged based on the underwater start and there wouldn't be any rule change. But because we



had a lot of success with it and because it's something new, FINA thinks it's their duty to change it so there isn't something new. I don't know what kinds of minds work to think that way. It's a shame that FINA feels something new is something wrong.

"When they wrote the rules years ago about backstroke, (the rules read) that you have to stay on your back, and that's backstroke," Berkoff continued. "And then all of a sudden something new comes along that they didn't think of, and they have to change it so it fits their little idea of what they think backstroke should be. It's obvious that if anybody else thinks of anything new for other strokes, FINA is going to shut it down. I just think it's wrong.

"And their saying that because people can't see us when we're underwater, there is no physical race and, therefore, it's not exciting—that's just ridiculous. They're coming back to what I'm saying—that it's exciting to watch something that's different that's going on underwater, then (the swimmers) pop out and they see it. The crowd thinks that's exciting. It's FINA's idea that it's not exciting. I think it reflects that they have to change the rules just because they're so backwards. I think they're a joke.

"It's really behind the back. They

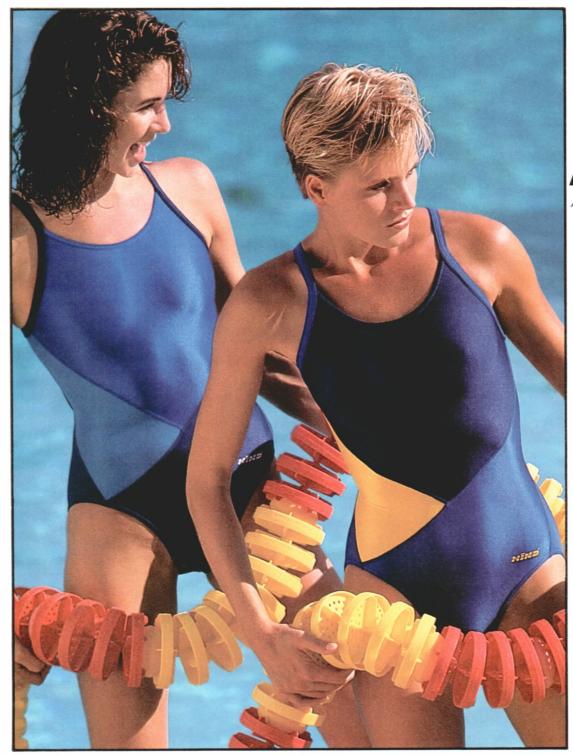
truWest, Inc., which recently changed its name from duWest, launched its 1989 line (above) at the ASCA clinic, held in September in San Francisco. made a rule change without telling me, without telling the swimmers who'll be affected, without telling my coach. That's really unfair, tacky behavior and I think they're wrong."

The new ruling is immediately in effect and will prevail from now forward. It might be reasonably predictive that when the next technical congress takes place (Perth, Australia, January 1991), that rule SW6.2 will be rewritten with sufficient definition to emphasize more clearly the present rules, Harvey said. Olympic gold medalists Troy Dalbey and Doug Gjertsen, and E. Glenn Mangum were arrested in Seoul and accused of stealing a carved marble lion's mask, valued at over \$800, from a hotel bar. The three were detained for questioning by Korean police for eight hours, after which the United States Olympic Committee confined them to the Athlete's Village.

If convicted of the theft, the three could have faced sentences of between one and 10 years, but after a hearing, they were released and sent home. A police investigation later revealed Gjertsen was innocent, reports say.

The XXIV Olympic Games proved to be the largest ever in numbers, with 13,626 participants from 160 countries at the final count. The Seoul Olympic Organizing Committee reported that 9,267 of that number were athletes, 7,150 men and 2,477 women. The United States fielded the largest contingent of 772, comprised of 612 athletes and 160 ►









BACK TO BASICS Quality Delivery Price

TJ'S EAST 236 S. Salem St. P.O. Box 1450 Dover, NJ 07801 (201) 989-8775 (800) 631-9684

TJ's WEST ★ New Location ★ 23011 Alcalde Ave.

Laguna Hills, CA 92653 (714) 380-7707 In CA (800) 421-6478 (800) 533-SWIM ★ New Location ★

# HIND COLOR SPLICE

Available in:

★ NEW COLOR Navy/Cobalt/Gold, ★ NEW COLOR Navy/Cobalt/Turquoise, Black/Cobalt/Scarlet, Black/Purple/Turquoise

### FEMALE \$23.95 • MALE \$12.50

**Please Compare These Prices** 

#### Newswave

officials, followed by the Soviet Union with a delegation of 655, combining 518 athletes and 137 officials.

Host Korea had the third-largest squad of 603, with 467 of them athletes; followed by 553 from the Republic of Germany; 501 from Canada; Great Britain, 488; France, 415; Italy, 411; Australia, 403; and China, 380.

Matt Biondi, winner of seven medals in Seoul (five gold, one silver, one bronze), threw out the first ball for the Oakland Athletic's pennant victory. Since the A's clinched the series that night, former Oakland star Reggie Jackson, scheduled to toss the first ball for the next game, had to sit back and wait for another chance.

TYR Sport Inc., has announced the appointment of Robert Kelley as vice president of finance and operations. He will be responsible for all financial areas, operations and internal administration. Kelley joins TYR after a 4-year association with Arena USA, Inc., where he held the post of chief financial officer.

The U.S. Mint has reported that sales of the 1988 U.S. Olympic commemorative coins have generated more than \$17.8 million for the USOC.

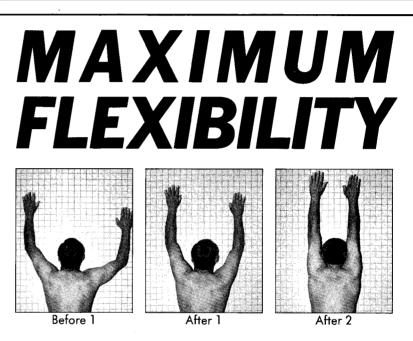
As of Sept. 14, congressionally mandated surcharges—\$35 for each \$5 gold coin, and \$7 for each \$1 silver coin, included in the purchase price of the coins—generated \$17,826,067 in contributions to the USOC. In late July the USOC announced plans to earmark \$25 million from coin revenues for direct athlete support, including scholarships, job programs and cash support.

The 1988 U.S. Olympic coins are available at participating financial institutions, coin dealers and retail stores, including K Mart, Sears and Montgomery Ward. Information on coin purchasing may be obtained by calling toll-free: 1-800-922-4400.

Entrees By Mail, a Fairfield, Ct.based company that works closely with American Frozen Foods, provided the 44-member U.S. Olympic swimming team with high-energy, nutritional snacks throughout their six-week training camp prior to the Olympics.

Ross Wales of Cincinnati, Ohio, was named Honorary Secretary of FINA at the FINA Congress meeting in Seoul. Wales succeeds Canadian Allen Harvey in the position. Wales was also voted onto the FINA Bureau, becoming the only U.S. representative on that body. Outgoing FINA president Robert Helmick of the USA will continue to serve without vote in the FINA Bureau.

Algeria's Mustapha Larfoui succeeded Helmick as FINA president, and will serve a four-year term in that office. Helmick is also currently serving as president of the USOC.



By releasing micro-fibers in the connective tissue that bind muscles, Micro-Fiber Reduction (MFR) can provide additional flexibility far beyond what stretching alone can do. MFR has been used successfully by age-group, Masters, National and International swimmers. Improving your flexibility with MFR can help improve your times four ways:

- **Reduce Injuries**—increased flexibility reduces strain on joints
- Improve Technique—maximum flexibility helps starts, turns, streamline and stroke technique
- Improve Breathing—increased chest flexibility makes breathing easier
- Increase Training Workload reduced strain means greater tolerance

Find out what MFR can do for you. For information or appointment call:

(415) 456-1100 USA (800) 227-6629 California Somax Sports, 711 D Street, San Rafael, CA 94901 Demonstration Videocassette Available

#### Rings Presented to Record Setters

United States Swimming honored world record holders in a presentation following the Olympic trials Aug. 8-13, in Austin, Texas. A 10k gold ring was presented to all swimmers who now hold or used to hold a world record.

Because this was a first-time event, a cut-off date was set as Aug. 1, 1987. Any swimmer who held a world record at this time, or after August 1987, received a ring. In all, 13 rings were awarded.

The following were awarded world record holder rings:

12/87 3/88 3/87	400 free, 4:04.45 800 free, 8:17.12 1500 free, 15:52.10
3/88	50 free, 22.23
8/85	400 FR, 3:17.08
8/85	400 MR, 3:38.28
8/81 8/81	100 fly, 57.94 200 fly, 2:05.96
6/86	200 back, 2:08.60
6/86	100 fly, 52.84
6/86	100 free, 48.74
8/83	100 back, 55.19
8/87	400 IM, 4:16.12
7/84	100 breast, 1:01.65
	3/88 3/87 3/88 8/85 8/85 8/85 8/85 8/81 8/81 6/86 6/86 6/86 8/83 8/87

#### Biondi, Evans Spark USA Team

Janet Evans took her customary spot on the blocks of lane four for the 1988 Olympic Games final of the Direct all questions to: U.S. Swimming National Headquarters 1750 E. Boulder St. Colorado Springs, CO 80909 (719) 578-4578

United States Swimming, Inc., is now, as it always has been, concerned for the safety of all its members. It will continue to disseminate such information concerning swimming safety as comes to its attention. However, United States Swimming cannot and does not accept responsibility for the content of any such information or material. All opinions and conclusions stated in any such material are solely that of the author(s) and not necessarily that of United States Swimming.

400 meter individual medley and waited for the electronic beep to signal the start of the race.

A scant four minutes, 37.76 seconds later, an American record time, Evans had her first, and the United States' first, gold medal of the 1988 Olympics. It marked the first time since 1972 that an American woman had beaten an East German swimmer in an individual Olympic Games swimming race and it was the second fastest time in history.

Evans' one-woman juggernaut continued three nights later in the 400 free, a race that also featured East Germany's Heike Friedrich, the 200 free world record holder and who had been undefeated in competition since 1983.

It was the race of the meet. At the final touch, Evans had a world record of 4:03.85 and Friedrich, who swum a personal best 4:05.94, was left gasping for air and staring at the scoreboard in disbelief.

Evans won her third gold medal of the meet two nights later in the 800 free over Astrid Strauss of East Germany and then spent Sunday shopping at Seoul's famous Itaewon Market.

Over on the men's side of the meet, Matt Biondi was set to try for a record-tying seven Olympic medals. Only Mark Spitz had won that many medals in one Olympics (1972), and all of his came wrapped in gold.

In his first race, the 200 free, Biondi grabbed an early lead and held it for 150 meters. Over the final length of the pool, however, Duncan Armstrong of Australia streaked by on the right to set a world record of 1:47.25, and Anders Holmertz of Sweden sneaked by on the left to claim the silver. Biondi took the bronze in his weakest event.

Two days later in the 100 butterfly Biondi was again upset, this time by Surinam's Anthony Nesty. Biondi held the lead the entire race, but was caught between strokes at the finish of the race. He made a splitsecond decision to kick into the touch rather than take another full stroke and touched in 53.01. Over in lane two Nesty was able to finish perfectly in his stroke cycle and hit the wall in a time of 53.00.

Later that same afternoon Biondi had his last 200 meters of freestyle to swim and it was the all-important anchor leg of the men's 800 free relay. West Germany held the world record and wanted revenge for the 1984 U.S. team's upset victory in this race. East Germany had won the 1986 World Championship gold medal in this race and was looking for international respect for its men's program. The European press thought the U.S. would be lucky to take home a bronze in this race.

Biondi blazed 1:46.44 on the anchor leg (following Troy Dalbey, Matt Cetlinski and Doug Gjertsen), the fastest 200 meter freestyle leg in history and the U.S. men had their first gold medal of the Games in a world record time of 7:12.51. East Germany was second in 7:13.68 and West Germany had the bronze in 7:14.35.

Biondi wasn't through by any means. He won the 100 free in 48.63, leading the first 1-2 USA finish of the meet as Chris Jacobs touched in

The opinions expressed on this page are those of United States Swimming, Inc., and do not necessarily reflect the views of *Swimming World Magazine*.





Olympic co-captain Jill Sterkel

49.08, and won the 50 free in a world record 22.14, just ahead of teammate Tom Jager (22.36).

The Moraga, Calif., native also anchored the U.S. 400 free relay to a world record 3:16.53 and swam the butterfly leg as the U.S. men set a world record in the 400 medley relay (3:36.93).

The other medals won by men on the U.S. swim team were silver. Jacobs and Jager were silver behind Biondi, while David Wharton was second behind Hungary's Tamas Darnyi in the 400 individual medley in a time of 4:17.36. Darnyi touched in a world record 4:14.75.

David Berkoff set a world record of 54.51 in the 100 backstroke morning prelims, but had to settle for a silver medal that night after a poor start. Japan's Daichi Suzuki won the gold in 55.05.

Although no other American men took individual medals, several came within a whisker of bronze medals. Matt Cetlinski and Mike Barrowman were fourth in the 400 free and 200 breast, respectively.

Melvin Stewart was fifth in the 200 fly, Jay Mortenson took sixth in the 100 fly, Rich Schroeder finished sixth in the 100 breast while Troy Dalbey and Dan Veatch were both seventh-place finishers in the 200 free and 200 back.

Wharton suffered a major disappointment when he qualified ninth in the 200 IM and did not make the championship final in that race. He won the consolation race, while teammate Bill Stapleton was 16th.

Two other American men won their consolation finals as Jeff Kostoff took the 400 IM and Mark Dean the 200 fly B final. Steve Bigelow was 10th in the 200 back B final, Daniel Watters was 15th in the 100 breast, Mortenson was 11th in the 100 back and Dan Jorgensen was 14th in the 400 free.

Kirk Stackle and Lars Jorgensen missed making their finals in the 200 breast and 1500 free.

Jill Sterkel and Mary T. Meagher won bronze medals in the 50 free and 200 fly for the only other U.S. women to medal in the Olympic competition (besides Evans). Sterkel, who won a gold medal in the 1976 Olympic Games in the 400 free relay, tied for third in the 50 free and established a women's Olympic record for most years between medals (12).

Earlier, Sterkel became the first woman from any country to make four Olympic swimming teams, and became the first American to actually swim in three Olympics. Meagher, who became the fourth woman to make three U.S. Olympic swimming teams, also had a seventh place in the 100 fly.

Other top eight finishes by American women included fourth place finishes by Mary Wayte in the 200 free, Tami Bruce in the 400 free, Betsy Mitchll in the 100 back and Beth Barr in the 200 back.

Fifth-place finishes were turned



Olympic co-captain Tom Jager

in by Janel Jorgensen in the 100 fly, Trina Radke in the 200 fly, Leigh Ann Fetter in the 50 free, Barr in the 100 back and Bruce in the 800 free.

Andrea Hayes turned in a sixth place in the 200 back as did Mitzi Kremer in the 200 free and Tracey McFarlane in the 100 breast. Dara Torres was seventh in the 100 free and Whitney Hegepeth came in eighth in the 200 IM.

In B final action, Erika Hansen took 11th in the 400 IM, Kremer was 12th in the 100 free, Susan Johnson was 13th in the 100 breast and threetime Olympian Susan Rapp was 13th in the 200 breast.

McFarlane was 14th in the 200 breast and Wayte became the only American woman not to swim in either the A or B individual finals in the Games. She was disqualified for an illegal breaststroke kick in the 200 IM.

The opinions expressed on this page are those of United States Swimming, Inc., and do not necessarily reflect the views of *Swimming World Magazine*.

Highest Quality. Lowest Prices. Best Delivery.

We contacted five major swim dealers and took the average team price for suit sizes 30 and over. The results were as follows:

	Speedo	Arena	Tyr	Hind
Female Lycra Print Suits	34.43	34.02	31.11	28.13
Male Lycra Print Suits	17.39	17.16	15.47	14.14

Aardvark Swim & Sport Chantilly, VA 703/378-1020

All American Swim Florence, AL 800/552-SWIM 800/239-6066 AL

Aquatic World Erlanger, KY 800/354-9789 606/341-6692

Atlanta Swim Center Tucker, GA 404/496-1030

B & B Swimwear St. Louis, MO 314/821-7946

Bland's Swim Shop Houston, TX 713/723-0910

California Swim Shop Carmichael, CA 916/971-9836

Candace's Swim Shop Jackson, MS 601/977-0444

Competitive Aquatic Lakewood, CA 213/633-3333

Dales Coronado, CA 619/435-1757

Different Strokes Livonia, MI 313/477-0521 Disco Sports Richmond, VA 804/740-4242 804/745-3100

Elsmore Aquatic Richfield, MN 800/642-7618 MN 612/866-9360

Gilrod's Sports Morgantown, WV 304/599-6324

Great Sport Lebanon, PA 717/274-8484

Horizon Sports Mission, KS 913/236-9995

J.D. Pence Aquatics Forest Grove, OR 800/547-2520 800/452-3121 OR

Kast-A-Way Swimwear Cincinnati, OH Indianapolis, IN 800/543-2763 800/582-1021 OH 800/345-5682 IN

Kiefer & Associates Northfield, IL 312/446-8866

N. Virginia Sport Center Vienna, VA 703/938-8820

P & G Swim Shop Cranford, NJ 201/276-8260 800/782-SWIM Recognition Plus Charlotte, NC 704/375-9098

Smith Brothers San Marcos, CA 714/744-0840

Smyrna Sports Beach Side, FL 904/427-0482

Sport Fair Arlington, VA 703/524-9500

Sports Corner Englewood, CO 303/790-1297

Starting Block Sarasota, FL 800/FLA-SWIM

Suburban Sports Willoughby, OH 800/634-3981 216/943-0005

Swat Swim Shop Wilmington, DE 302/478-0992

Swim & Sport Newport News, VA 804/874-SWIM

Swim 'N Gear Pensacola, FL 904/474-8932 800/255-0284 GEAR

Swim Shops of the SW Spring, TX 800/231-0333 713/376-4460 Swim Sports Oskaloosa, IA 515/673-6779

Swim Zone St. Petersburg, FL 813/822-SWIM

Swimmers Complete El Paso, TX 915/595-0777

Swimmers Edge Woodridge, IL 800/441-7946 312/985-2334

Swimming Unlimited Newman, CA 209/862-1000

Swimskin Portland, ME 800/341-0246 207/774-4648

Swimwear Unlimited Omaha, NE 402/339-0781

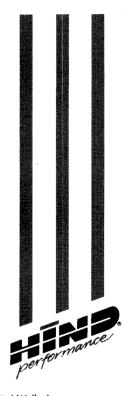
Sylvia's Swimwear Bellevue, WA 206/747-1131

T J.'s Swim & Trophy Dover, NJ 800/631-9684 201/989-8775 Anaheim, CA 800/533-SWIM 800/421-6478 CA

Virginia Swim Shop Glen Allen, VA 804/743-9574 Walter's Swim Supply Mequon, WI 414/242-6596 800/558-0428

Wink's Swim Country Concord, CA 415/798-0470

**World Wide Aquatics** Cincinnati, OH 800/543-4459 800/582-2648 OH



Hind-Wells, Inc. P.O. Box 12609 San Luis Obispo, CA 93406

For more information call 805/544-8555 CA 800/345-8790 US 800/235-4150

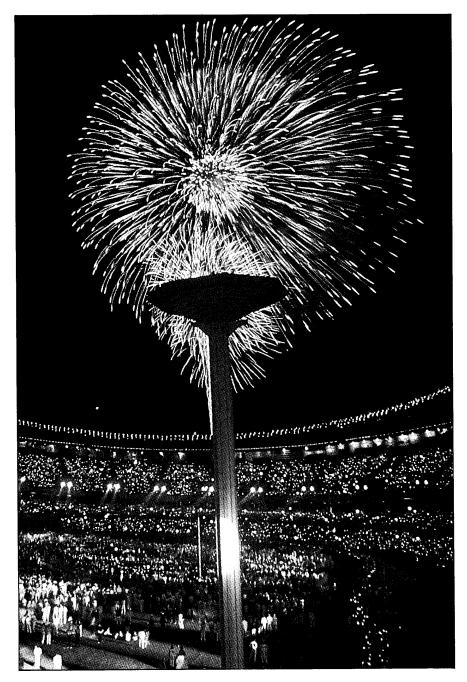


SEOUL-The Republic of Korea (better known as South Korea) is located on a small peninsula sticking out from China and directly west of Japan. When its capital of Seoul, a city of 10 million people, was awarded the XXIV Olympiad by the International Olympic Committee in 1981, my first reaction, and I'm sure of many others, was negative. Our principal impression of the Asian country came from the longrunning television series M.A.S.H. which showed a desolate land surrounding the mobile army surgical hospital. South Korea appeared on the news only when a military incident with North Korea, the Communist nation which attacked it 37 years ago, brought the threat of another conflict.

It's because of that image of their country that the Korean leaders bid for the Games and spent \$3.1 billion to hold a first-class extravaganza. They wanted to show they've not only recovered from the devastation of the 1950s war but prospered to become a modern, industralized nation. The city was unique among Olympic hosts in that it had something to prove, motivating the Seoul Olympic Organizing Committee to build almost all new athletic stadiums, spruce up the city with beautiful decorations all over and plan exhilarating Opening and Closing Ceremonies. The Olympics represented an international recognition of a coming-of-age of the young republic whose Games' motto was "Harmony and Progress." The goal: to provide an opportunity for all the people of the world to make meaningful progress toward global harmony and lasting prosperity, peace and happiness.

News reports on Seoul leading up to the Olympics centered on student rioting in its colleges and anticipation of terrorism or another sneak attack by North Korea, hurting attendance at the Games significantly. But the fears went unrealized. Supported by a 120,000-man security force, the Koreans held the Olympics without any outbreaks of violence, save their own attack on a boxing referee.

While the presence of the police and army was quite evident, security didn't get in the way of the competi-



tion. Instead, it gave everyone a better feeling of being safe. And the interminable security checks of bags at stadium entrances were performed in a polite and friendly manner.

Unlike at the Los Angeles Games, tickets were reasonably priced for the events. For example, swimming cost from \$7 to \$20 for finals, diving \$7 to \$14, synchro \$4 to \$14 and water polo \$3 to \$4. By comparison, the 1984 prices were \$40 to \$90 for swimming, \$20 to \$75 for diving, \$10 to \$35 for synchro and \$15 to \$30 for water polo.

The spectator seating also was a

big improvement. While Los Angeles offered only temporary bleachers with backless benches for aquatic sports, Seoul had individual plastic seats with backs at its two pools which were both indoors. The Olympic Swimming Pool, where all swimming and synchronized swimming events and the final four days of water polo were held, seated 10,000 and included a 50 x 25 pool with a movable bottom from 2 to 3 meters deep and a diving well. The Chamsil Pool, site of all the diving and the first three days of water polo, had 4,500 seats and the same configura-

tion of pools except the big one was two meters deep. The Olympic pool was one of six sports stadiums located in Olympic Park, next to the athletes and press village and a resplendent area of grass, trees and decorative displays of traditional and modern beauty. A 2<sup>1</sup>/2-mile drive brought you to the Chamsil pool, part of the 135-acre Seoul Sports Complex of five stadiums built along the southern side of the Hangang River  $8\frac{1}{2}$  miles from downtown. The piece de resistance of these exquisite facilities, all built since 1981 especially for the Games, was the \$73 million Olympic Stadium with ultra-modern interior facilities, a mammoth electronic scoreboard and state-of-the-art equipment for timing, broadcasting and lighting.

In the 70,000-seat stadium, the Koreans presented opening and closing ceremonies overwhelming in their magnitude with spectacular special effects and an inspiring tribute to the country's culture. Although they're not among the sports powers, they rank at the top for putting on an entertaining and engrossing show. The natives took so much pride in the ceremonies that capacity crowds attended several dress rehearsals.

The ingenious idea to hold the Games mainly during early fall (Sept. 17-Oct. 2) and avoid the monsoon of summer resulted in a perfect day for the Opening Ceremony with a clear, blue sky. There were many highlights to the 3-hour, 20-minute opening such as:

• The boat festival, featuring 160 windsurfers on the Han River, to

Country	Women	Swimming Men	Combined	Diving	Synchro	Polo	Total
East Germany	10-5-7 (22)	1-3-2 (6)	11-8-9 (28)				11-8-9 (28
United States	3-1-3 (7)	5-5-1 (11)	8-6-4 (18)	2-1-2 (5)	0-2-0 (2)	0-1-0 (1)	10-10-6 (26
Soviet Union	0-1-0 (1)	2-1-5 (8)	2-2-5 (9)	2-1-2 (5)	0-2-0 (2)	0-0-1 (1)	2-2-6 (10
China	0-3-1 (4)	0-0-0 (0)	0-3-1 (4)	2-3-1 (6)		0-0-1 (1)	2-2-0 (10
Hungary	1-1-0 (2)	3-1-0 (4)	4-2-0 (6)	2-3-1 (0)			4-2-0 (6
Canada	0-0-1 (1)	0-1-0 (1)	0-1-1 (2)		2-0-0 (2)		2-1-1 (4
Japan	0-0-0 (0)	1-0-0 (1)	1-0-0 (1)		0-0-2 (2)		1-0-2 (3
Great Britain	0-0-0 (1)	1-1-1 (3)	1-1-1 (3)		· · · · · · · · · · · · · · · · · · ·		1-1-1 (3
Australia	0-0-1 (1)	1-1-0 (2)	1-1-1 (3)				1-1-1 (3
Bulgaria	1-1-1 (3)	0-0-0 (0)	1-1-1 (3)				1-1-1 (3
West Germany	0-0-0 (0)	1-1-1 (3)	1-1-1 (3)				1-1-1 (3
Romania	0-1-1 (2)	0-0-0 (0)	0-1-1 (2)				0-1-1 (2
France	0-0-1 (1)	0-0-1 (1)	0-0-2 (2)				0-0-2 (2
New Zealand	0-0-0 (0)	0-0-2 (2)	0-0-2 (2)				0-0-2 (2
Surinam	0-0-0 (0)	1-0-0 (1)	1-0-0 (1)				1-0-0 (1
Yugoslavia						1-0-0 (1)	1-0-0 (1
Sweden	0-0-0 (0)	0-1-0 (1)	0-1-0 (1)				0-1-0 (1
Denmark	0-0-0 (0)	0-1-0 (1)	0-1-0 (1)				0-1-0 (1
Costa Rica	0-1-0 (1)	0-0-0 (0)	0-1-0 (1)				0-1-0 (1
Holland	0-1-0 (1)	0-0-0 (1)	0-1-0 (1)				0-1-0 (1
Italy	0-0-0 (0)	0-0-1 (1)	0-0-1 (1)				0-0-1 (1)
Spain	0-0-0 (0)	0-0-1 (1)	0-0-1 (1)				0-0-1 (1
Poland	0-0-0 (0)	0-0-1 (1)	0-0-1 (1)				0-0-1 (1
Mexico				0-0-1 (1)			0-0-1 (1)

begin the ceremony, allowing more people to catch a glimpse of the historical day's activity than just the limited capacity of the stadium;

• Hundreds of drums, including a giant dragon drum, gave out a resounding beat, aided by an incredible sound system for an outdoor stadium;

• A musical welcome upon the entrance of the athletes given by the spectators who were all given harmonic pitchpipes at the turnstiles;

• A card section in the center of the far stands that remarkably displayed the flag of each nation as they appeared marching on the track;

• After Sohn Kee Chung, 76, the first Korean gold medalist with a marathon victory in 1936 (although he represented Japan, which was Korea's colonial master from 1910-45), carried the Olympic torch into the stadium, the flame eventually went to three runners (representing athletics, scholastics and the arts) who were dramatically lifted on a platform to the stadium cauldron, which sat on a tower 70 feet above the ground. Then they lit the Olympic torch;

• As the flame was lit five jets overhead left a trail of smoke colored to resemble a rainbow and formed in the shape of the five Olympic rings;

• With masked performers on the field, suddenly flares came from the curbs of the track and enormous balloon-type masks pop up from the stadium roof;

• The largest-ever demonstration of taekwondo, South Korea's na-

#### Flyers, Crawlers, Breaststrokers — Lend Us Your Ears! and hear how LACTATE can optimize your training program.

A single drop of blood from earlobe or finger is all that is needed to measure lactate and thus set your ideal training pace and to monitor progress. Lactate measurement enables the aerobic energy system to be trained optimally and overtraining to be avoided.

The ANALOX GM7 LACTATE ANALYZER gives you a hard copy result in 20 seconds on just 7 microlitres of blood and the P-GM7 is a fully portable battery operated version for safe and convenient poolside testing. All items you need, such as capillary collection tubes, record cards, blood lancets, sterile swabs and disposal containers are available.

Send for explanatory leaflet specially for swimmers.....

P.K.Morgan Instruments Inc., Two Dundee Park, Level One, Andover, MA 01810, USA. Telephone: (508) 470-0473





tional sport, with youngsters, spanning the entire field, smashing boards simultaneously with marvelous precision;

• A seven-year-old, born on Sept. 30, 1981—the day it was announced the 1988 Olympics would be held in Seoul—rolled a silver hoop across the field in silence to symbolize hope and the future.

Over the next 16 days, nearly 10,000 sportsmen from a record 160 countries participated in the Games. That's 20 more countries than attended the Los Angeles Olympics. Best of all, East met West for the first time since 1976. There was no major boycott like those that tarnished the last three Games (black Africa didn't participate in 1976). The only IOC members which didn't attend were North Korea, which wanted to co-host the Games; Cuba, Ethiopia and Madagascar, boycotters in sympathy with North Korea; and Albania, Nicaragua and the Sevchelles for other reasons.

Swimming, with its opportunity to compete in multiple events, usual-

ly produces the leading medalist at each Games. This year, though, featured more than one superstar.

The German Democratic Republic's Kristin Otto, a 22-year-old from Leipzig, led all Olympians at this year's Games by capturing six

The people of Seoul (opposite page) made the XXIV Olympic Games memorable by sharing their smiles, warmth and culture.

gold medals, the all-time record for a woman and one short of the overall mark set by Mark Spitz of the United States in 1972. This was the third successive year Otto has been the leading performer at her country's major international competition. She earned four golds and two silvers at the 1986 World Championships and five golds at last year's European Championships.

Matt Biondi of the USA became the leading overall medalist for this Olympics by placing in the top three in seven events, receiving five gold, a silver and a bronze. Biondi, 22, from Moraga, Calif., missed by a hundredth of a second of getting six gold when he finished second in the 100 meter butterfly. While Otto didn't contribute any world records, Biondi was part of four—one in the 50 freestyle and three in relays.

America's Janet Evans won all three of her events for the most U.S. individual wins and just one less than Otto. The 17-year-old distance star from Placentia, Calif., was the only U.S. swimmer to set two national records in individual events, including a world mark in the 400 freestyle.

Diver Greg Louganis was another American with a perfect record in the Games. Louganis, 28, from Malibu, Calif., won both men's diving events—the first ever to accomplish that feat twice in an Olym-



pics—and received the Maxwell House Olympic Spirit Award, honoring the Olympian who embodies the Games' ideals.

There were several other swimming stars in the most competitive Olympic swim meet ever. The Games featured champions from 10 countries and medalists from 22.

Hungary's Tamas Darnyi made the most of his time. He swam twice and set world records in each, low-

SWIMMING TECHNIQUE

ering his marks in the men's 200 and 400 individual medleys. His nation of just 10 million wound up with 4 gold and 2 silver medals in swimming, a sensational performance by a team of 16 coached by Tamas Szechy, Laszlo Kiss and Tamas Gyertyanffy.

The biggest upset occurred in the men's 200 freestyle where the spotlight was on a showdown between Biondi and world record holder

WIMMING

#### For All Levels of Swimming

A quarterly publication desi for coaches and swimmers interested in up-to-the-minu trends in stroke mechanics swimming sports medicine getting the most from their spent in the water. You'll w be sure that you don't miss single information-packed i this lively and helpful public	and time ant to a ssue of
SWIM Magazine Swimming is serious business whether you are trying to lose a few pounds improve your level of fitnes or training for the national championships, you need to know how to get the most out of your training time. SWIM Magazine is here for you, the adult swimmer	s, o
Mail to: Swimming World, P.O. Box 45	497, Los Angeles, CA 90045
Swimming Technique (4 issues) 1 year \$10.00 2 years \$20.00 3 years \$30.00 Renewal subscription New subscription	SWIM Magazine (6 issues) 1 year \$12.00 2 years \$22.00 3 years \$32.00 Payment enclosed Bill me
Name	
Address	
City/State/Zip	
□ VISA □ MasterCard	
Card No.	Exp. Date

Michael Gross of West Germany. However, Australia's Duncan Armstrong, ranked No. 46 on the 1988 world list, won in world-record time with Biondi settling for third and Gross finishing sixth.

A milder surprise came in the men's 100 butterfly. Anthony Nesty, ranked No. 11 this year, nipped Biondi at the wall to give Surinam, a small nation in the northeast corner of South America, its first Olympic medal ever.

The most heartwarming victory was Vladimir Salnikov's win in the men's 1500. The Soviet Union great, unbeaten in the event from 1977 through 1985 but an also-ran since, wasn't given much chance to win at age 28.

The most hearbreaking performer had to be the USA's David Berkoff, who set a world record in the 100 backstroke prelims only to be beaten by Daichi Suzuki of Japan in the final.

In all, it was quite a change from the last Olympic meeting of the swimming powers in 1976. Then, the USA took 12 of the 13 men's events and the GDR captured 11 of the 13 women's races. A difference that year was that each nation was still allowed three entries per event; since 1980, there's a limit of two per race.

Paced by Otto, the GDR women still dominated with 10 victories in 15 events. On the other hand, the U.S. men slumped to just 5 wins out of the 16 races, although remaining the deepest team with world-record victories in all three relays. They did retain leadership with their five golds followed by Hungary with three and the Soviet Union two. In total medals, the Americans had 11 in men's events with the Soviets next at 8.

Evans had the only victories among the U.S. women, who finished with three golds, a silver and three bronze. That's a far cry from 1984 when the Eastern Bloc boycott allowed them to win 12 golds and 7 silver. The American men took 9 gold and 6 silver in Los Angeles.

The reuniting of the swimming powers at an Olympics didn't produce an onslaught of world records. There were nine marks in the men's competition, the same as in Los

Add \$5.00 per year for all countries outside USA

Angeles, and two in the women's, compared to none at the 1984 Games.

In the other aquatic sports, the USA fared no better. Thanks to Louganis, it split the golds in diving with China. But the Americans lost the total medal count to the rising power from Asia, 6 to 5, falling from its 8-for-8 performance four years ago. In synchronized swimming, the U.S. women dropped from two gold medals in Los Angeles to two silvers. Water polo ended much the same way as in 1984 with the American men finishing second to Yugoslavia, only this time losing in overtime to the champions instead of tying the gold medalists in the final and being the victim of a tiebreaking procedure.

One small consolation for the U.S. water polo team: team captain Terry Schroeder carried the U.S. flag in the majestic closing ceremonies held Oct. 3.

An evening time slot for the Closing Ceremonies, which began at 7, gave the Koreans the opportunity to show off even more special effects.

The show began with the lingering reverberations of the Emille bell, expressing the Korean aesthetic of parting. First to appear were 750 costumed dancers, twirling ribbons from their hats.

With the entry of the athletes came mass confusion as the competitors released the tension built up from the pressure of the Games and joyfully raced all over the stadium floor behind their flag bearers. A band of Americans positioned themselves on the infield so that the letters USA could be seen from overhead.

Order was finally restored a halfhour later, permitting the hoisting of the flags of Greece, where the Games originated; host Korea; and Spain, which will be the site of the 1992 Olympics.

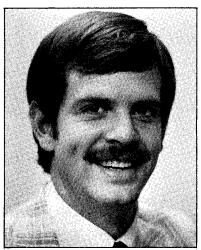
Next, a series of dances—magpie, fan and cymbal—on an "Ojak Bridge" pathway suddenly created in the midst of the athletes on the infield. Following the remarks by Park Seh-jik, president of the Seoul Olympic Organizing Committee, and International Olympic Committee President Juan Antonio Samaranch, the Olympic flag was turned over to Pasqual Maragall, mayor of Barcelona, the 1992 host city. To celebrate this exchange, Korean and Spanish troupes entertained with colorful dance performances.

The lowering of the Olympic flag and extinguishing of the flame set the stage for a spectacular farewell. With the lights dimmed and the audience waving lanterns covered with red and green fabric, smoke began filling the air from the floor of the stadium. Arising through the smoke, a giant foil balloon hovered in the sky, pinned by spotlights. It exploded to reveal Hodori, the mascot of Seoul, and Kobi, mascot of the 1992 Barcelona Games. The two balloon figures connected and disappeared into the autumn night.

As one who saw both ceremonies in person and later on a VCR tape with the endless interruptions for commercials, I can only say, you had to be there. —By Russ Ewald  $\Box$ 

#### How would you like to have private swimming lessons from a winner of four Olympic gold medals? *Well, now you can!*

Get your copy of the GETTIN' BETTER video with Olympic gold medalist and former world record holder John Naber. John brings you his successful championship techniques in an entertaining and motivating way.



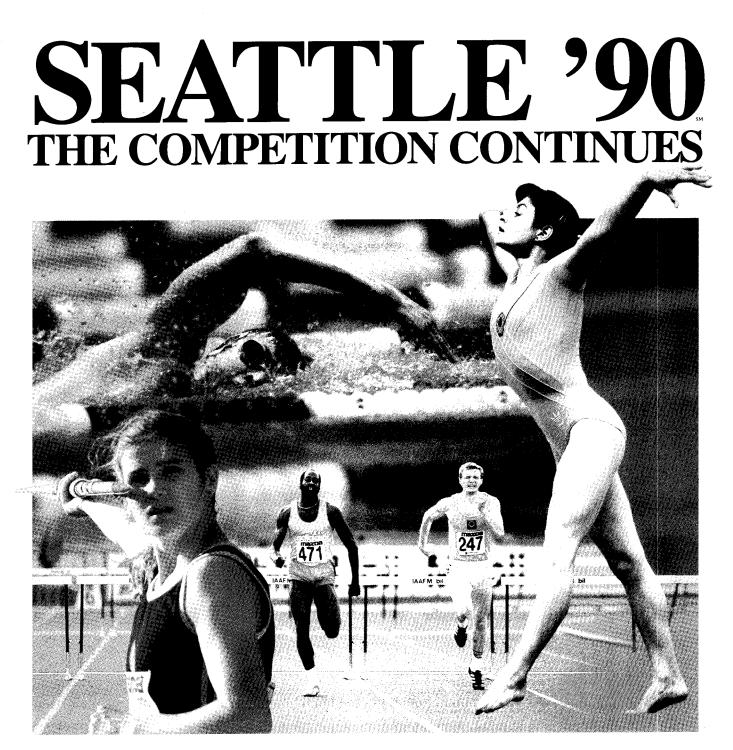
John Naber, Four-time Olympic Gold Medalist, 1976. Color commentator for swimming, NBC-TV, 1988 Olympics.

Vi	deo	conte	ent i	ncludes:
•	Stro	ke m	echa	anics

- Starts and turns
- Weight training
- Stretching
- Psychology
- Goal setting
- Motivation tips
  - and much more!

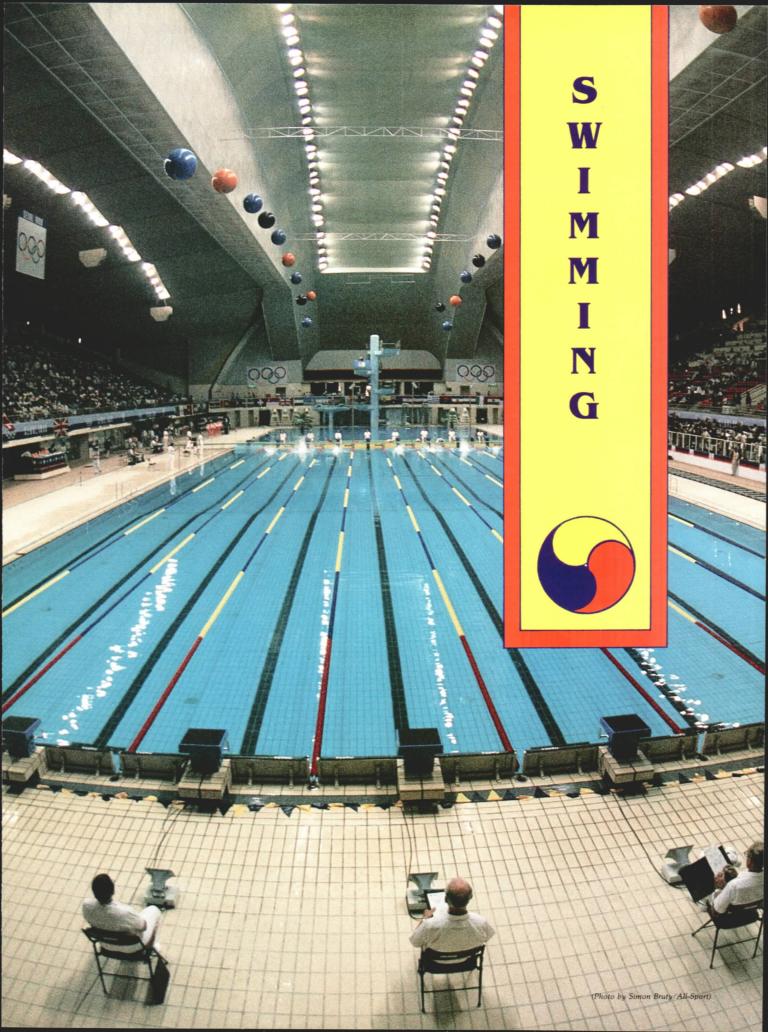
John Naber gives you 50 minutes of some of the most important lessons you may ever learn. Learn from him and you might well become a better swimmer and improve yourself out of the water as well.

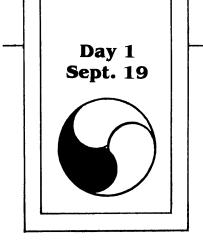
<b>-</b>
ON VIDEO
Please send me:
VHS Cassette(s) @ \$49.95 each
Beta   Cassette(s) @ \$49.95 each
Beta II Cassette(s) @ \$49.95 each
Residents of California please add applicable tax
Shipping and Handling \$4.00 per cassette ordered
Cassettes @ \$4.00 each
TOTAL AMOUNT ENCLOSED
(please allow up to six weeks for shipment)
Prices quoted good only within USA. Our foreign friends, please write us for video format and price information.



The Goodwill Games. Seattle 1990. The competition continues. Over 2500 athletes from more than 50 countries will compete in the next major international multi-sport athletic event. The Goodwill Games... launched as an extraordinary vision of international goodwill through athletic competition... unites the world's best athletes for 17 days of summer competition. The victors of Seoul. And the world's athletic elite. Going headto-head. No trials. No heats. Every event is a final. The Goodwill Games, July 20-August 5, 1990. The countdown to triumph has begun!







#### Women's 100 Free

Championship Finals—Sept. 19		
Kristin Otto, GDR	26.36	54.93
Yong Zhuang, CHN	26.84	55.47
Catherine Plewinski, FRA	26.59	55.49
Manuela Stellmach, GDR	27.00	55.52
Silvia Poll, CRC	26.78	55.90
Karin Brienesse, HOL	27.11	56.15
Dara Torres, USA	26.71	56.25
Conny van Bentum, HOL	27.15	56.54

We had to wait four years since the last Olympics. We had to wait 12 years since the last "true" Olympics where all the major swimming powers were on hand to compete. We even had to wait one more day for the start of the swimming finals since prelims of the first four events were conducted the day before finals to accommodate TV coverage.

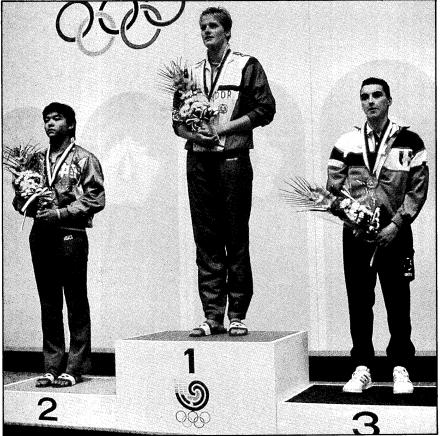
But finally, no more waiting.

At precisely 12:06 p.m. Korean time, the first swimming final of the XXIVth Olympiad in Seoul, South Korea, was underway. And 54.93 seconds later, the German Democratic Republic's Kristin Otto was the first to win gold.

Otto, the European champion, world champion and world record holder in this event, won as predicted, but still could not eclipse the eight-year-old Olympic record set by countrywoman Barbara Krause (54.79) in Moscow.

"The main point was to get the gold medal, not the Olympic record or world record," Otto said.

For runners-up Yong Zhuang of China (55.47) and Catherine Plewinski of France (55.49), the main point was just to medal. Both were surprise medal winners. Zhuang, 16, improved from a 59.60 two years ago to 56.22 last year (12th in the world) to 56.02 in May (ninth in the world) to 55.84 in prelims (third qualifier behind Plewinski, 55.53,



and Otto, 55.80) to her silver medal performance.

It was the first Olympic medal a Chinese swimmer has won. "This is a dream come true," she said. "I'm very happy about the silver medal, but I'm sorry I didn't get the gold because that's what I had in mind before the competition."

Her comments might be considered pretty bold for a newcomer on the world scene, but Otto knew she was in for a good race. "I knew about the Chinese girl," she said, "since the GDR had sent a coach to China to help train them."

Plewinski, 20, surprised everyone when she qualified first the day before. After all, her previous successes have been more in the 100 fly. She ranked 18th in the world a year ago with a 56.63, hardly a medalcontending performance.

But she improved upon her prelim time and held off the GDR's Manuela Stellmach for the bronze.

"I am extremely surprised to have won a medal and to have swum this fast," Plewinski said. "Before I arrived in Korea, I did not think that I had a chance to qualify for the A final in the 100 free."

As much a surprise as those who medaled were those who didn't medal—or who didn't qualify.

"I wasn't surprised by the swimmers in my race," Otto said, "but I was surprised by the U.S. and Romanian swimmers. I expected more from Dara Torres, but she appears not to be in good shape."

Torres, the American record holder and top-ranked swimmer coming into the meet at 55.30, couldn't match her personal best from last March at the U.S. nationals, which would have been fast enough for a silver medal. Ranked fourth a year ago at 55.72, Torres qualified seventh (56.37) and finished seventh (56.25)—times that were even slower than her 1986 best (56.23).

Mitzi Kremer, ranked third in the world coming into the meet (55.40) and the USA's top trials qualifier, swam a disappointing 56.97 in prelims to qualify 13th. She finished 12th overall the next day with a 56.83.

The Romanian girls, both ranked among the world's top 10 last year,

also failed to qualify. Luminita Dobrescu, 10th in 1987 (56.14) qualified 10th (56.67), while teammate Tamara Costache, third in 1987 (55.64), qualified 11th (56.79). —By Bob Ingram

#### Men's 100 Breast

Championship Finals—Sept. 19		
Adrian Moorhouse, GBR	29.42	1:02.04
Karoly Guttler, HUN	28.94	1:02.05
Dmitri Volkov, URS	28.12	1:02.20
Victor Davis, CAN	29.44	1:02.38
Tamas Debnar, HUN	29.56	1:02.50
Richard Schroeder, USA	28.97	1:02.55
Gianni Minervini, ITA	28.96	1:02.93
Christian Poswiat, GDR	29.31	1:03.43

Great Britain's Adrian Moorhouse had something to prove. And he had to wait four years to prove that he was, indeed, the world's best 100 breaststroker.

"This (win) avenges the defeat in 1984 in Los Angeles (where he finished fourth)," he said. "I have been working for four yers for this moment. I said that I wanted to prove to the world that I am the best, and now finally I have done that."

But it wasn't easy.

Lodged in sixth place at the turn (29.42) some 1.3 seconds off the pace, Moorhouse had to "bring it" the final 50.

"On the second lap about halfway back, I said to myself, 'Go for it,' " Moorhouse said. "I probably should not have waited to start pushing, but it worked. I really wasn't worried. I was sure that I could do it."

The 24-year-old especially came on strong the final 20 meters and won it on the touch by a hundredth of a second over Hungary's Karoly Guttler, 1:02.04 to 1:02.05.

Guttler, despite barely losing the gold medal, was, nevertheless, elated. "I am happy, happy, happy," he said. Ranked sixth in the world last year (1:02.70) and fourth at the European Championships, the 20year-old said he did not expect to win even the silver medal.

Moorhouse (above) won the 100 breast by 1-hundredth; Otto (opposite page, center) captured her first of six golds over Zhuang and Plewinski.



Dmitri Volkov, 22, of the Soviet Union, had the early lead at 50 meters (28.12), but had to settle for the bronze at 1:02.20. Yet Volkov seemed satisfied with his placing, considering his accident just two months before the Olympics.

"Two months ago, I cut my hand and broke it on a glass door," he said. "I lost a full month of training. If I had not had this accident, who knows what I might have achieved today."

But the grand achievement went to Moorhouse. And, if anything, Moorhouse proved he was the world's best not only with an Olympic gold medal but by his consistency since 1984.

He won the European Championships in 1985 and 1987. He also touched first at the World Championships in 1986, but was later disqualified. He was No. 1 in the world the last two years and came into the Olympics ranked No. 1 with his European record 1:01.78 from March at the U.S. nationals. He qualified first the day before (1:02.19) and claimed his longawaited prize the next day. "The last two nights, it was impossible for me to sleep," Moorhouse said. "It's been a long time (between prelims and finals, which were held on separate days). I just wanted to get it over with."

In the second of as many events, the American team was again disappointed. Top U.S. qualifier Richard Schroeder, who was ranked second before the meet with his 1:01.96 at trials, qualified seventh in a pedestrian 1:03.05 and improved to a sixth-place finish at 1:02.55. Daniel Watters qualified and finished 15th with times of 1:04.04 and 1:04.17, respectively. Watters was ranked 10th in the world coming into the meet with a 1:02.76 from trials.

-By Bob Ingram

#### Women's 400 IM

Championship Finais—Sept. 19						
1:04.55	2:12.79	3:34.26	4:37.76			
1:04.75	2:13.83	3:35.97	4:39.46			
1:04.53	2:16.01	3:36.78	4:39.76			
1:04.52	2:17.84	3:35.85	4:40.44			
1:03.43	2:17.81	3:37.46	4:41.64			
1:06.21	2:18.02	3:39.30	4:45.86			
1:04.87	2:18.25	3:40.55	4:47.05			
1:05.63	2:18.76	3:42.63	4:47.51	►		
	1:04.55 1:04.75 1:04.53 1:04.52 1:03.43 1:06.21 1:04.87	1:04.552:12.791:04.752:13.831:04.532:16.011:04.522:17.841:03.432:17.811:06.212:18.021:04.872:18.25	1:04.55         2:12.79         3:34.26           1:04.75         2:13.83         3:35.97           1:04.53         2:16.01         3:36.78           1:04.52         2:17.84         3:35.85           1:03.43         2:17.81         3:37.46           1:06.21         2:18.02         3:39.30	$\begin{array}{cccccccccccccccccccccccccccccccccccc$		

Janet Evans to the rescue. The U.S. swimming team went medalless in the opening two events of the first day, putting additional pressure on the 17-year-old high school senior who had enough of it going in as the favorite in the 400 individual medley after her American record 4:38.58 at the trials.

In the prelims held the day prior to the finals, Evans qualified only third (4:43.04) behind Romania's Noemi Lung (4:41.95) and Kathleen Nord (4:42.92) of the German Democratic Republic. But the plan of Evans and her coach, Bud McAllister, was to hold back somewhat to be fresh for the final.

Lung provided a mystery element to the race. The 20-year-old Romanian led the world last year with a 4:39.01. This winter, though, she missed a lot of training because of a sinus problem and didn't race until May, she said. Just two weeks before the Olympics, she did swim a 4:40.8 at her nationals to move up to No. 2 in the 1988 world rankings.

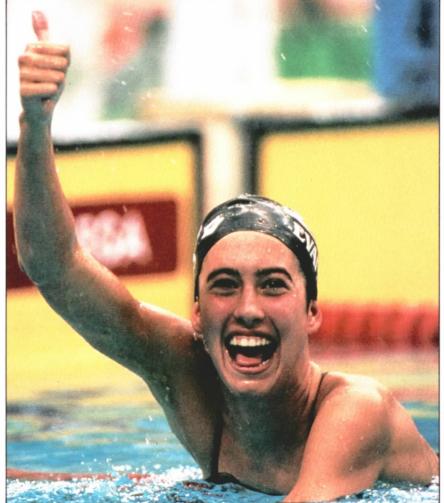
After one false start, the final began with Nord, a world-class flyer, charging off the blocks to lead by more than a second at the 100 (1:03.43). Evans stood fourth (1:04.55), a half-second off her American record pace.

As Nord faded out of contention on the backstroke, Evans streaked to the front with a sizzling 1:08.24 split that put her a body length in front and left Lung as her only challenger.

The petite American fattened her margin on the breaststroke to a body and a half, going 1:21.47.

Although Lung is a faster freestyler with a best of 2:00.43 in the 200, she couldn't close at all the final 100. Evans sped home in 1:03.50 to lower her U.S. record to 4:37.76 and capture not only the first swimming gold medal for the United States, but the initial gold in any sport for America. She missed a fourth world record by 1.66 seconds, settling for the third fastest performance and becoming the second-ranked performer of all time with the quickest time in six years.

When asked if she felt disappointment in not getting the world mark, she exclaimed, "I don't care about the time. I just won an Olympic



Games gold medal. I'm happy about that. There are no words to describe it. I achieved the goal I wanted to do."

The strategy of taking it out easy on the fly and going hard on the back and breast worked to perfection.

"In Austin (at the trials), I told her to sprint the fly," said McAllister. "We went in knowing she'd probably make the team and tried to experiment. I thought it would be closer here. Her back did it for her. She always split 1:09s in the past."

It was on the second half of the back that Evans knew she could win the race.

Lung, who held off the GDR's Daniela Hunger for the silver (4:39.46 to 4:39.76), came to the Games with lowered expectations because of her illness. "I came here with a handicap. I feel good because I swam for a medal, and I have a medal." —By Russ Ewald

#### Men's 200 Free

Championship Finals-	Sept. 19			
D. Armstrong, AUS	25.46	53.02	1:20.05	1:47.25w
Anders Holmertz, SWE	25.16	52.21	1:20.03	1:47.89
Matt Biondi, USA	24.98	52.25	1:19.62	1:47.99
Artur Wojdat, POL	25.66	53.58	1:20.80	1:48.40
Michael Gross, FRG	25.65	53.36	1:20.88	1:48.59
Steffen Zesner, GDR	25.59	53.37	1:21.33	1:48.77
Troy Dalbey, USA	25.56	53.50	1:20.99	1:48.88
Thomas Fahrner, FRG	25.75	53.71	1:21.89	1:49.19

"That's right, mate!" laughed Australian coach Laurie Lawrence. "Lucky lane 6!"

Lawrence had just been reminded by an associate that Australian Jon Sieben had been swimming in lane 6 at the Los Angeles Olympics in 1984, when he pulled an upset victory over Michael Gross of West Germany in the 200 butterfly, setting a world record in the process. The parallels were a bit uncanny.

An Australian male had just upset the field to win the 200 freestyle. The victim was again Gross, the favorite in the event and the world record holder. And, swimming in lane 6, Duncan Armstrong had broken the world record, streaking to a 1:47.25 and a gold medal.

While even those familiar with swimming seemed shocked by his win, Armstrong said he was not completely surprised. The gold medal had been his goal all along.

"I knew I had it in me," he said. "I've been training very hard with Laurie. We've been working very hard since (1986) Commonwealth Games and I haven't been swimming all that well until this meet."

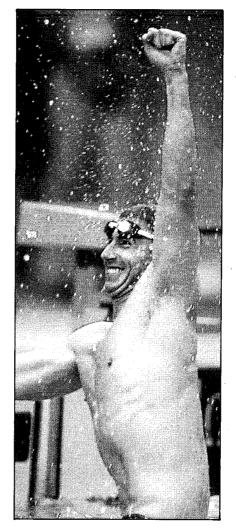
In third place when he turned at the 150, Armstrong pulled ahead of Sweden's Anders Holmertz and then caught American Matt Biondi, who had led the field for the entire race, in the last five meters. Holmertz was second in 1:47.89, with Biondi finishing in 1:47.99 for the bronze.

Biondi had qualified second for finals, behind Poland's Artur Wojdat, but Lawrence decided the American was the one to beat, and geared Duncan's race around Biondi. Lawrence said he spent five hours reviewing splits and watching video tapes of races in order to figure out where Armstrong needed to be at different points in the race.

Armstrong placed sixth in the 200 at the 1986 World Championships, with a 1:50.17, his best time prior to the world record. He was ranked only 25th in 1987 and was ranked 46th this year, prior to the Olympics. Lawrence said Armstrong has been swimming below his potential in meets for the last two years due to fatigue. The two Australians decided in 1986 that Armstrong could win the gold in Seoul and since that time. Lawrence said, "I've been working his guts out. That's why he hasn't done his best time. He's been too bloody tired."

The two-year strategy paid off. All Lawrence was worried about was the 400, four days away. "He's got to start training for the 400; he's too

Evans (left) showed "thumbs up" approval after winning the 400 IM, while Armstrong (above) got up on the lane lines to celebrate his 200 free world record.



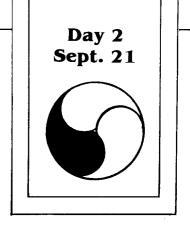
lazy," he said grinning.

Biondi was not grinning after the race, although he wasn't exactly frowning either. It was his third fastest 200, and was only 27-hundredths off his best time.

"I really am pleased with my swim," Biondi said. "I've said that this is the most competitive event in the Olympics (in swimming) and it's my worst event as far as natural talent. So I'm real happy to be here."

But the bronze put to rest any hopes of the American duplicating the seven-gold medal string Mark Spitz had in 1972. Biondi has said all along, that although he qualified for seven events, winning gold medals in every one was a virtual impossibility. But the expected parallel refused to die. The best he could hope for now would be seven medals, which only one other athlete (Spitz) had ever accomplished in a single Olympic Games.

-By Mark Muckenfuss



#### Men's 100 Fly

Championship Finals—Sept. 21		
Anthony Nesty, SUR	25.02	53.000
Matt Biondi, USA	24.53	53.01
Andy Jameson, GBR	25.00	53.30
Jon Sieben, AUS	24.75	53.33
Michael Gross, FRG	25.01	53.44
Jay Mortenson, USA	25.20	54.07
Tom Ponting, CAN	25.29	54.09
Vadim Yaroshuk, URS	25.14	54.60

Anthony took the "Nesty" plunge and came up a winner.

It was Surinam's Anthony Nesty's final plunge to the wall that earned him the gold medal in the 100 fly the first Olympic swimming medal of any kind for Surinam, a small country in the Caribbean on the northeast tip of South America.

Yet for 99 meters, give or take a few inches, the race belonged to the USA's Matt Biondi, vying for his second of a possible seven Olympic medals.

The 22-year-old earned the silver with a time of 53.01, just 1-hundredth of a second behind Nesty's winning 53-flat. But most observers felt he should have had the gold to go along with his bronze medal two days earlier in the 200 free.

"To be honest," Biondi said later in the day after anchoring the United States to a gold medal in the 800 free relay, "I was disappointed with my 100 fly. The worst part was it was only by one 1-hundredth. I asked myself, 'What's one 1-hundredth? What if I had longer fingernails or if I kicked harder?' "

Biondi, sitting alone at the warmup pool with his head down after the race, wouldn't have had to ask those questions if he hadn't messed up his finish.

"I think as luck would have it—or wouldn't have it—the wall came up at a bad time," Biondi said. "I was ► halfway between taking another stroke or kicking in. I made the decision to kick in. Sometimes the wall is deceiving, but I decided not to take another stroke because when I do, I usually hit the wall with my nose."

Once Biondi made the decision, it seemed forever for Biondi to "glide in" and finish. Biondi, leading the entire race and splitting 24.53 at the 50, truly seemed in command with the only question being who would finish second.

But Nesty, fifth at the 50 (25.02), seized the opportunity.

"I knew I was going to be in the top three (before the race)," Nesty said, "or maybe first. All I can say is I did my best and I'm on top."

And being a half-second behind Biondi at the turn didn't bother last year's Pan American Games champion. That's the way Nesty swims his race. "I knew there were a few guys in the field who would take it out fast," he said, "but I'm not one of them. I just sit back and have a pretty good second 50 (27.98 to Biondi's 28.48)."

It was quite a story, not only for the 20-year-old Nesty, but for his country as well. Surinam, which has a population of about  $2\frac{1}{2}$  million, only has one six-lane, 50 meter pool and ten 25 meter pools for a total of 11 in the entire country.

"It's not much, but we get by," Nesty said.

Seeming to enjoy the interview by the herd of media after the race, he told the press, "I'd like to say hi to my mom back in Surinam. I guess I'm quite a guy."

His dad, who was in the stands to see his son win the gold, said, "Our country hasn't won a medal before so I don't know (how his son will be treated when he returns). But there'll be some kind of carnival there."

The top qualifier from the day before, Andy Jameson, 20, of Great Britain, won the bronze medal with a national record 53.30. Last year's European champion and No. 2 swimmer in the world wasn't disappointed. "It is the best time of my life," he said. "Still, I thought I could have done better; only a little would have been enough to win."

The 1984 Olympic champion, Michael Gross, 24, of West Ger-



many, finished fifth in 53.44 (his second fastest ever) and American Jay Mortenson, 21, who came into the meet with the second fastest time (53.29), placed sixth at 54.07.

-By Bob Ingram

#### Women's 200 Free

Championship Finals—	Sept. 21			
Heike Friedrich, GDR	28.55	58.50	1:28.03	1:57.650
Silvia Poll, CRC	28.47	58.78	1:28.46	1:58.67
M. Stellmach, GDR	28.51	58.60	1:28.96	1:59.01
Mary Wayte, USA	28.07	58.43	1:28.66	1:59.04
Natalia Trefilova, URS	28.47	58.61	1:29.51	1:59.24
Mitzi Kremer, USA	28.26	57.89	1:28.38	2:00.23
Stephanie Ortwig, FRG	28.94	59.27	1:29.98	2:00.73
Cecile Prunier, FRA	29.35	1:00.26	1:31.70	2:02.88

The women's 200 freestyle was more a contest between Heike Friedrich and the clock.

Americans Mary Wayte and Mitzi Kremer set the pace. Wayte hit the first turn in 28.07. Then Kremer went for broke, churning furious the second lap to lead at the halfway point in 57.89.

Friedrich, who has a tremendous finishing kick, bided her time and turned in third place at 58.50, 14hundredths off her world record split. She took over on the third lap, powering past Kremer and Wayte to take a slight lead. The 18-year-old GDR swimmer pulled away from the field the final 50 to win by a body length over Costa Rica's Silvia Poll. She didn't better her world mark, though, falling a tenth of a second short with a 1:57.65 for the secondfastest performance of all time and an Olympic record.

"The record was not important at this moment," said Friedrich, who hasn't lost a 200 at a major meet the last four years.

"The problem was the start time. I am not accustomed to competing in such an important final at noontime. It is a very unusual time to hold such an important race. Perhaps had the event taken place at a more normal hour, the tenth to a world record would have been there.

"I never thought that the race would be so close to how I planned it. I expected more competition from Silvia Poll, both Americans and my teammate, Manuela Stellmach."

Poll passed a tiring Kremer early on the final lap and held second the remainder of the race to claim the



first medal ever for Costa Rica. Her time of 1:58.67 was the best ever outside of GDR and American swimmers.

"I wanted to win the 100 free, but my goggles slipped at the start and ruined my concentration," said Poll, 17, who placed fifth in the 100.

Stellmach nipped Wayte by 3-hundredths for the bronze in 1:59.01. The sizzling opening 50 meters, 65hundredths faster than Wayte went in her 1984 victory, cost the 23-yearold American who dropped one place each succeeding lap.

Kremer faded to sixth in 2:00.23. "I went all out and can't be upset," said the 20-year-old Clemson junior. "There are lots of meets to go." —By Russ Ewald

Nesty (opposite page, clockwise) upset Biondi in the 100 fly on the second day of swim finals, but things went according to script as Friedrich took the 200 free and Darnyi won the 400 IM, winning by over 2<sup>1</sup>/<sub>2</sub> seconds with a world record.

#### Men's 400 IM

Championship Finals	-Sept. 21	I		
Tamas Darnyi, HUN	59.04	2:01.76	3:15.96	4:14.75w
David Wharton, USA	58.17	2:04.27	3:19.58	4:17.36
S. Battistelli, ITA	1:00.96	2:06.06	3:19.98	4:18.01
Jozsef Szabo, HUN	59.56	2:07.76	3:19.21	4:18.15
Patrick Kuhl, GDR	58.40	2:03.73	3:18.64	4:18.44
Jens-P. Berndt, FRG	59.80	2:05.94	3:21.29	4:21.71
Luca Sacchi, ITA	1:00.35	2:07.20	3:22.05	4:23.23
Peter Bermel, FRG	59.50	2:06.69	3:22.10	4:24.02

One of the great anticipated match-ups in the Olympic swimming events was the faceoff between former world record holder David Wharton and the current record holder, Hungary's Tamas Darnyi, in the 400 IM.

Wharton had broken the world record in the event last year with a 4:16.12, only to have it erased five days later by Darnyi, who grabbed the European Championship gold with a 4:15.42. Talk turned at that point to the showdown in Seoul. Both swimmers said they anticipated it would take a 4:13 to win the race.

But what was supposed to be a great head-to-head battle disintegrated into a runaway victory that left Wharton fighting off the waves of Darnyi's wake.

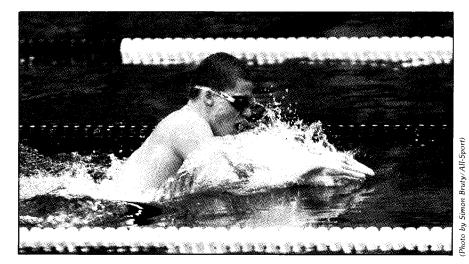
Slightly ahead at the 100 mark, Wharton lost 3.38 seconds to Darnyi on the backstroke leg of the race. He never recovered from that position as Darnyi sped to a world record of 4:14.75 and a gold medal, Hungary's sixth gold medal ever in men's swimming.

A swimmer of few words, Darnyi said only that he was a little surprised to have won by such a large margin.

"I expected a close race," Darnyi said. "I didn't have a time in mind, but I'm very happy with my world record."

Wharton wasn't exactly happy with his time ("I expected to go faster than I did"), but said he looked at the race as only one of many that lie ahead of him.

"This was just one race," he said. "I don't think the battle's finished as far as I'm concerned because I plan to continue to go after (the world record)." —By Mark Muckenfuss ►



#### Women's 200 Breast

Championship Finals-	Sept. 21			
Silke Horner, GDR	32.88	1:10:24	1:47.38	2:26.71w
Xiaomin Huang, CHN	34.00	1:11.41	1:49.22	2:27.49
A. Frenkeva, BUL	33.16	1:10.32	1:48.83	2:28.34
T. Dangalakova, BUL	32.26	1:09.22	1:47.48	2:28.43
Julia Bogacheva, URS	34.44	1:12.44	1:49.98	2:28.54
Ingrid Lempereur, BEL	34.79	1:13.39	1:52.02	2:29.42
Allison Higson, CAN	32.71	1:09.91	1:48.56	2:29.60
M. Dalla Valle, ITA	35.07	1:12.90	1:50.79	2:29.86

Consistency, perhaps, is the better measure of success. Canada's Allison Higson, 15, was the new world record holder coming into the Olympics, having swum a 2:27.27 last May. Yet it was the only time she's gone that fast—a year ago, she was only 16th in the world with a 2:33.36.

The German Democratic Republic's Silke Horner, 23, on the other hand, was the former world record holder at 2:27.40. She's been under 2:28 twice and 2:30 at least 10 times. She was the world champion in 1986 and the European champion and world's fastest in her event in 1987.

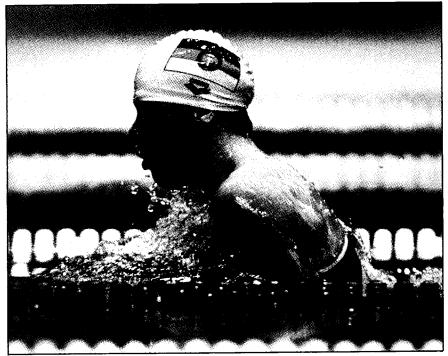
Though ranked only fourth coming into the Olympics with her 2:29.17 from the GDR trials in July, it was really Horner who should have been considered the favorite, not Higson.

At prelims, held one day before finals, Horner made a statement that she was ready to reclaim her world mark by qualifing first in 2:27.63—a new Olympic record and less than a half-second off the world record. She was the only swimmer under 2:28, while Higson swam a 2:29.67 to qualify fourth.

The Leipzig swimmer was equally strong the following day for finals.

She let Tania Dangalakova, 24, of Bulgaria set the early pace. (Dangalakova is the former Bogomilova, who took time out from her swimming career last year to have a baby.) Dangalakova turned at 1:09.22 for the first 100 meters, a full second ahead of Horner at 1:10.24. But by the 150 wall, Horner touched first (1:47.38 to Dangalakova's 1:47.48) and was on her way to a new world record swim of 2:26.71, the first swimmer ever under 2:27.

Dangalakova couldn't keep up the pace the final 50 and fell to fourth at 2:28.43.



"I knew that I could swim a world record," Horner said. "However, I thought that two or three others would be able to swim a world record, too. I expected more competition from the others."

China's Xiaomin Huang, 18, who finished second at 2:27.49 (just 2tenths off the old world record), agreed with Horner. She thought she could do better, too.

"I am not really satisfied with the outcome," Huang said after becoming only the second Chinese swimmer to win an Olympic medal. "Perhaps it was because I didn't feel really good. I've prepared this last year for the Olympic Games, but today's performance was not good. In the end, though, I have lost only to the new world record holder."

Finishing third was Bulgaria's Antoaneta Frenkeva, 17, with a 2:28.34. She felt quite differently than Huang.

"I feel fantastic," she said. "It is my best time ever. I keep on improving, bit by bit. This was the best race of my life."

Higson was only a factor the first 100, splitting a 1:09.91, 3-tenths ahead of Horner, but faded to sixth with a 2:29.60.

After the race, Higson was too emotionally upset to say anything to the media. Her coach, Paul Bergen, said, "She tried as hard as she could. Unfortunately, it was very hard but not as fast as it should have been. She needed to go out fast and, yet, feel easy; she went out fast, but it was a struggle.

"Her plan was to beat Horner. Allison is smaller and needs to take more strokes per lap to compete with Horner, but I think that she adapted too much to Horner's armstroke and pace during the latter part of the race. Allison was OK time-wise at the 100, but she worked too hard for that time."

The last place time was a 2:29.86, marking the first time in history everyone in the finals swam under 2:30.

Perhaps it was some consolation for the Americans, knowing that the 200 breast field was extremely fast. Only Tracey McFarlane's personal best of 2:29.82 (done at trials) could have cracked the top 8. But as it was, neither McFarlane nor Susan Rapp could turn in personal bests. McFarlane, the top U.S. qualifier, finished 14th overall with a 2:33.46, while Rapp was 13th overall at 2:32.90 (she swam 2:31.01 at trials). —By Bob Ingram

Three world records were set Sept. 21, including Horner's 200 breast (above) and USA's 800 free relay (Biondi, Gjertsen, Dalbey and Cetlinski).

#### Men's 800 FR

Championship Fina	le Sant 2			
	1:49.37		5.26.07	7.12 51w
(Dalbey, Cetlinski,			3.20.07	7.12.JTW
GDR		3:37.18	5.25.25	7.13.68
(Dassler, Lodziews				1.10.00
FRG		3:37.66		7:14.35
(Hochstein, Fahrne				
AUS	1:48.99	3:38.04	5:27.99	7:15.23
(Stachewicz, Brow	n, Plummer.	Armstron	g)	
ITA	1:49.23	3:36.52	5:26.18	7:16.00
(Gleria, Lamberti,	Trevisan, Gia	ambalvo)		
SWE	1:48.06	3:37.47	5:28.04	7:19.10
(Holmertz, Werner	Soderlund,	Wallin)		
FRA	1:52.05	3:42.09	5:34.23	7:24.69
(Pou, lacono, Foug				
CAN	1:51.45	3:42.46	5:33.92	7:24.91
(O'Hare, Goss, Ha	ddow, Vande	er Meulen)		

Matt Biondi sat on the blocks of the warmup pool with his head down following a heartbreaking loss in the 100 butterfly. But the American star couldn't stay in mourning very long. He still had to swim the 800 free relay, the final event of the night. As he sat around waiting, relay teammates Troy Dalbey, Matt Cetlinski and Doug Gjertsen picked him up.

"We talked about fun things, not necessarily swimming," said Biondi.

The quartet faced a challenging task in upholding Olympic superiority for the USA in the event. The Americans hadn't lost any men's relay at the Games since 1956. But they placed only third at the 1986 World Championships behind the German teams and last year saw West Germany surpass their world record by over  $2\frac{1}{2}$  seconds.

After the heats, the main U.S. concern became the German Democratic Republic foursome. The GDR qualified first by a margin of two seconds with the U.S. team second and West Germany another 6-tenths back.

The race began in alarming fashion for the U.S. team as Dalbey trailed the GDR's Uwe Dassler by 1.11 seconds at the exchange. Sweden put its best swimmer, 200 free runner-up Anders Holmertz, as leadoff and got out in front (1:48.06). Italy used its ace on the second leg with Giorgio Lamberti (1:47.29) putting his country into the lead. Neither team was a factor afterward, though.

In the real race, distance specialist Cetlinski surprisingly almost halved the gap with a 1:48.44 going against the GDR's Sven Lodziewski, 200 free runner-up at the 1986 World Championships. Lodziewski, whose best split was a 1:47.34, did only a 1:48.92.

The GDR took the lead from Italy on the third leg as Thomas Flemming, 10th in the 200 free, went 1:48.07. Gjertsen (1:48.26) moved up from fifth to second and kept the Americans within a body length of their rivals. Biondi made up almost half that margin with a great dive off the blocks. By the second lap, he passed GDR anchor Steffen Zesner and pulled away from there. He finished a body length up in a world record 7:12.51, shattering the old mark by 59-hundredths. Biondi's anchor was 1:46.44, the fastest in history.

"I was definitely tired of losing," said Biondi. "I was hurting the last 25. But all I was thinking of was I wanted to be on top of the awards stand."

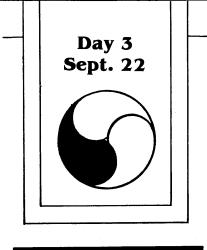
For Gjertsen, it was his only event at the Games. "All the anxiety and pressure and sleepness nights, it all came together," said the Texas junior, competing in his first international meet. "I'm just glad all three of us gave Matt the chance to win it. I think it helped that he had raced earlier. I'm not saying I'm glad he only got the silver (in the 100 fly), but it did put fire in his eyes."

U.S. head swimming coach Richard Quick felt the second and third legs were crucial. "They (Cetlinski and Gjertsen) didn't get overexcited because they were behind and swim too fast the first 100.

"That was a great win for us, coming in as the underdogs. It should provide the spark that the team needs to get going."

-By Russ Ewald ►





#### Women's 400 Free

Championship Finals	-Sept. 22			
Janet Evans, USA	59.99	2:02.14	3:03.40	4:03.85w
H. Friedrich, GDR	1:00.23	2:02.49	3:03.56	4:05.94
Anke Mohring, GDR	1:00.27	2:02.51	3:05.27	4:06.62
Tami Bruce, USA	1:00.75	2:03.42	3:06.19	4:08.16
Janelle Elford, AUS	1:01.05	2:04.20	3:07.74	4:10.64
1. Arnould, BEL	1:01.57	2:04.77	3:08.42	4:11.73
S. Ortwig, FRG	1:01.25	2:04.31	3:08.56	4:13.05
N. Trefilova, URS	1:00.87	2:04.04	3:08.75	4:13.92

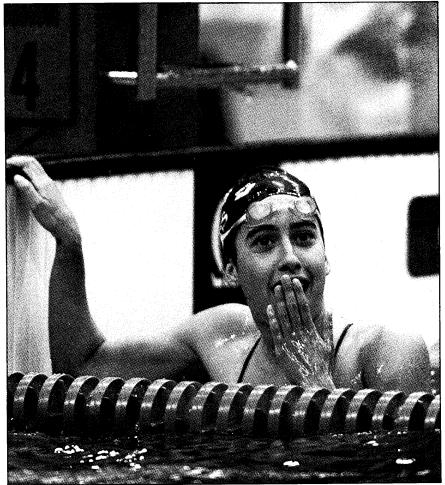
When Janet Evans saw her coach, Bud McAllister, after destroying her own world record in the 400 freestyle, she shouted in disbelief, "I can't believe it! It (the race) didn't hurt! I wasn't even tired!" The American star then broke out in laughter at her discovery.

Evans had finally found the Nirvana of negative splitting in capturing her second gold medal of the Games. The closest she'd ever come previously was her first 400 free world mark last December at the U.S. Open, going two seconds slower the final 200 in posting a 4:05.45.

"I've been trying to get her to at least even-split," said McAllister. "She's always been so small that she had to go all out at the start, so she wouldn't get outkicked."

The plan wasn't to negative split, just to emphasize the final 200 and go out more controlled. The 400 figured to be Evans' toughest race with the presence of 200 free gold medalist Heike Friedrich of the GDR and her devastating kick. Friedrich, the defending world and European champion in the 400, had gone 4:06.39 last year.

Evans took the lead at the start as usual but turned at the 100 in 59.99, 4-tenths slower than her record pace and slightly ahead of Friedrich and Anke Mohring, also of the GDR. The German duo stayed a half-body back at the halfway point as Evans remained controlled. The leader's



time of 2:02.14 put her a half-second behind her record split.

Friedrich made a move on the third 100, splitting a 1:01.07, but Evans refused to be overtaken (1:01.26). The 3:03.40 pace removed Mohring from contention.

Then, Evans amazed the crowd by pulling away from her speedy rival the final two laps. She finished two body lengths ahead. When she looked at the scoreboard and saw the winning time of 4:03.85, her face expressed shock. The blazing 1:00.45 coming home and 2:01.71 the second half put her an incredible 1.6 seconds under her old world record.

"My goal in the race was to win, so when I swam 4:03 it was surprising," said Evans at the news conference. "I didn't think I was going that fast. I expected a tough race the last 100 meters and didn't feel I had it won until the last 15 meters."

McAllister added, "The people that are swimming smart races are winning, like (Duncan) Armstrong, Friedrich (in the 200) and Janet." Asked if it was unusual to change strategies at an Olympic final, he replied, "Yes, it is. But she's never faced competition like Friedrich."

The runner-up from the GDR lowered her European record to 4:05.94, third fastest performance of all time, in taking the silver. Mohring got the bronze in 4:06.62 with Tami Bruce, the other U.S. entry, fourth in 4:08.16.

"After the morning heats, I thought it was possible one of us (she or Mohring) could win," said Friedrich. "I was expecting a world record. I expected to do it myself. I thought 4:05. I underestimated her. She's another dimension in swimming." —By Russ Ewald

It was a great day for the USA Sept. 22 as Evans (above) and Biondi captured gold. Evans won her second gold medal, as did Biondi, but it was Matt's first individual gold medal.

#### Men's 100 Free

23.21	48.630
23.76	49.08
23.97	49.62
23.46	49.75
24.07	50.08
23.92	50.23
24.21	50.35
24.29	50.54
	23.76 23.97 23.46 24.07 23.92 24.21

"I kept reminding myself before the race, '100 fly, 100 fly, 100 fly.' I just kept reminding myself about how let down I felt after that race."

Touched out by 1-hundredth of a second on a terrible finish, Matt Biondi was not going to let it happen again. "That race just shows you how great you have to swim at the Olympics."

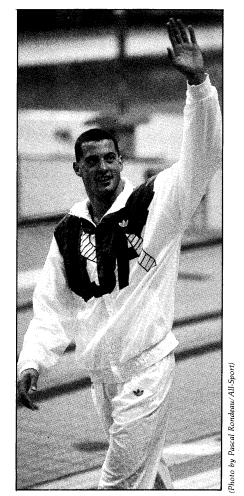
One would think he hardly had to worry. This, after all, was the 100 freestyle. Biondi has owned this race for nearly the entire quadrennium since the last Olympics. France's Stephan Caron had come the closest to mounting a challenge with a 49.35 clocking last year at the European Championships. But no one was even near the 49-second barrier. which Biondi had ventured into on several occasions. And when he streaked to a 48.42 at Olympic trials, he put himself nearly a second ahead of anyone else in the field. How could this guy lose? He couldn't, unless he committed a great error, something akin to his 100 butterfly finish. He wanted to make sure it didn't happen.

It didn't.

Biondi was out quick, hitting the 50 wall at 23.21, faster than his world record split of 23.25. Coming home, he lost a little bit, but not much, stopping the clock at 48.63, the second fastest 100 free time ever recorded. The California swimmer was ecstatic, and when American Chris Jacobs hit the finish at 49.08 for the silver medal, the two celebrated together.

It was the first, and would be one of two 1-2 finishes for the Americans in the meet. It was something both swimmers had thought about and discussed before the race.

"We just talked about swimming our best times," Biondi said. "We understood if we could go 1-2, it would really be a boost for the



team. What I told Chris before the race (the two shook hands before climbing onto the blocks) was, 'Good luck.' I wanted him to do his best time—but not too good."

Jacobs' time was plenty fast, as far as he was concerned. Prior to the Olympics, his fastest 100 had been the 49.45 at Olympic trials that put him on the team. He qualified for the Olympic finals with a 49.20 morning swim, and dropped that another 12-hundredths to 49.08 for the silver. Caron swam 49.62 for the bronze.

"I'm very happy to medal," Jacobs said. Two years ago, he said, he would never have pictured himself on the awards stand. At that time he was struggling with a cocaine addiction. But after leaving college, spending nine months at home and getting professional help, Jacobs began to battle back. He returned to Texas with a "more realistic perspective," and began training again.

"I can start fresh now because of the Olympics," he said, looking ahead. "I think this is definitely a landmark in my life."

One that was becoming even more important. Since Jacobs was swimming fast and butterflyer Jay Mortenson was struggling, Jacobs was given the nod to anchor the medley relay, while Biondi, who normally handled that task, would swim the butterfly leg.

"I prefer to swim freestyle," Biondi said. "But Chris deserves to swim on the relay, and I'm happy to swim the butterfly."

That race would be Biondi's last. Number seven. With the 100 free, he now had four medals, two of them gold. He assessed his progress.

"Well, the seven golds are long gone," he said. "I'm over the hump for sure. I think our 400 relay is in good shape. The 50 free is going to be my biggest challenge. I haven't beaten Tom (Jager) in two years."

And with the 50 being a race where absolutely no mistakes are allowed, Biondi would probably again be muttering on his way to the blocks, "100 fly, 100 fly, 100 fly."

-By Mark Muckenfuss

#### Women's 100 Back

Championship Finals—Sept. 22		
Kristin Otto, GDR	29.12	1:00.89
Krisztina Egerszegi, HUN	29.36	1:01.56
Cornelia Sirch, GDR	29.43	1:01.57
Betsy Mitchell, USA		1:02.71
Beth Barr, USA	30.60	1:02.78
Silvia Poll, CRC	29.68	1:03.34
Nicole Livingstone, AUS	31.05	1:04.15
Marion Aizpors, FRG	30.61	1:04.19

The German Democratic Republic's Kristin Otto, 22, had a chance to earn two gold medals tonight in her quest for a record six gold medals by a woman swimmer.

She had already won the 100 free on the first day of finals, and the 100 back was No. 2 in line.

"I was determined to win this gold medal," Otto said.

She came into the meet as the European champion and world's fastest in this event last year (tied with Costa Rica's Silvia Poll).

Otto showed just how determined she was to win this event as she qualified first in the morning prelims with a 1:01.45. Poll, 17, who was thought to challenge Otto for the gold based off her No. 1 ranking last year and Pan American Games gold medal, qualified sixth in a rather slow 1:03.21.

Both American swimmers, Betsy Mitchell, 22, and Beth Barr, 16 (the youngest swimmer on the U.S. team), qualified fifth and fourth, respectively, with times of 1:02.85 and 1:02.63.

Otto was in command throughout the final. She was never challenged, leading the entire race and splitting ahead of world record pace (29.12 to 29.67). She touched first at 1:00.89, becoming only the third girl ever to break 1:01. She did not, however, set a world record or Olympic record since the only other two girls to break 1:01 were the GDR's Ina Kleber (1:00.59 world record) and Rica Reinisch (1:00.86 Olympic record).

"The world record of Ina Kleber in this race was just beyond my reach today," Otto said. The GDR has held the 100 back world record since the middle of 1974.

Finishing in a mild upset for the silver medal was Hungary's little 14year-old, Krisztina Egerszegi, 67hundredths behind at 1:01.56. She just did outtouch the GDR's Cornelia Sirch, 21 (better known for her prowess in the 200 back), at 1:01.57.

Mitchell and Barr finished just out of the medal picture with respective fourth- and fifth-place finishes (1:02.71 and 1:02.78). Both swam faster at trials to qualify for the Olympic team (1:02.01 and 1:02.21).

Poll was never a factor in the race, turning fourth at the 50 and fading to sixth (1:03.34)—a far cry from her 1:01.86 a year ago.

Egerszegi's coach, Laszlo Kiss, was surprised with his young charge's performance. "We expected her to be fourth, maybe, under the best of circumstances, to be third."

Egerszegi is only 5-5 and 99 pounds. She just turned 14 in August and already has the 100 and 200 back European junior titles to her credit. At last year's European Championships, she placed fifth in the 100 back and ranked 11th in the world (1:02.75).

"She has a lot of potential," Kiss said. "Krisztina has a great future in front of her. She will soon be at the top."

But at the top for the moment was



Otto, one-third of the way to a possible six gold medals. Only Mark Spitz has won more gold medals (7), while the GDR's Kornelia Ender leads the women with four.

"I did not think of Mark Spitz," Otto said, "and I did not have the goal to win that many gold medals. I do not think of winning a total of six gold medals.

"I will not be the big hero here because what we did (at the Olympics), we did as a team. We competed together and trained together and worked together."

-By Bob Ingram

#### Men's 200 Back

Championship Finals—	Sept. 22			
Igor Polianski, URS	27.14	57.49	1:28.20	1:59.37
Frank Baltrusch, GDR	27.98	58.57	1:29.02	1:59.60
Paul Kingsman, NZL	26.74	59.48	1:29.53	2:00.48
S. Zabolotnov, URS	27.23	57.53	1:28.97	2:00.52
Dirk Richter, GDR	28.99	59.94	1:30.77	2:01.67
Jens-P. Berndt, FRG	28.69	59.42	1:30.66	2:01.84
Dan Veatch, USA	28.63	59.75	1:30.82	2:02.26
Rogerio Romero, BRA	28.52	59.79	1:31.41	2:02.28

It was a close shave for Paul Kingsman. The New Zealander captured the bronze medal by a mere 4hundredths over Sergey Zabolotnov, 2:00.48-2:00.52. It was to be an even closer shave for his coach.

"There was a lot riding on this race," Kingsman said. "A lot of people at home are watching—my mom and sister couldn't be here—and my coach said he's shave his hair off if I won a medal."

Kingsman's coach won't really have much trouble explaining away a bald spot that goes ear to ear—not when he tells people that it was for New Zealand's first-ever Olympic medal in men's swimming.

"I'm extremely happy," Kingsman said, referring to that accomplishment. "I'm extremely happy just to be in this company. I think anyone in this final was to be respected. I just knew I had it in me."

Finishing ahead of Kingsman were East Germany's Frank Baltrusch (1:59.60) and Soviet backstroke king Igor Polianski (1:59.37).

"I didn't expect a gold medal today," Polianski said. "But I think I earned it and I'm very satisfied." Only slightly back of his countryman Zabalotnov, who led the race at the 100 mark, Polianski moved



**40** Swimming World/November 1988

into first place on the third 50 of the race, and held off the rest of the field.

"It's a very long distance," he said, alluding to the fact that he prefers the 100 sprint much more, "and you have to concentrate very hard in order to pace yourself correctly. This gold medal is the best prize for me, but the 100 is my favorite race."

Unfortunately for Polianski, the thrill may have been marred a bit when, during the awards ceremony, organizers mistakenly announced the playing of the national anthem of New Zealand (the correct anthem was played). In addition, Kingsman was announced as being from the Soviet Union. But the New Zealander didn't seem to mind.

"They could have said anything when I was up there," he said. "I still would have been thrilled."

-By Mark Muckenfuss

#### Women's 400 FR

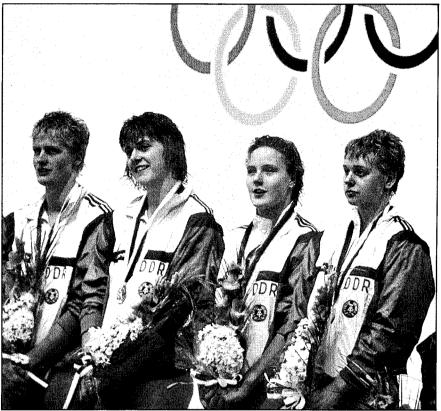
Championship Finals-Sept. 22

enemplementp - mate - e				
GDR	55.11	1:49.84	2:45.53	3:40.63
(Otto, Meissner, Hunger	, Stellma	ch)		
HOL	56.26	1:52.62	2:48.35	3:43.39
(Ma. Muis, Mi. Muis, V	an Bentu	m, Brienes	sse)	
USA	55.88	1:51.56	2:48.27	3:44.25
(Wayte, Kremer, Walker,	Torres)			
CHN	57.78	1:53.16	2:50.44	3:44.69
(Xia, Yang, Lou, Zhuang	1)			
URS	56.49	1:52.69	2:48.69	3:44.99
(Dendeberova, Issakova,	Trefilova	i, Koptchil	(ova)	
CAN	57.01	1:53.76	2:50.07	3:46.75
(Bald, Noall, Nugent, Ke	rr)			
FRG		1:53.62	2:50.08	3:46.90
(Ortwig, Aizpors, Pielke,				
DEN	56.93	1:54.21	2:51.16	3:49.25
(Jensen, Sorensen, Jaco	bsen, Jo	rgensen)		

No, Angel Myers wouldn't have made any difference for the gold medal. In what used to be a dominating event for the United States, the 400 free relay is now dominated by the German Democratic Republic. They're the world and Olympic record holder, current world champion and have won six straight European championships.

Coming into Seoul, however, the Americans had not lost this race

Polianski (left) captured the 200 back as Otto (opposite page, top, and with relay, left) won her second and third gold medals in the 100 back and 400 free relay with teammates Meissner, Hunger and Stellmach.



since 1956 when they placed second to Australia. (The German Democratic Republic won in 1980, but the Americans did not compete.)

The Americans also looked good on paper. Before the Olympics had begun, the four best American girls' times from the 100 free added up to a 3:42.55, and that's without Myers, whose 54.95 was disqualified when she tested positive for steroids.

The top four from the GDR figured to a 3:42.81.

But that's on paper. In the pool, it was easy to tell early on that the GDR was the class of the field. In the prelims, the GDR rested Kristin Otto and Manuela Stellmach and qualified first at 3:43.13 with a team of Katrin Meissner (55.30), Sabina Schulze (56.32), Heike Friedrich (55.68) and Daniela Hunger (55.83).

The Americans qualified third at 3:45.10 behind Holland at 3:44.12. The bright spot for the United States was Mary Wayte's 55.06 anchor split (ninth-fastest and top American alltime). With Dara Torres and Mitzi Kremer resting for finals, Laura Walker led off in 57.46, followed by Paige Zemina (56.51) and Jill Sterkel (56.07).

The night also belonged to the

German Democratic Republic with a new Olympic record 3:40.63. And it was Kristin Otto's third gold medal in as many tries.

They just missed the world record of 3:40.57 by the GDR at the 1986 World Championships. Asked if they might have broken the record if Otto hadn't swum the 100 back just two events earlier, the GDR girls quickly discounted any such theory.

"The fact that she was on the team contributed to the victory," Manuela Stellmach said.

Otto got the girls going with a 55.11 leadoff leg. That gave a 77hundredths of a second lead for Katrin Meissner. The USA's Mary Wayte put the Americans in second with her 55.88, while Marianne Muis of Holland touched third at 56.26.

Meissner then gave the German Democratic Republic a near 2-second advantage with a remarkable 54.73 split—the fourth fastest ever. Their 1:49.84 led the United States at 1:51.56 (Mitzi Kremer, 55.68) and Holland at 1:52.62 (Mildred Muis, 56.36).

It was the same order at 300 meters, only this time the German Democratic Republic had opened a 2.74-second margin. Daniela Hunger **>** 

clocked 55.69 for a 2:45.53 running split, while the USA's Laura Walker turned in a 56.71 (2:48.27). Holland closed the gap in their quest for the silver medal as Conny van Bentum split a 55.73, putting her team just 8hundredths behind.

With Stellmach anchoring in 55.10, the German Democratic Republic easily had the gold. But the battle was for second, and as it turned out, for third.

Dara Torres (55.98) was no match for Holland's Karin Brienesse (55.04, eighth fastest all-time) as the Dutch moved past the USA for the silver medal at 3:43.39. The Americans won the bronze at 3:44.25, but it was all Torres could do to hold off China's Yong Zhuang, who split 54.25—the fastest ever.

Stellmach, who missed in her bid to medal in the 100 free, said, "I'm relieved to end up with a gold medal. I didn't think my times (in the individual event) were very good, so the relay was an opportunity to do so."

Meissner, who had the fastest split on the GDR team and who really put her relay team out of reach, said, "I noticed immediately that the United States was right behind me. That encouraged me to go fast. I had a good first 50, and I really wanted the lead."

Holland, which had finished runner-up in this event in 1984 and last won the gold medal in 1936, was surprised with the silver medal.

"To be honest, I didn't think we would get the silver," van Bentum said. "We thought we would be battling for third with China. We were really, really excited that we got second."

Although the Americans didn't swim as fast as they might have on paper, they appeared happy with the bronze medal.

Both Torres and Kremer were out of the medal picture in the 100 free, as was Wayte in the 200, so putting things in perspective, Kremer said, "I'm very excited to be going home with a medal, and I'm happy it's with a relay. I'm happy to end my meet with a good swim and to help our team finish third. Swimming with these three girls is just so exciting and swimming in the finals is a dream come true." —**By Bob Ingram** 



#### Men's 400 Free

#### Championship Finals-Sept. 23

Uwe Dassler, GDR	55.30	1:53.17	2:51.40	3:46.95w
D. Armstrong, AUS	56.41	1:55.10	2:52.13	3:47.15
Artur Wojdat, POL	54.78	1:52.98	2:51.06	3:47.34
Matt Cetlinski, USA	54.57	1:52.45	2:50.46	3:48.09
Podkoscielny, POL	55.34	1:53.52	2:51.65	3:48.59
Stefan Pfeiffer, FRG	56.17	1:54.22	2:52.19	3:49.96
Kevin Boyd, GBR	55.68	1:53.72	2:51.99	3:50.16
A. Holmertz, SWE	54.48	1:52.32	2:51.08	3:51.04

Former world record holder Artur Wojdat called it the race of the century.

With three men swimming under the listed world record, Poland's Wojdat wasn't too far from the truth.

The German Democratic Republic's Uwe Dassler, 21, was the one who captured the Olympic gold medal and new world record in a race that was literally up for grabs. His time of 3:46.95 bettered Wojdat's 3:47.38 of March, as did runners-up Duncan Armstrong, 20 of Australia (3:47.15) and Wojdat, 20 (3:47.34).

"I did not really expect the race to be that fast," Dassler said. "A fast race, yes, but not *that* fast."

He should have had a clue it would be something special after all eight qualifiers bettered Thomas Fahrner's (FRG) Olympic record of 1984 (3:50.91) in the prelims. Poland's other fine distance swimmer, Marius Podkoscielny, had the honor of holding the new Olympic record for half a day with his top qualifying time of 3:49.51. Just two years ago, his personal best was 3:58.83. The eighth qualifying time was turned in by American record holder Matt Cetlinski at 3:50.82.

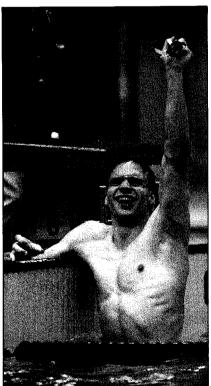
The final was a race of differing strategies. Dassler, the European champion and world's fastest in this event last year, called it a race of nerves. There were swimmers who took it out fast, swimmers who even-split the race and others who negativesplit. And that was part of what contributed to the race's anticipated excitement.

Consider the splits of the three medalists: Dassler was out in 1:53.17 and returned in 1:53.78; Armstrong came from behind with a 1:55.10-1:52.05 combination; while Wojdat swam with the early leaders at 1:52.98, returning in 1:54.36.

"As always, I swam my own race," Dassler said, "without allowing myself to be influenced by the pace of the other swimmers."

Sweden's Anders Holmertz (the youngest finalist at 19) and Cetlinski (the oldest at 23), swimming in lanes 7 and 8, respectively, set the early pace (54.48 and 54.57), with Wojdat a half-body length behind (54.78). Dassler was in fourth (55.30) and Armstrong last (56.41).

All eight swimmers touched in exactly the same order at 200 meters as they did at the 100. Holmertz and Cetlinski still shared the lead (1:52.32 and 1:52.45); Wojdat was still a halfbody length off the frontrunners (1:52.98), Dassler was right behind Wojdat (1:53.17) and Armstrong was dead last (1:55.10), nearly three



seconds behind Holmertz and nearly two seconds off Dassler.

There were little changes of position at the 300 as Cetlinski took the lead (2:50.46), followed by Wojdat (2:51.06) and Holmertz (2:51.08). Dassler was still hanging close in fourth (2:51.40), while Armstrong moved up one position to seventh (2:52.13), still 1.67 seconds behind the leader.

Then things started to happen.

It looked like a replay of the U.S. nationals last March when Cetlinski led for 350 meters only to have Wojdat pass him the final 50 for a world record.

That's exactly what happened in Seoul, only Dassler and Armstrong had other plans.

Dassler, who was swimming in lane 6, aware of the fast early pace set by the two lanes next to him, said, "The last 50 meters, I didn't look at anyone. I simply swam as fast as I could."

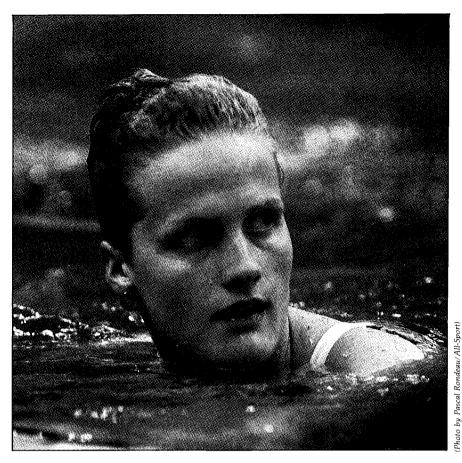
Unfortunately for Armstrong, swimming across the pool in lane 1, the 200 free gold medalist and world record holder never saw Dassler. Swimming from behind, all he thought he had to do was catch Wojdat in lane 3, which he did.

"I came out of the second half of the race very strongly," Armstrong said. "I wasn't looking where the others were; I just listened to my body. From the outside lane (on the final 25 meters), I looked across and pulled up even with Artur, but I could not see Uwe on the other side of him. I did my best to beat Artur to the wall, but Uwe had the touch on me.

"But I'm not sure (swimming in lane 1) made any difference. This is the fastest race in history, and it took a world record to beat me."

Even Cetlinski came within 3hundredths of his American record (3:48.09) and still finished out of the medal picture. "How disappointing—to go so fast and end up only fourth," he said. Cetlinski, however,

Dassler (opposite page) led three swimmers under the world record in the 400 free, giving the GDR its only men's gold. Teammate Otto (above), however, took her fourth gold in the fly.



swam the final 100 in 57.63 as three swimmers—Dassler (55.55), Armstrong (55.02) and Wojdat (56.28) passed him for the medals.

Terry Stoddard, Wojdat's coach in Mission Viejo, Calif., couldn't believe the amazing finish either.

"We were expecting the gold," Stoddard said of Wojdat. "Three people broke the world record, but on this day, two other people hit the wall ahead of him. But that's the Olympics."

Asked if he agreed with his swimmer that this race was the race of the century, Stoddard said, "Yes, definitely. It was the greatest race in history." — By Bob Ingram

#### Women's 100 Fly

Championship Finals-Sept. 23		
Kristin Otto, GDR	27.95	59.00o
Birte Weigang, GDR	28.18	59.45
Hong Qian, CHN	27.87	59.52
Catherine Plewinski, FRA	27.54	59.58
Janel Jorgensen, USA	28.61	1:00.48
Conny van Bentum, HOL	28.54	1:00.62
Mary T. Meagher, USA	29.20	1:00.97
Xiaohong Wang, CHN	28.99	1:01.15

Kristin Otto appeared at the swim-

ming pool one morning made up like she was going to a disco. If the 22year-old GDR star can dance as well as she can swim, look out John Travolta.

A strong last lap in the 100 butterfly carried Otto to her fourth gold medal of the Olympics. She qualified only third (1:00.40) for the final behind France's Catherine Plewinski, who set a European record of 59.34, and teammate Birte Weigang (59.97), the winner at the GDR trials. And in the championship race, she stood just third (27.95) at the halfway point as Plewinski streaked the opening 50 in 27.54, 23-hundredths under Mary T. Meagher's world record split, with China's Hong Qian closest (27.87). But the 6-foot-1-inch Otto turned it on coming off the wall, took command quickly and withstood a challenge by Weigang to win by half a body length.

The winning time of 59.00 was the second fastest of all time behind Meagher's phenomenal 57.93 in 1981. It gave her an individual triple—she also won the 100 free and 100 back—along with a gold in the 400 free relay to equal the  $\blacktriangleright$ 

Games' record output for a female swimmer. Kornelia Ender, also of the GDR, captured four gold and a silver at the 1976 Montreal Games.

Asked the secret to her domination, Otto answered, "The team is responsible for my success, and I don't have any secrets. I just train like all the others at home. Perhaps my success comes from trying to remain calm before an important final. It's there I might have a slight edge.

Otto did very little training early this year while completing her college studies which is why she didn't swim as well before the Games. In the GDR trials, she placed second to Weigang. Also, she thought her momentum from earlier victories helped. "From a psychological point of view, I had an advantage due to my three gold medals," she said. "I didn't feel any pressure. However, I didn't think that I would be able to improve this much and set a European record."

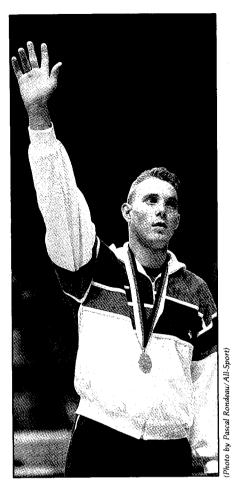
Although the powerful GDR women's team had won five out of seven events up to the 100 fly, Weigang's runner-up finish in a personal-best 59.45 was its first 1-2 sweep. Hong placed third with an Asian record of 59.52.

Meagher, the defending gold medalist and holder of eight of the top 10 times going into the meet, was last to the turn (29.20) and ended up seventh in 1:00.97, over a second off her U.S. trials' time.

"I felt ready to go this morning and did a poor time (1:01.48 to qualify eighth) that shocked me," said the 23-year-old Meagher. "I went out trying to stay easy and go long in the final, and that's what I did."

U.S. assistant coach Skip Kenney, who had been training Meagher during the Olympic training camp, analyzed, "The snap in her stroke and hand speed just weren't there. She's put a lot of her training emphasis on the 200 fly. We've done a lot of pace work even up to the day before this race. I felt at the finish she could have turned and done another 100."

Janel Jorgensen, added to the U.S. team when trials' winner Angel Myers was disqualified for use of a banned substance, placed fifth in 1:00.48. —By Russ Ewald



#### Men's 200 Breast

Championship Finals—Sept. 23						
Joszef Szabo, HUN	30.57	1:04.81	1:38.99	2:13.52		
Nick Gillingham, GBR	30.45	1:04.92	1:39.25	2:14.12		
Sergio Lopez, ESP	31.10	1:05.52	1:40.15	2:15.21		
Mike Barrowman, USA	30.85	1:05.65	1:40.71	2:15.45		
Valeri Lozik, URS	29.98	1:03.86	1:38.75	2:16.16		
Vadim Alexeev, URS	30.49	1:04.73	1:39.71	2:16.70		
Jon Cleveland, CAN	31.52	1:06.63	1:41.76	2:17.10		
Peter Szabo, HUN	31.31	1:05.96	1:41.19	2:17.12		

Although Mike Barrowman stunned the swimming community with a near world record in the 200 breaststroke at the Olympic trials in Austin, Texas, and was seeded first coming into the Games, Joszef Szabo was still seen as the man to beat here. The Hungarian had dominated the world since setting the European record and winning the event at the 1986 World Championships in Madrid, Spain. Szabo lowered that mark last year at the European Championships with a 2:13.87. Barrowman's swim at trials was a 2:13.74.

Both swimmers incorporate a rolling-style breaststroke, the source of which is identical. Barrowman's Curl Swim Club coach, Joszef Nagy, is a Hungarian who had worked with Szabo, and then taught Barrowman the same thing. But as this race unfolded, it was Szabo that rolled to the win, while Barrowman finished only fourth.

Soviet swimmer Vadim Lozik took the race out like a sprint and was leading the field by nearly a second at the 100. He was unable to maintain that pace, however, as Szabo swept by him at the start of the final 50, and other swimmers followed suit. Lozik ended up fifth.

Szabo's winning time of 2:13.52 again lowered the European record, but was shy of the 2:13.34 that Canada's Victor Davis swam at the Los Angeles Olympics. Missing the time, Szabo said, didn't matter.

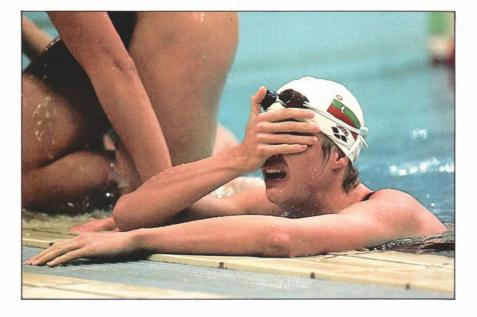
"The important thing was winning," he said. He was happy just to be in the race. Last December, the Olympics seemed very far away to the Hungarian, and having just undergone knee surgery for a cartilage problem, he wondered if he would be in Seoul at all. The surgery had kept him out of the water for four weeks and, he said, "It was indeed hard to regain my previous form. As an indication of my problem, a mere month ago, at the national championships, I was only fourth."

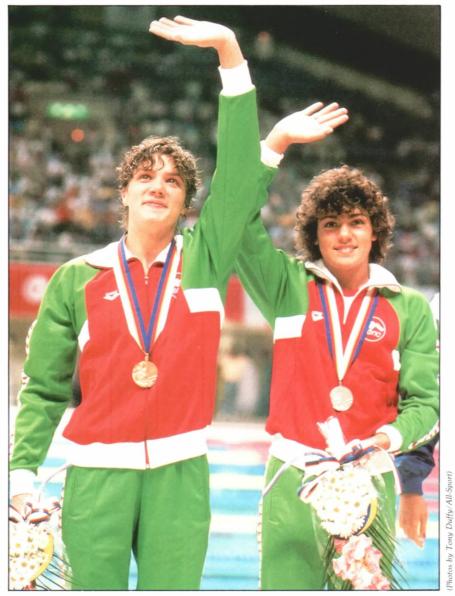
On the other hand, Szabo had swum a 2:16.70 at U.S. nationals in March, and after a fourth place in the 400 IM here, it was obvious his stroke was not suffering. Nor was the stroke of British swimmer Nick Gillingham, who blasted to a national record of 2:14.12 for the silver medal.

"I can't believe the Russians went out so quick," Gillingham said. "But I knew Szabo was the man to beat; he's very strong on the last 50. I just didn't have quite enough (at the end), but I'm completely happy. I mean, to be an Olympic gold medalist—I mean silver," he laughed, correcting himself. "See, I'm still trying to get used to this."

-By Mark Muckenfuss

Szabo (above) was the favorite in the 200 breast, but Dangalakova surprised herself when she and Frenkeva (right) went 1-2 in the 100 breast.





#### Women's 100 Breast

Championship Finals-Sept. 23		
Tania Dangalakova, BUL	31.90	1:07.950
Antoaneta Frenkeva, BUL	32.43	1:08.74
Silke Horner, GDR	31.58	1:08.83
Allison Higson, CAN	32.18	1:08.86
Elena Volkova, URS		1:09.24
Tracey McFarlane, USA	33.02	1:09.60
Xiaomin Huang, CHN	33.64	1:10.53
Annett Rex, GDR	33.04	1:10.67

A year ago, Bulgaria's Tania Dangalakova gave birth to a baby girl, Anna. After tonight's 100 breast finals, Tania will have something to show her grandchildren—an Olympic gold medal.

Dangalakova, married since 1984, still swam under her maiden name of Bogomilova until this year. Her husband, Jorgi, is also her coach.

After the 1986 World Championships where she placed third in the 100 breast and second in the 200 breast, Tania took a year off from competitive swimming to have a baby, born in June 1987.

But her comeback wasn't all that easy.

She still had to have surgery related to the pregnancy in October 1987 with the Olympics looming only a year away.

"I started training really hard for the Olympics after the new year," Dangalakova said, "so I've only had about eight months of real hard training."

Asked if having a baby provided motivation for her performance in Seoul, she first shook her head, then reconsidered, "It was in a sense. After I gave birth to a baby, I feel that most swimmers would quit swimming, but I wanted to prove that I could still swim well."

Coming into finals, Dangalakova felt the race would be between her and the German Democratic Republic's Silke Horner for the gold. The two tied as the prelim's top qualifiers at 1:08.35—a full second to 2<sup>1</sup>/<sub>2</sub> seconds ahead of the field.

Horner, 23, had already won the Olympic gold medal in the 200 breast while Dangalakova finished fourth. Horner was the current world record holder (1:07.91), the European champion, the fastest in the world in 1987 and in quest of a second gold medal.

Dangalakova said, "I felt very easy 🕨

this morning (in prelims), so I expected a world record in the evening."

It appeared that way after 50 meters as Horner was nearly a halfsecond under her world record split (31.58 to 32.00). Dangalakova, however, was right behind in 31.90, also under the world record pace—the only two swimmers under 32.00.

The second 50, however, was a different story. Horner was obviously hurting as Dangalakova kept closing the gap with each stroke. She finally caught Horner with about 20 meters to go and touched in 1:07.95, a new Olympic record and 4-hundredths off the world record.

"I told my coach before finals I would win a medal," Dangalakova said, "but I did not specify which one. Today my dream came true, and this is a victory for the Bulgarian people."

Bulgarian teammate Antoaneta Frenkeva, 17, also passed Horner for the silver medal with a 1:08.74, giving Bulgaria its first 1-2 finish ever in Olympic swimming. Horner just did have enough to win the bronze at 1:08.83 as Canada's Allison Higson finished 3-hundredths out of the medal picture.

Asked through an interpreter how she felt the second 50, Horner answered very graphically, but the interpreter said, "You'll have to find a better word that's fit for publication."

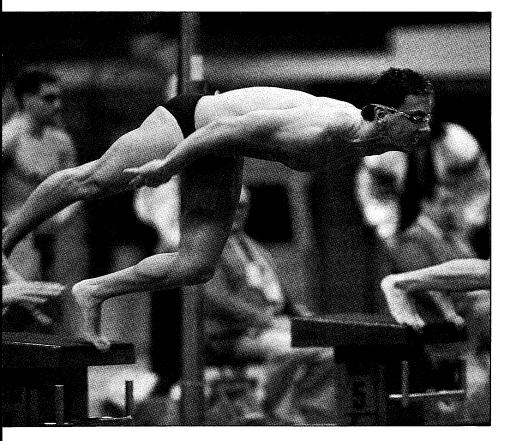
Needless to say, she was struggling the last 50. "Maybe I started out too fast," she said.

Only one American swimmer made it to the final 8. Tracey McFarlane finished sixth at 1:09.60, off her 1:08.91 national record set at trials. Susan Johnson placed 13th overall with a 1:11.08 in the B finals, also slower than her 1:09.61 at trials.

-By Bob Ingram

#### Men's 400 FR

Championship Finals	-Sept. 23	3		
USA	49.63	1:39.38	2:28.72	3:16.53w
(Jacobs, Dalbey, Jag	er, Biondi	)		
URS	50.24	1:39.54	2:28.81	3:18.33
(Prigoda, Bachkatov,	Evseev, 1	'kacenko)		
GDR	59.25	1:39.95	2:30.30	3:19.82
(Richter, Flemming,	Hinneburg	, Zesner)		
FRA	49.97	1:40.06	2:30.10	3:20.02
(Caron, Kalfayan, Ne	uville, Gut	zeit)		
SWE	50.58	1:40.58	2:31.05	3:21.07
(Johansson, Werner,	Holmquis	t, Titus)		
FRG	50.66	1:40.66	2:31.06	3:21.65
(Gross, Fahrner, Zikt	harsky, Si	tt)		



46 Swimming World/November 1988

 GBR
 51.36
 1:41.56
 2:31.89
 3:21.71

 (Fibbens, Foster, Lee, Jameson)
 ITA
 50.51
 1:40.82
 2:32.01
 3:22.93

 (Gleria, Lamberti, Rampazzo, Ceccarini)
 Generational and the second and the

Nobody sprints like the Americans do.

If there is one bastion of United States swimming that remains untouched, this is it. Even without Matt Biondi, American depth is such that the United States would probably have still won the relay. With Biondi, they were untouchable.

Even the USA's "B" team turned in the third fastest time overall with a top qualifying time of 3:19.52 in prelims.

To show just how much depth the United States has, Coach Richard Quick was able to rest three members of his front-line relay team.

With Biondi, Chris Jacobs and Tom Jager (the top three finishers in the 100 free at the U.S. trials in August) resting for finals, Brent Lang, Doug Gjertsen and Shaun Jordan joined the fourth member of the "A" team, Troy Dalbey, in the prelims.

Lang led off in 50.18, followed by Gjertsen's 49.64, Jordan's 50.19 and Dalbey's 49.51 to lead runner-up qualifier USSR by 37-hundredths.

In finals, Jacobs—fresh from the silver medal in the 100 free—led off the United States in 49.63, giving the American team a nearly half-second lead over the rest of the field. Troy Dalbey split 49.75, followed by Tom Jager's 49.34, but the Soviet team was gaining ground. By the time Jager hit the wall, the U.S. was a mere 9-hundredths ahead of the Soviet Union.

But now it was Matt Biondi time. And while Vladimir Tkacenko split a respectable 49.52, it was no match for Biondi's blazing 47.81, the third fastest split ever swum, capping the fastest ever 400 free relay. The U.S. team beat the three-year-old world record of 3:17.08 with a 3:16.53. The Soviets finished in 3:18.33, while the East Germans took the bronze with a 3:19.82.

Jacobs (left) got the USA off to a fast start, and Biondi (congratulated by Jager) finished even faster in their world record 400 freestyle relay. The win was a needed boost for the U.S. Olympic team, whose spirits were down following a night of less than ideal performances.

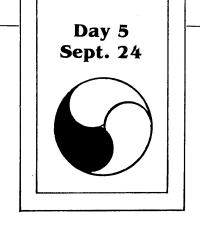
"This was an off night for us," Jager, a team co-captain, said. "But we've got some great days coming up. I think the (U.S.) team is a little scared, and that's maybe why they didn't do as well as they could have."

Tkacenko said he and his comrades were pleased with their silver medals.

"Before the finals we understood pretty well that the Americans were a very strong team," he said. "We knew it would be very difficult to defeat them. Still, I think we did very well to break the European record, and I think we're very satisfied."

In terms of overall team performance, the U.S. swimmers could not say the same. So far, outside of Janet Evans, Biondi and a few others, the rest of the team was struggling. Very few swimmers were even matching their best times. "But that's going to change," Jager said. "Things are only going to get better."

-By Mark Muckenfuss

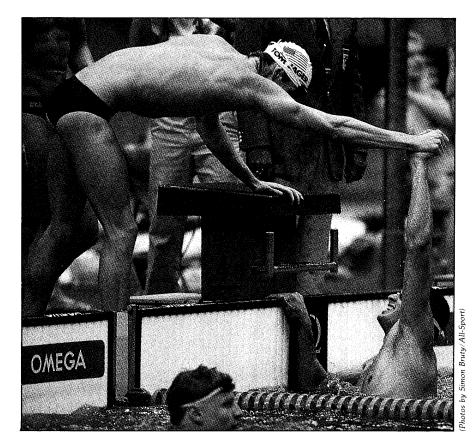


#### Women's 200 IM

Championship Finals—Sept. 24							
Daniela Hunger, GDR	28.97	1:03.18	1:42.08	2:12.590			
E. Dendeberova, URS	29.78	1:03.55	1:41.39	2:13.31			
Noemi Lung, ROM	30.34	1:03.67	1:43.57	2:14.85			
Jodie Clatworthy, AUS	29.99	1:04.83	1:44.31	2:16.31			
Marianne Muis, HOL	30.00	1:04.08	1:45.07	2:16.40			
A. Patrascoiu, ROM	29.51	1:03.28	1:44.46	2:16.70			
Li Lin, CHN	29.46	1:04.16	1:45.04	2:17.42			
W. Hedgepeth, USA	28.98	1:02.92	1:45.97	2:17.99			

While golden girl Kristin Otto, 22, will probably retire following the Olympics, the German Democratic Republic has another star on the horizon in 16-year-old Daniela Hunger.

The Berliner is equally adept in the



sprints and individual medley. She was ranked No. 2 in the world in the 50 last year (although finishing just third at this year's GDR trials) and earned a gold medal earlier in the week on the 400 freestyle relay and bronze in the 400 IM.

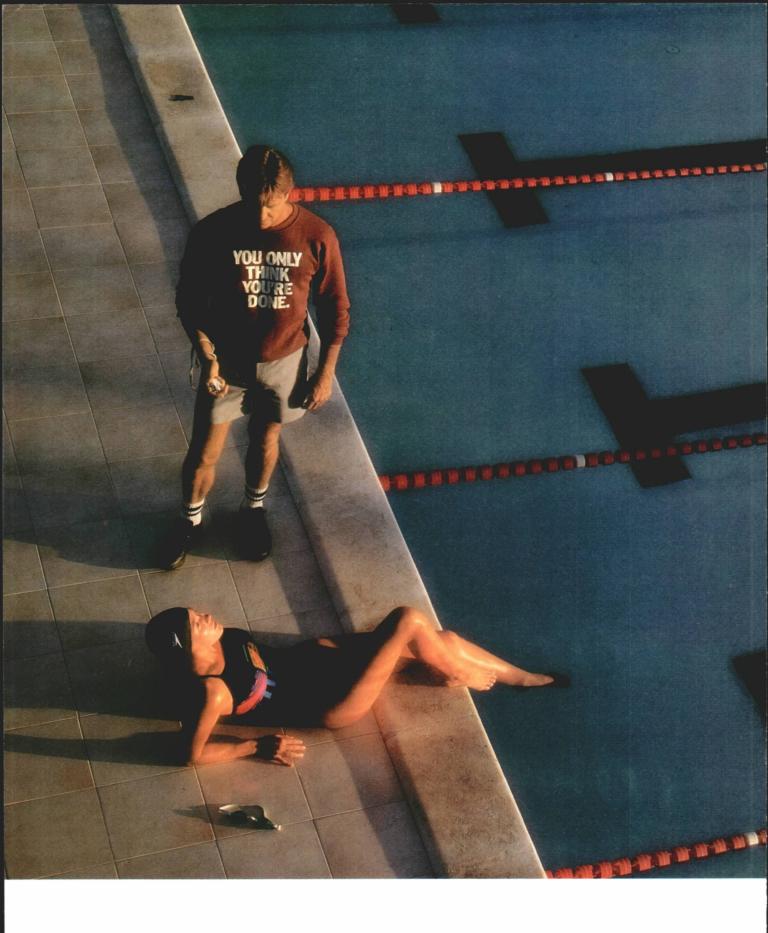
More impressively, Hunger reached the top in the world in the 200 IM where she won a second gold with an Olympic-record 2:12.59, bettering the mark of 2:12.64 set by Tracy Caulkins in 1984. The winning time, fifth-fastest in history and quickest in four years, ranks the 5foot-9, 140-pounder No. 3 on the all-time list behind world record holder Ute Geweniger (2:11.73) and Petra Schneider (2:11.79), two former GDR greats.

Hunger held a slight lead after the fly leg (28.97) but gave way on backstroke to the USA's Whitney Hedgepeth, whose 33.94 lap put her ahead (1:02.92) halfway through the race. On breaststroke, the Soviet Union's Elena Dendeberova bolted in front off a 37.84 split. Hunger retained second, 69-hundredths back, as everyone passed the struggling Hedgepeth by 150 meters. On the final lap, the young GDR standout sped past (30.51 free) the 19-year-old Soviet swimmer and won by half a body. Dendeberova's runner-up time of 2:13.31 set a USSR record.

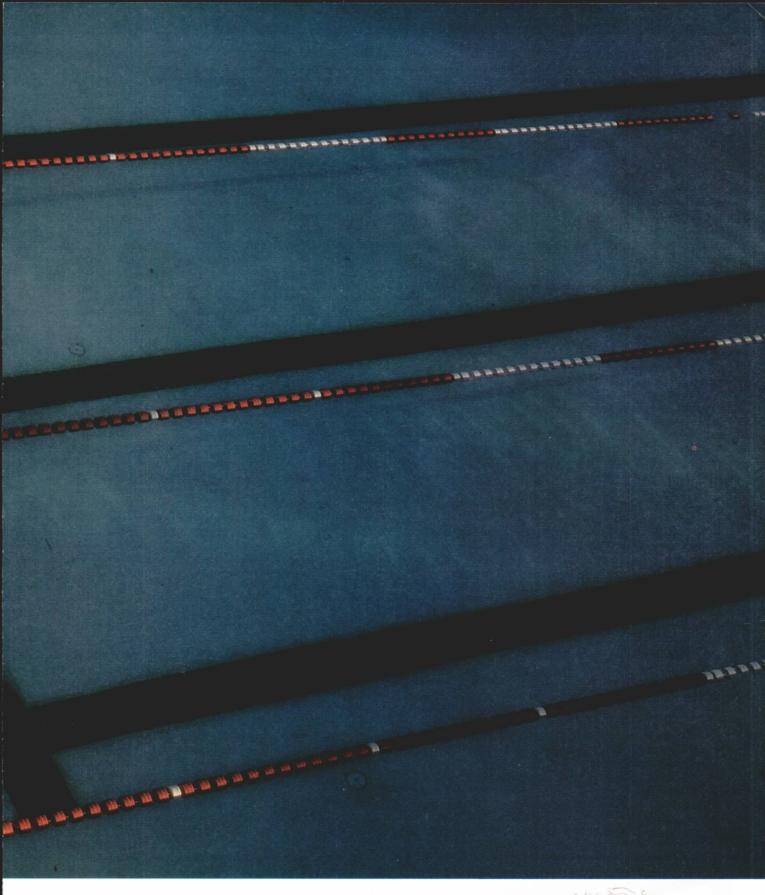
"I did not break the world record because the breaststroke and backstroke legs were not the best," said Hunger. "Next year, my goal is to break the record."

Noemi Lung, the 400 IM silver medalist from Romania, placed third in 2:14.85 while Hedgepeth finished last in 2:17.99. Hedgepeth, a 17year-old high school senior from Colonial Heights, Va., was fortunate to make the final, qualifying eighth only after the other U.S. entry, Mary Wayte, was disqualified in the heats. Wayte had swum a personal-best 2:15.77 for the third-fastest time of the morning, but was eliminated for a dolphin kick on breaststroke.

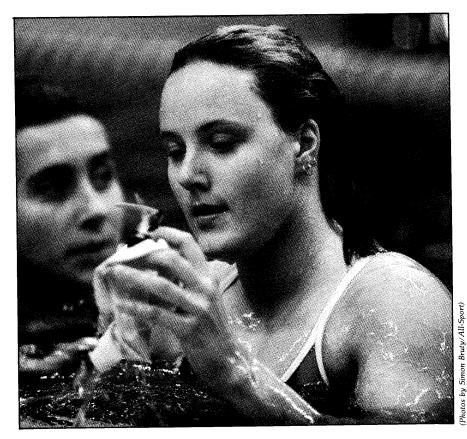
"I only remember my arm pull, but all the American coaches—they may be biased—told me it was a legal kick," said Wayte. "I've been swimming that breaststroke since 1983 and hadn't been disqualified before. The call was made by a judge from Morocco. I wonder how many ►











meets he judges."

Hunger's teammate, Kathleen Nord, scratched from the heats to rest an injured knee in order to swim Sunday in the 200 fly.

Otto, the 1986 world champion, has not competed in the 200 IM since then. She said, "I can't swim all the events." —By Russ Ewald

#### Men's 200 Fly

Championship Finals—Sept. 24								
Michael Gross, FRG	25.94	55.39	1:25.53	1:56.940				
Benny Nielsen, DEN	27.12	57.05	1:27.65	1:58.24				
Anthony Mosse, NZL	26.60	56.34	1:27.07	1:58.28				
Tom Ponting, CAN	26.98	57.39	1:28.16	1:58.91				
Melvin Stewart, USA	26.69	57.00	1:27.50	1:59.19				
David Wilson, AUS	27.08	57.59	1:28.15	1:59.20				
Jon Kelly, CAN	27.35	57.67	1:28.34	1:59.48				
Anthony Nesty, SUR	26.79	56.91	1:28.15	2:00.80				

"It was a question of all or nothing today."

West Germany's Michael Gross, 24, had already missed medal opportunities in two of his three premier events, the 200 free and 100 fly. The 200 fly was his last chance to medal individually, and he made the most of it.

"In my freestyle races, I have had stroke problems here in Korea," Gross said. "In the 100 meter fly, which was the second best of my career, I noticed that my stroke felt much better.

"Only the victory was important for me today."

Gross, the 1986 world champion and fastest swimmer in this event last year, came to Seoul with the fastest 200 fly of 1988—1:56.48, more than a second faster than the No. 2-seeded swimmer, Melvin Stewart, 19 (the youngest competitor in the event), of the United States.

The world record holder proceeded to qualify first in the morning prelims with a 1:58.09, 7-tenths ahead of Anthony Mosse, 23, of New Zealand.

In the finals, Gross' strategy was clear.

"I went out as fast as possible," he said. "I wanted to lead from the beginning."

With a one-second lead at 100 meters (55.39 to Mosse's 56.34) and a one-and-a-half to two-second lead at 150 (1:25.53 to Mosse's 1:27.07, Stewart's 1:27.50 and Denmark's Benny Nielsen's 1:27.65), Gross made sure the race would be for second.

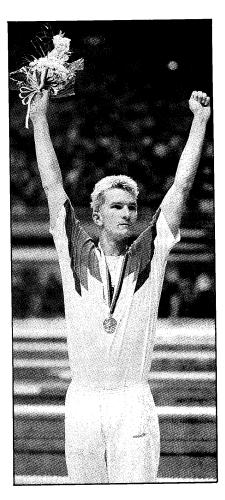
With splits under the world record pace at 50 and 150 meters, Gross fell

just short of breaking his world mark of 1:56.24 with a 1:56.94. He won by a body length over Nielsen, 1:58.24, and Mosse, 1:58.28. Stewart, ranked third in the world a year ago, dropped to fifth with a 1:59.19, well off his personal best of 1:57.89 from last March at U.S. nationals.

"I wasn't thinking that much about bettering my world record," Gross said. He did, however, set a new Olympic record, breaking the 1:57.04 set by Australia's Jon Sieben when he upset Gross for the gold at Los Angeles. Strangely enough, the two events Gross won in 1984 (200 free and 100 fly), he placed fifth in 1988. The event he lost last time around, he won.

"I think this race was really one of my best," Gross said. "I expected Anthony (Mosse) to go a 1:57. It proved to be good tactics to go out as fast as I did and be (nearly) two seconds ahead at the start of the last lap."

Mosse, who swam second to Gross



50 Swimming World/November 1988

for 150 meters, did not make 1:57 and slipped to third at the finish.

"I tied up coming home," Mosse said. "I was trying to catch Michael on the last lap. He just had too much of a lead. I thought I was making headway, then with 20 meters to go, I just tied up."

The 22-year-old Nielsen, fourth at 150 meters, said he's had quite a few close races with Mosse over the years, and it was Mosse who usually won by a few tenths of a second. This time, though, "I knew that I had one chance, and I took it. I gave it my all on the last lap."

It was that kind of effort which really impressed Mosse.

"There's been some tremendous racing at the Olympics," he said. "I thought this was a good race with individuals racing against each other instead of the clock."

—By Bob Ingram

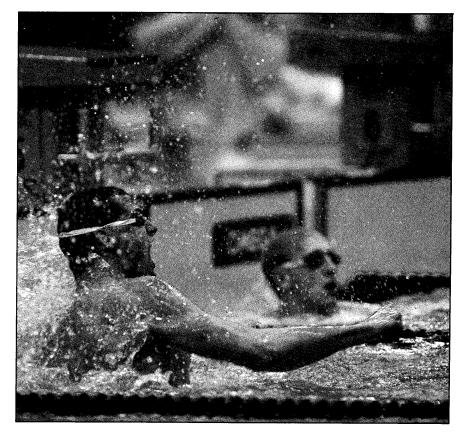
#### Men's 50 Free

Championship Finals—Sept. 24	
Matt Biondi, USA	22.14w
Tom Jager, USA	22.36
Gennadi Prigoda, URS	22.71
Dano Haisall, SUI	22.83
Stefan Volery, SUI	22.84
Vladimir Tkacenko, URS	22.88
Frank Henter, FRG	23.03
Andrew Baildon, AUS	23.15

The battle had raged for nearly four years. First it was Jager, then Biondi, then Jager again. Back and forth the title had gone, like a pingpong ball as the two American sprinters spurred each other on, each trying to hold onto the 50 meter freestyle title and the designation of being the fastest swimmer in the world.

Since setting the world record at the Pan Pacific meet last year (22.32), Jager had kept the title. He lowered the record to 22.23 at U.S. nationals last spring, and went 22.26 to win the event at Olympic trials. Biondi had never cracked the 22.30 barrier and had not gone faster than

Hunger and Gross (opposite page) won their first individual gold medals in the 200 IM and 200 fly on the next to last day of the meet, while Biondi (above) collected his fourth gold and sixth medal in the 50.



22.42 since the summer of 1987. In this highly psychological war zone, Jager had the definite mental edge.

But Biondi had some tricks up his sleeve. He had been working on his 50, particularly on his start. Jager, lightning fast off the blocks, always jumped to an early lead on Biondi, and it was forever a game of catchup for the latter. During Olympic training camp, however, Biondi had been working on his starts, specifically his "breakout" time (the time period from the sound of the gun until breaking the water for the first stroke), and had made marked improvement. He had recorded 50 times at training camp that were faster than his personal best of 22.33. There was definitely going to be a race here.

When the gun sounded and the swimmers sprung from the blocks in unison, Biondi broke to the surface nearly a half body length ahead of the field. By the 25-meter mark, Jager was even with him, but the official world record holder (Peter Williams' 22.18 is not recognized since he is South African) was in trouble. The second half of the race had always been Biondi's. Jager had to be in front, not just even, at the halfway point. As the two Americans steamed toward the finish, Jager watched Biondi pull ahead and finish in 22.14, setting a world record, while he hit the wall at 22.36 for the silver.

"I have been working on my breakout times," Biondi said, "and I feel I did that the best probably that I've ever done, tonight." Another point he has worked on, he said, was "swimming the first two strokes long and building into (the race). The problem I've had is trying to race it rather than swim it; that's really what I concentrated on tonight—just staying long those first few strokes rather than hitting it right away."

"It was a great race," Jager said of Biondi's record performance. "He swam an incredible race. I gave it my all, and I'm sure he gave it all he had, and that's just the way it came out."

The nature of the 50 is so tenuous, Biondi said, that "if the gun had gone off 10 seconds later, it might have come out different. Tom has clearly dominated the 50 the last few years, and we've competed so many times I can't (keep track).

"I will say that between Tom and I, I don't think there's a better competition anywhere else in athletics. ►

The American record, between us, has gone three or four times, and now the world record has changed hands. He had, then I had it, then he had it and now I have it back. I don't doubt that he'll lower it again."

Jager agreed, saying he, unlike Biondi, was not retiring from the sport.

"I'll be back in four years," he said. "I believe in myself and I have goals I haven't reached yet."

As far as goals, Biondi was now one race away from capturing seven Olympic medals. The 50 gave him a new total of four golds, a silver and a bronze. He was asked what it meant to have six Olympic medals.

He thought for a few moments. Then, smiling slightly, he said, "It means I need one more."

—By Mark Muckenfuss

#### Women's 800 Free

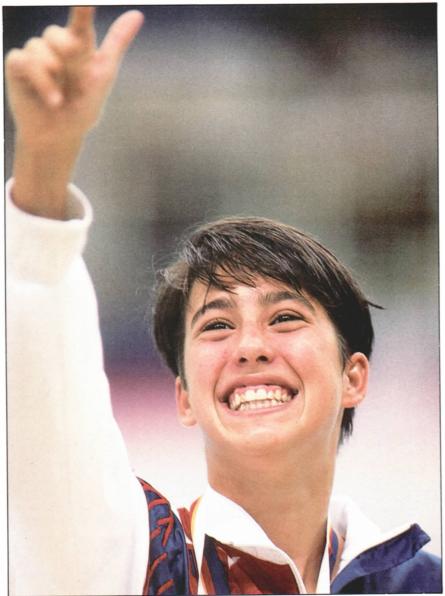
Championship Finals—Sept. 24						
Janet Evans, USA	1:01.13	2:04.04	3:06.76	4:10.06		
	5:12.68	6:15.60	7:18.40	8:20.200		
Astrid Strauss, GDR	1:01.47	2:05.03	3:09.06	4:12.96		
	5:15.56	6:18.48	7:21.38	8:22.09		
J. McDonald, AUS	1:02.76	2:06.97	3:11.03	4:14.73		
	5:17.27	6:19.81	7:22.15	8:22.93		
Anke Mohring, GDR	1:01.84	2:05.87	3:10.05	4:14.01		
	5:17.10	6:19.80	7:22.57	8:23.09		
Tami Bruce, USA	1:02.53	2:06.90	3:11.10	4:15.08		
	5:18.71	6:22.99	7:27.22	8:30.86		
Janelle Elford, AUS	1:01.97	2:06.06	3:10.27	4:14.48		
	5:18.49	6:22.99	7:27.55	8:30.94		
I. Arnould, BEL	1:03.41	2:07.92	3:12.73	4:17.73		
	5:22.37	6:27.51	7:33.13	8:37.47		
Strumenlieva, BUL	1:01.44	2:05.94	3:10.78	4:15.80		
	5:21.70	6:28.22	7:35.64	8:41.05		

Janet Evans has suffered only one long course defeat over the last two years. A little more than two weeks after setting a world record (8:22.44) at the nationals last summer, she ran out of her incredible energy supply and lost to Australia's Julie McDonald in the 800 at the Pan Pacific Championships. The petite American didn't just get beat, she was crushed by almost 10 seconds, able to do just 8:33.11.

"Between nationals and the Pan Pacs, I tried to hold my taper," recalled Evans. "I didn't, though, and died (in the race)."

There were other factors, too. The meet was held in Brisbane, Australia, hometown of Tracey Wickham, whose record Evans had just broken. Consequently, the Aussie press wouldn't leave her alone when she arrived Down Under. "They were

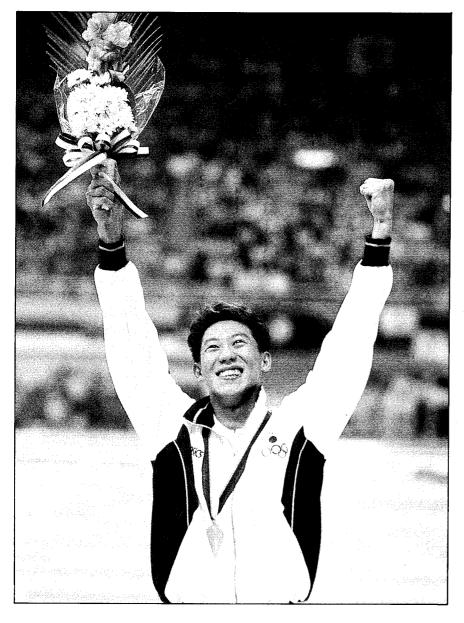
52 Swimming World/November 1988



nosey, pushy and very nationalistic," Evans summed up. She also didn't take to the Aussie food at the training table buffet with its heavy use of gravy and sauce and lost 10 pounds during her stay. Her coach, Bud McAllister, didn't accompany her, either, not making the U.S. staff for the Pan Pacs. This prompted U.S. national coach Richard Quick to get as many coaches of the Olympic qualifiers to the Games as possible—all but three came to Seoul.

With McAllister at her side the entire time, Evans went straight up in yardage immediately following the trials and didn't come down until a couple of days after arriving in Seoul, Sept. 8. She forced herself to eat, concentrating on rice, rolls and "chicken that wasn't that good." And because the Olympics feature so many stars, the media demand wasn't as bad. She was ready for her rematch with McDonald and motivated after doing a slow burn when the Aussies' coach, Laurie Lawrence, pranced and danced following her defeat in Brisbane.

In the Olympic final, competition also figured to come from the two GDR swimmers, two-time European champion Astrid Strauss and former world record holder Anke Mohring. Evans went out 4-tenths slower (1:01.13) than at the trials, yet no one stayed with her. By the 200 turn, she led by a body and lengthened her advantage to two bodies at 300 meters. She held a five-meter lead



over Strauss with Mohring and McDonald hanging another second back midway through the race, although sticking to her new strategy of going out more controlled (4:10.06) which put her  $2\frac{1}{2}$  seconds behind world record pace. Negative splitters Strauss and McDonald went to their kicks in the last 200 but made up only a couple of meters. Evans captured a third gold medal in an Olympic record time of 8:20.20,

Evans (opposite page) had reason to smile when she won her third gold medal in as many tries—as did Suzuki when he upset Berkoff in the 100 back.

bettering the old mark of 8:24.95 by Tiffany Cohen in 1984.

"I thought it was going to be tougher than it was," said Evans, the first swimmer ever to complete the 400-800-400 IM triple. "I looked around at the 100 and no one was there."

For the first time ever, she evensplit an 800 in recording the third fastest performance ever. "In the trials (where she did 8:23.59), I took it out too hard," she said.

Strauss, who improved her personal best over four seconds (8:22.09) in holding off McDonald (8:22.93) for the silver, acknowledged, "Janet, after her fantastic 400 meter freestyle, was unbeatable in this race." —By Russ Ewald

#### Men's 100 Back

Championship Finals—Sept. 24		
Daichi Suzuki, JPN	25.97	55.05
David Berkoff, USA	25.47	55.18
lgor Polianski, URS	26.06	55.20
Sergei Zabolotnov, URS	26.38	55.37
Mark Tewksbury, CAN	26.66	56.09
Frank Baltrusch, GDR	27.22	56.10
Frank Hoffmeister, FRG	26.71	56.19
Sean Murphy, CAN	26.34	56.32

David Berkoff, who set the world record twice (in prelims and in finals) at the U.S. Olympic trials, had a good morning. He shattered his own world record of 54.91 with a 54.51 prelim swim, qualifying him more than a half-second ahead of anyone else in the race. It appeared that the United States would finally capture an individual gold that didn't have the name of Matt Biondi or Janet Evans attached to it.

But as Berkoff readied himself for the start of the race, settling into his crouch on the block, the gun went off. Before he could react, the rest of the field was already entering the water. The submarine starter, who always breaks the surface at about 40 meters out and well ahead of the field, was behind. As he dolphinkicked beneath the surface, he did gain an advantage, so that by the time he came up for his first stroke he was about a body length ahead of the field. But that lead was less than he was accustomed to, and it turned out not to be nearly enough.

As Berkoff emerged from his turn, Daichi Suzuki of Japan was at his hip, and as the two stroked toward the finish, Suzuki caught and moved ahead of Berkoff, winning the gold, 55.05-55.18, turning in the sixthfastest 100 backstroke ever. Igor Polianski of the Soviet Union, who had broken Rick Carey's five-yearold record in March of this year, and had lowered it twice before Berkoff shot into the 54s, wound up with the bronze in 55.20.

"I didn't think the start would be that fast," Berkoff said of his being caught off-guard. "But I'm usually slow off the blocks anyway, so it wasn't that much of a factor. I just felt a lot tighter tonight. Daichi is a great competitor and he swam a hell of a race tonight. The best I could do was second. I'm still very pleased with myself and with this whole season."

Suzuki said he was a bit stunned to be sitting with a gold medal dangling from his neck.

"I didn't think I would win the gold medal," he said. His fastest time coming into the Games was a 55.32. He went 55.91 in prelims, hardly an indication of his final time. "I can't really grasp this," he said. "I feel very happy for myself and my country."

And his country was happy in return. With breaststroke star Hiroko Nagasaki faltering, Suzuki provided Japan's only swimming medal in this Olympic Games.

-By Mark Muckenfuss

#### Women's 400 MR

Championship Finals	-Sept. 24	ļ			
GDR	1:01.03	2:09.23	3:08.74	4:03.740	
(Otto, Horner, Weiga	ng, Meissi	ner)			
USA	1:02.56	2:12.78	3:12.62	4:07.90	
(Barr, McFarlane, Jo	rgensen, V	Nayte)			
CAN		2:12.40	3:14.18	4:10.49	
(Melien, Higson, Ker	r, Nugent)				
AUS	1:03.43	2:13.92	3:14.79	4:11.57	
(Livingstone, Hooiveld, Alessandri, Van Wirdum)					
HOL	1:03.76	2:15.16	3:15.46	4:12.19	
(De Rover, Moes, van Bentum, Brienesse)					

Mary Wayte was asked to clarify a statement she made that the German Democratic Republic women swimmers were overrated.

"They're not overrated swimmers," she said, "but they're overrated by the American media. They make them out to be superhuman, then the press wants us to dominate.

"That puts too much pressure on us. It's just another hurdle for us.

"Certainly they (the GDR women swimmers) came into this meet No. 1 or 2, and they have proven that by the way they're swimming. I never said they were overrated, just that the U.S. press overrates them. There's a big difference . . . I think."

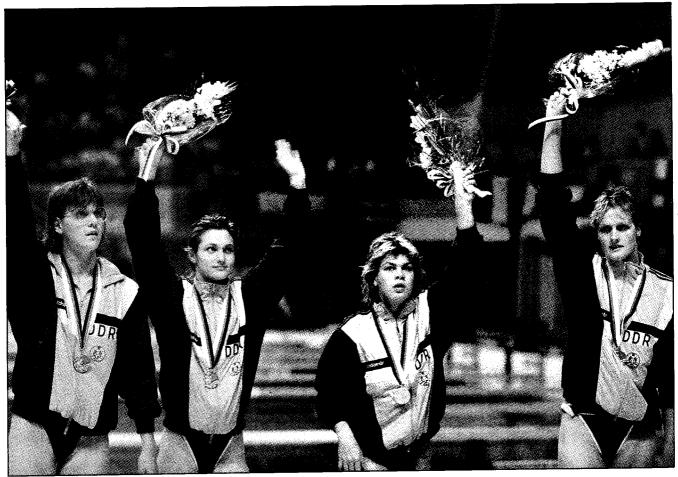
Overrated or not, the GDR women had to be "rated" the favorite in the medley relay. There couldn't be any pressure on the U.S. women because there was just no way they could beat their primary competition this side of a disqualification.

Consider the facts. All of the 100 stroke events had been swum at Seoul by the time the medley relay rolled around. The best times turned in by the GDR (including the best split from the 400 free relay) added up to a 4:03.90; the best of the U.S. came to 4:07.77.

In prelims, the GDR put together a team of Cornelia Sirch (1:02.34), Silke Horner (1:09.37), Birte Weigang (1:00.75) and Manuela Stellmach (56.07) to qualify first with a 4:08.53. The Americans were second at 4:10.38 with a team of Betsy Mitchell (1:02.66), Tracey McFarlane (1:10.33), Mary T. Meagher (1:01.64) and Dara Torres (55.75).

In finals, the biggest question for the GDR coaches was where to put Kristin Otto. After all, she had won the 100 back, 100 fly and 100 free.

They decided to put her in backstroke in place of Sirch while substituting Katrin Meissner (the girl with the fastest 100 free split, from their 400 freestyle relay) for Stellmach in freestyle.



The Americans substituted Beth Barr for Mitchell in the backstroke, Janel Jorgensen for Meagher in butterfly and Mary Wayte for Torres in freestyle since these were the swimmers with the fastest times or splits swum in Seoul.

And the final went just as planned. The GDR set a new Olympic record of 4:03.74, just 5-hundredths shy of the world mark set by the GDR in 1984. In fact, teams from the GDR have held the world record in this event since 1973. They never trailed as Otto led off in 1:01.03, followed by Horner's 1:08.20, Weigang's 59.51 and Meissner's 55.00.

The Americans easily captured the silver in 4:07.90, just off their American record of 4:07.75 set in 1986 at Madrid. Barr led off in 1:02.56. followed by McFarlane's 1:10.22, Jorgensen's 59.84 and Wayte's 55.28. They swam in the second position for all of the race except breaststroke when Canada's Allison Higson turned in a 1:08.15 (third fastest performer all-time) to put Canada ahead for a brief moment by 38-hundredths. On the same leg, Tania Dangalakova of Bulgaria (the gold medalist in the 100 breast) split 1:07.95, just off her best of 1:07.88 from 1986.

Canada took the bronze—its first medal of the meet—with a 4:10.49.

The GDR relay win also provided Otto with her fifth gold medal of the meet—three indivdidual and two relay.

"I'm very happy about my results," she said, "but I haven't realized the full meaning of winning five gold medals. I think it'll take some time to realize it."

Asked to analyze her five races, she said, "All of them were difficult. There was a certain amount of tension in each of them. Perhaps the 100 freestyle (her first gold medal) I will remember the most."

After the Games, Otto plans to retire. "I'll do something else other than swimming," she said.

-By Bob Ingram

When it came to the medley, Meissner, Weigang, Horner and Otto (left) contributed to a relay win, while Darnyi (right) did it by himself in both IMs.

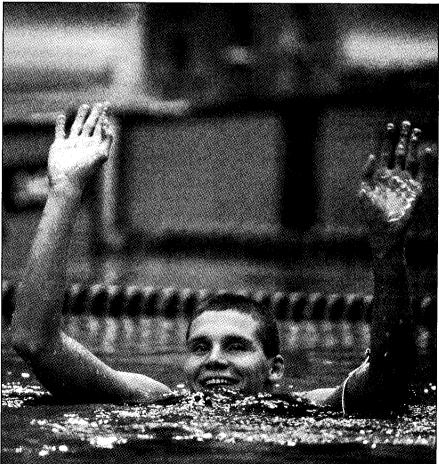


Championship Finals—Sept. 25						
Tamas Darnyi, HUN	27.06	57.33	1:32.44	2:00.17w		
Patrick Kuhl, GDR	26.59	57.56	1:32.37	2:01.61		
Vadim Yaroshuk, URS	25.60	56.24	1:32.20	2:02.40		
Mikhail Zubkov, URS	27.18	58.45	1:33.97	2:02.92		
Peter Bermel, FRG	27.29	58.31	1:34.19	2:03.81		
Robert Bruce, AUS	26.69	58.14	1:34.73	2:04.34		
Raik Hannemann, GDR	26.25	58.12	1:34.46	2:04.82		
Gary Anderson, CAN	27.10	58.23	1:35.63	2:06.35		

In the 400 individual medley, Hungary's Tamas Darnyi blew away Dave Wharton in their much-anticipated duel with a world record of 4:14.75. But there was no rematch in the 200 IM as the American record holder finished only ninth in the prelims in 2:04.64, 3.62 seconds off his best which was the second-fastest performance of all time.

"I didn't anticipate that swim," said Dick Shoulberg, Wharton's coach. "He had a great training camp. His attitude's been great. His health has been perfect. He did everything I asked. I just don't know what happened. It's what is known as a bad day at the mill."

In the final, though, Darnyi didn't have the race to himself. Soviet Vadim Yaroshuk blazed a 25.60 fly leg and remained in front through the back (56.24) and breast (1:32.20) laps. A strong breaststroke (34.81) elevated GDR ace Patrick Kuhl to second, only a shoulder-length back. Then, Darnyi, who had stuck close throughout and was almost even with Kuhl, took over with his vaunted freestyle finish. He surged past the leaders and won by more than a body length in 2:00.17, lowering his world record by 39-hundredths. His final split was a smok-



ing 27.73.

"If the race had been closer (the last lap), I could have swum under two minutes," said the 21-year-old Darnyi, who revealed he will continue swimming at least through the next Olympic Games.

Hungary's only double gold medalist will receive a half-million forints (\$10,000) less taxes from his government for the victory.

Tamas Szechy, the longtime Hungarian coach who trains Darnyi, said, "If Dave Wharton was in great shape, he (Darnyi) and Wharton would have distanced the field by 10 meters,"

Kuhl also passed the tiring Yaroshuk to pick up the silver medal and set a GDR record of 2:01.61. Yaroshuk was third in 2:02.40.

-By Russ Ewald

#### Women's 200 Fly

Championship Finals-Sept. 25							
Kathleen Nord, GDR	29.59	1:02.21	1:35.46	2:09.51			
Birte Weigang, GDR	28.61	1:00.60	1:34.15	2:09.91			
Mary T. Meagher, USA	29.94	1:03.07	1:36.34	2:10.80			
Stela Pura, ROM	30.07	1:03.27	1:37.01	2:11.28			
Trina Radke, USA	30.36	1:03.94	1:37.56	2:11.55			
Kiyomi Takahashi, JPN	30.33	1:03.84	1:38.16	2:11.62			
Xiaohong Wang, CHN	30.28	1:03.75	1:37.67	2:12.34			
C. van Bentum, HOL	30.00	1:03.77	1:37.85	2:13.17			

This was the swan song of Madame Butterfly, Mary T. Meagher. Her final performance on the vast stage of international swimming. It was time for the curtain to drop on the career of the greatest female butterflyer ever. Just one more race.

A year ago, Meagher swept the butterfly events at the NCAAs and then settled into a brief retirement, one that was never intended to be permanent. When she reappeared on the scene last spring for the indoor nationals, she won the 200 fly and placed fourth in the 100 fly with times that were less than impressive. At Olympic trials, she cracked the one-minute barrier in the 100 fly for the first time in two years to qualify second, and later (following Angel Myers' removal from the team) first. in that event. She was the top swimmer in the 200 fly, but her time of 2:09.13 was far from her best.

When Meagher struggled to a seventh-place finish here in the 100 fly with a time of 1:00.97, it began to become apparent that it would be a fight for her simply to medal in the 200, an event where, since setting the world record in 1981 (2:05.96), she had only been beaten once in a

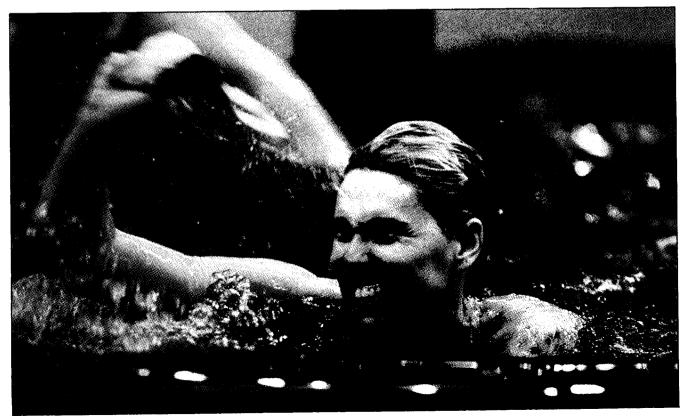
major meet, and that was in 1982. Now, however, her confidence seemed to be on the wane.

Birte Weigang, normally a fast first-half swimmer, outdid herself in the race, streaking to a 100 split of 1:00.60 (8-tenths ahead of world record pace), but paid the price on the back half ("I simply couldn't pull my arms through the water on the last lap"), as she lost ground, and the gold, to her East German countrywoman Kathleen Nord. Weigang did, however, hold off Meagher, who hit the wall on the first 50 in third and was never able to break out of that position. Weigang finished in 2:09.91, Meagher in 2:10.80 to win the bronze.

Nord said she was surprised with the gold.

"If Birte had gone out a little slower, I am sure she would have been able to last better." Her own time, she said, "leaves a little to be desired for a competition of this magnitude, but I am happy with it."

As for Meagher: "Well, I certainly didn't want to end this way. I am pleased with my career, but this time shows that it's time to go on to other things." Admitting to being very nervous coming into the race, Meagher



said she felt she had prepared herself as best she could. "I gave it everything I could (tonight), and that's all anyone can do."

—By Mark Muckenfuss

#### Women's 50 Free

Championship Finals—Sept. 25 Kristin Otto, GDR	25.490
Wenyi Yang, CHN	25.64
Katrin Meissner, GDR	25.71
Jill Sterkel, USA	25.71
Leigh Ann Fetter, USA	25.78
Tamara Costache, ROM	25.80
Catherine Plewinski, FRA	25.90
Karen Van Wirdum, AUS	26.01

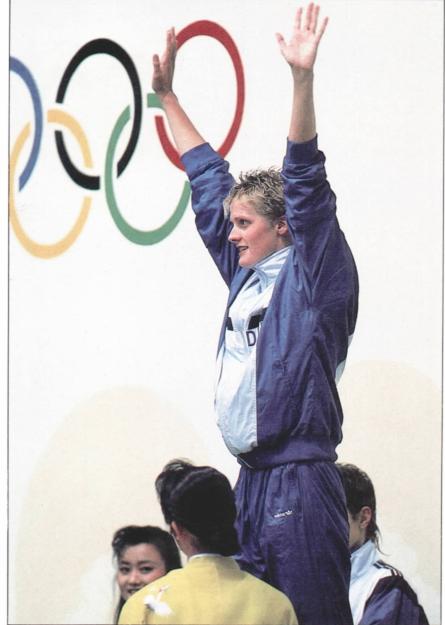
No one thought Kristin Otto would win six gold medals at the Olympic Games, including Otto herself. The German Democratic Republic swimmer didn't think much of her chances in the 100 butterfly. But the biggest surprise to her was gold medal No. 6 in the 50.

"I didn't think 25.5 (actually 25.49) would be fast enough to win this race," she said. "That is the same time that I swam in Madrid (at the World Championships) two years ago, only then I ended up second. I can't swim faster than 25.5. Perhaps my nerves were better today."

Otto is not only fast, she is a good analyst. Her chances in the 50 looked slim because the field featured China's Wenyi Yang, who set a world record of 24.98 earlier this year, and world champion Tamara Costache of Romania with six times better than Otto's best. In the heats, Otto qualified third (25.85) behind Wenyi (25.67) and teammate Katrin Meissner (25.77).

Two false starts—one when the gun failed to go off—probably prevented a fast time in the final. The race was up for grabs until the final few strokes when Otto pulled her 6foot-1-inch body in front to touch out Wenyi by 15-hundredths. Since this was the first time the 50 was held at the Games the winning time

Nord (left) outtouched teammate Weigang by 4-hundredths for gold in the 200 fly. When Otto (right) won the 50, she became the winningest woman at an Olympics with six golds—four individual and two relays.



established an Olympic record but was only 1-hundredth better than Otto's personal best. Costache, who earlier in the month went 25.15 at her nationals, did just 25.80 to finish sixth.

While Otto thought the false starts might have unsettled record holder Wenyi, the 16-year-old Chinese standout said they had no impact.

"I don't have any Olympic experience, so I am happy with the results," said the silver medalist.

Mu Xiang Hao, who coaches Wenyi, explained, "I think she was very tired. She swam a lot of races in this meet, and she is very young and inexperienced." Meissner, who tied for third with Jill Sterkel at 25.71, believed the maturity of her 22-year-old teammate may have been the difference.

"Well, my time is not particularly earth-shaking," said the 15-yearold, the youngest of the GDR swimmers. "Maybe the long delay affected me. Only Kristin did not appear to be bothered."

Sterkel, co-captain of the U.S. team with Tom Jager, was able to swim the 50 in the Olympics only in the wake of Angel Myers' disqualification. Sterkel had already made history just by being on the U.S. Olympic swimming team again, a record fourth time. She was also the oldest

Siefer SDORS THREE SUD SCIENCES OMEGA SWIM-O-MATIC 0SM 6 EVENT : 004 HEAT : 06 P 15.43:49.09M LL 15/07/85 ĤĤ L Ū Ν Ĥ RESULT ΕE Ρ 5 İ 1:08.320 1:09.22M Ţ **INHE** 36 1 1:11.081 47 1:12.260 1 **OFFICIAL** 8 1 1:14.14M 1:15.56M 1:15.84M TIMER 1:16.14# **OF THE XXIV OLYMPICS** 

## It's called the OSM-6. And Kiefer has it for you.

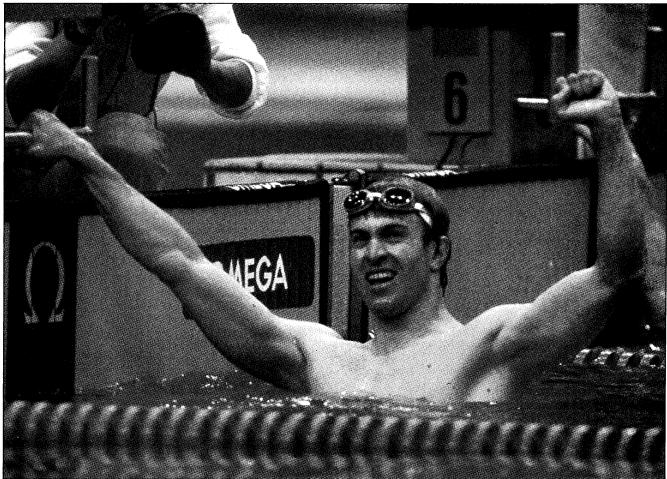


This rather special attachécase contains a computer, the OSM-6, which automatically times swimming events at all levels. Omega Electronics, a company known throughout the world for its quality products and its flawless timekeeping of the most prestigious sports events: the Olympic Games, World Championships, etc. Request the special documentation on the "OSM-6".



Kiefer Sports Timing Systems

1750 Harding Road, Northfield, IL 60093 (312) 501-4848, 800-322-5448 FAX: 312-501-4565



hoto by All-Sport)

member of this year's squad at age 27. And then to get a medal, too.

"I am pleased with my medal," she said. "Of course, everyone tries to win a gold medal, and that was my goal going into the race.

"After 22 years, one lap of the pool. That is what I said to myself on the starting block. I'm glad there weren't any gun false starts because I felt I had just one great one in me. I had no idea where I was in relation to the other swimmers. At the finish, I kept my head up and went for the wall."

Leigh Ann Fetter, who this year was a freshman at Texas where Sterkel was an assistant coach, finished just one place in back of her mentor in fifth with a time of 25.78.

-By Russ Ewald

It was the perfect culmination of Salnikov's (above) career when he won the 1500 with a time of 15:00.40. He now owns the event's five fastest times.

#### Men's 1500 Free

Championship Finals	S	F		
V. Salnikov, URS	36pt. 2 58.14		2:59.50	3:59.76
v. Jannkov, UNJ	5:00.14	6:00.41	7:00.60	8:00.67
		10:00.17	10:59.79	11:59.42
	9.00.02	12:59.01	13:59.19	15:00.40
S. Pfeiffer, FRG	58.45		3:00.04	4:00.55
S. FIEIIIEI, FNG	5:01.11	6:01.62	7:02.06	8:02.14
	9:02.07		11:02.35	12:02.61
	9.02.07	13:03.13	14:03.42	15:02.69
Unit Deserves ODD	50.10		2:59.77	4:00.34
Uwe Dassler, GDR	58.13			
	5:00.84	6:01.54	7:02.43	8:03.24
	9:04.27	10:05.68	11:06.71	12:07.47
	50.00		14:08.48 2:59.22	15:06.15
Matt Cetlinski, USA	58.09			3:59.52
	4:59.63	6:00.13	7:00.86	8:01.11
	9:01.80	10:03.15		12:06.03
D 11 1 DO1	50.40		14:09.08	
Podkoscielny, POL	58.48		3:00.71	4:01.61
	5:02.78	6:04.11	7:05.45	8:06.79
	9:08.20	10:09.66	11:11.13	12:12.57
Rainer Henkel, FRG	59.09	13:14.21 2:00.03	3:01.24	<b>15:14.76</b> 4:02.47
namer nenker, rnu	5:03.47		7:04.81	8:06.07
		10:08.07	11:09.36	12:11.47
	9.00.00	13:13.97		15:18.19
Kevia David CDD	58.70	1:59.87	3:01.21	4:02.72
Kevin Boyd, GBR				
	5:04.03	6:05.38	7:06.91	8:08.64
	9:10.24			
Doring Detric VUC	59.50		14:20.26 3:01.33	15:21.16 4:02.90
Darjan Petric, YUG				
	5:04.71	6:06.69 10:17.30	7:08.96	8:11.37
	9:14.04		14:33.64	
		13.29.18	14.33.64	19.37.12

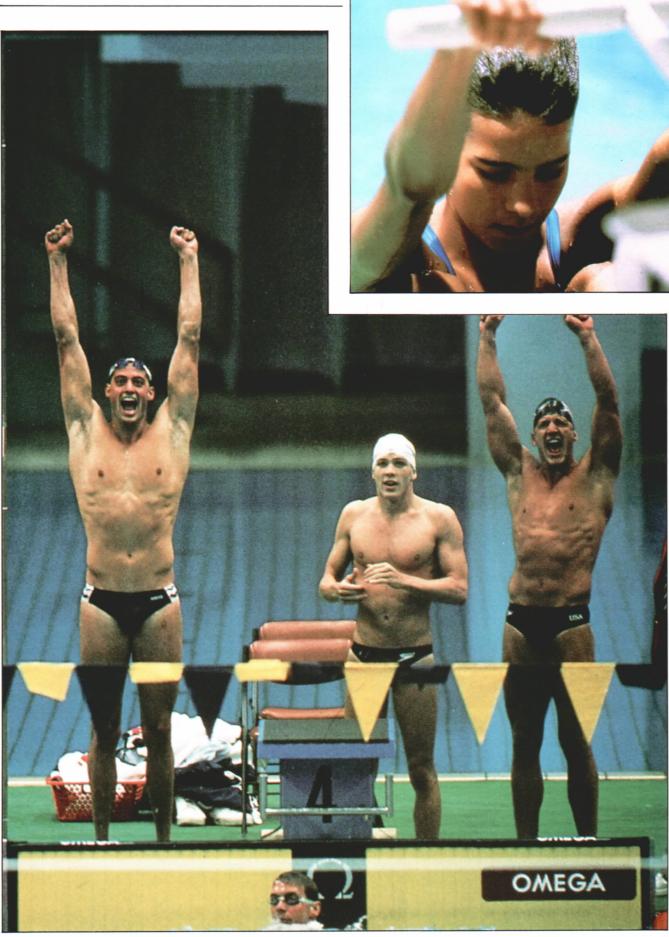
Vladimir Salnikov climbed from over the hill back to the top.

This is the man who was unbeaten in international competition in the 1500 free between 1977 and 1986. This is the only man to swim under 15 minutes in this event, and he's done it four times.

This, too, is the man who placed only fourth at the World Championships in 1986 and couldn't make finals at last year's European Championships.

Over the hill? Not by any means. The Soviet veteran went out in a blaze of glory by capturing the Olympic gold medal in 15:00.40, the fifth fastest swim all-time of which he owns all five. Finishing in second and in third were Stefan Pfeiffer, 22, of West Germany (15:02.69) and Uwe Dassler, 21, of the GDR (15:06.15).

Salnikov was easily the crowd favorite. When receiving his gold medal, he was given one of the longer and louder ovations. But even more moving was when he returned to the athletes village cafeteria later that night. When he entered the



Mik

room, some 200 to 300 athletes and coaches of all sports and countries gave the Soviet a spontaneous standing ovation.

"I am very happy for Vladimir about this victory," runner-up Pfeiffer said. "This is really the culmination of his career."

At 28, the culmination of Salnikov's career could have come years earlier with logical stopping points after the Olympic Games in Moscow in 1980 or the Friendship Games in Moscow four years later.

"(Those two meets) were realistic points to stop," Salnikov admitted, "but I still liked swimming. I just couldn't stop. I spent about 20 years in this sport. It's a big part of my life. I've had many exciting moments, and there's a happiness I feel in my victories."

But the inevitable was asked. Is he retiring now?

"Yes, I think so."

But before Salnikov made it official, he swam with most of the field for 600 meters, trailing American Matt Cetlinski by half a body length. At about 675 meters, he pulled even with Cetlinski and turned ahead of him at the 700 mark, 7:00.60 to 7:00.86.

From there it was all Salnikov, first swimming ahead of Cetlinski by about a body length at 900 meters, then an even bigger margin over Pfeiffer who passed Cetlinski for second at the 950 turn. Salnikov maintained splits of 1:00 with five 100s between 59.55 and 59.95.

Dassler, the eventual bronze medalist, caught Cetlinski just before 1400 meters and opened up a half body length lead over the American with 50 meters to go. Cetlinski churned furiously to the finish, gaining on Dassler with each stroke, only to be outtouched at the finish by 27-hundredths.

For Salnikov, the comeback was made complete with his second Olympic gold medal in the 1500, but it was a struggle.

Egerszegi, 14 (inset), became the youngest Olympic swimming gold medalist ever (200 back); Biondi, Berkoff and Schroeder teamed with Jacobs to win the medley relay. "It's difficult to explain, but some moments I felt I came to the point where I would never be at the top again," Salnikov admitted. "My wife (Marina) believed in me. In this victory, she was the most important part.

"I've been at the top for a very long time, but I didn't feel I did everything I could. Now I can retire with pleasure." —**By Bob Ingram** 

#### Women's 200 Back

Championship Finals-Sept. 25

K. Egerszegi, HUN	30.321:02.99	1:35.88	2:09.290
K. Zimmermann, GDR	30.831:03.59	1:37.03	2:10.61
Cornelia Sirch, GDR	30.201:02.79	1:36.47	2:11.45
Beth Barr, USA	31.341:04.98	1:38.72	2:12.39
N. Livingstone, AUS	31.651:05.14	1:39.58	2:13.43
Andrea Hayes, USA	31.591:05.66	1:40.23	2:15.02
Jolanda de Rover, HOL	31.811:06.04	1:40.87	2:15.17
Svenja Schlicht, FRG	32.231:06.61	1:41.54	2:15.94

Each Olympics seems to bring one future star to the forefront. This time it took until the final day when a 14year-old sprite from Hungary ousted the East Germans from the first-place platform, becoming the youngest swimming gold medalist in any Olympic Games.

The 5-5, 99-pound Krisztina Egerszegi made a quiet debut last year at the European Championships as a 12-year-old, where she placed fourth in the 200 back with a 2:13.46. Later in the year, at the U.S. Open, she lowered that time to a 2:11.86. In morning prelims she qualified second (2:11.01) behind East Germany's Cornelia Sirch, and it looked as though those standings would hold true for the final, when Sirch hit the 100 wall 2-tenths ahead of Egerszegi (1:02.79-1:02.99).

But the little Hungarian had more gas in the tank than her competitors realized. On the third 50, she blitzed past Sirch and led by nearly 6-tenths at the 150 mark. She broadened that distance even more on the final lap, as Sirch faded to third and Egerszegi finished 2:09.29-2:10.61 over Sirch's teammate Kathrin Zimmermann.

Egerszegi's time was the second fastest ever, establishing her as the reigning world champion in the stroke.

She seemed to take it in stride as she blushed and giggled shyly (like any 14-year-old would) through the press conference that followed the medal presentation. "Her nickname is 'Mouse,' " offered her coach, Laszlo Kiss. "That's because she is so shy."

"I'm very, very happy," Egerszegi said, when asked how she felt about being Hungary's first female gold medalist in 36 years.

The youngster had reportedly predicted two weeks before the race that she would break the 2:10 barrier, something only two other backstrokers, Sirch and Betsy Mitchell, have done. "I was not certain about it," she said, referring to her forecast, "but I wanted to be able to swim under 2:10."

Egerszegi's potential was probably best summed up by Sirch.

"She's a very good swimmer," Sirch said, "and she's also in very good shape. She's very young and I'm sure she has a great future before her. I'm certain she will break new ground in backstroke swimming."

Correction: She already has.

-By Mark Muckenfuss

#### Men's 400 MR

Championship Finals-Sept. 25 54.56 1:56.20 2:48.58 3:36.93w **HSA** (Berkoff, Schroeder, Biondi, Jacobs) 56.11 1:57.01 2:50.53 3:39.28 CAN (Tewksbury, Davis, Ponting, Goss) URS 55.35 1:56.88 2:50.22 3:39.96 (Polianski, Volkov, Yaroshuk, Prigoda) FRG 57.18 2:00.30 2:53.47 3:42.98 (Hoffmeister, Mayer, Gross, Zikarsky) ÌPN 55.87 1:58.62 2:52.80 3:44.36 (Suzuki, Nagahata, Miura, Ogata) AUS 57.85 2:02.86 2:56.28 3:45.85 (Wilson, McAdam, Sieben, Baildon) 58.26 2:01.66 2:56.14 3:46.55 HOL (Kroes, Dekker, Drost, Dybiona) DQ (Harper, Moorhouse, Jameson, Foster)

Japan's swimmers waved their flags. West Germany's swimmers came out dressed in mountain-climbing gear suitable for the Bavarian Alps. And the American swimmers came out dressed to kill . . . the world record, that is.

Before you could say, "Matt Biondi just won his seventh Olympic medal," the USA was on the attack to a 3:36.93 medley relay, smashing the world record of 3:38.28 that was turned in by the United States team of Rick Carey, John Moffet, Pablo Morales and Matt Biondi at Tokyo in 1985.

"Wow! Did you see those splits?" asked the USA's head coach, Richard ►



# Special gifts for serious swimmers!



NEW Malibu C Carepack only \$18.75 (\$15.00 with purchase of \$100.00 or more) Save up to 29% on these items through December 5th only!

AMF Voit Snorkel/Fins/Mask set • NIKE Aqua Socks • Body Drench • Speedo Neon Logo Towel • Speedo Convertible Beach Duffle Bag • Speedo Deck Duffle Bag • Arena Logo Towel • Arena LA Bag • TYR Bag • Pinettes and Key Chains • Gold and Pewter Earrings • Accusplit 930XP Watch

Special prices good through December 5th only. For Christmas delivery, orders must be received no later than December 5th.



Quick. "What a great way to finish this meet."

It was a tremendous way to finish the meet as David Berkoff, Richard Schroeder, Biondi and Chris Jacobs all had splits among the 10 fastest ever.

Berkoff (silver medalist in the 100 back and world record holder at 54.51) led off the USA quartet with a 54.56 backstroke—the fourth time he's been under 55 and still the only swimmer to crack the 55-second barrier. That gave the Americans nearly a full second lead over the Soviets as Igor Polianski touched in 55.35. The 100 back gold medalist, Daichi Suzuki of Japan, who swam a 55.05 in the individual event, could only muster a 55.87 in the relay to put his team in third.

Berkoff gave way to Schroeder, who had placed sixth in the 100 breast six days earlier.

"Rick is always a good relay swimmer," Biondi said of Schroeder, "and he was only 5-tenths from first in the 100."

Schroeder responded with the sixth fastest breaststroke split ever with a 1:01.64. Although the Soviet Union's Dmitri Volkov (third in the 100 breast) caught Schroeder at the 150 turn, Schroeder held off the Soviet to keep the United States in the lead after 200 meters, 1:56.20 to 1:56.88. Volkov had split 1:01.53 (fourth fastest all-time), while Canadian Victor Davis tied the fastest breaststroke split ever (by Great Britain's Adrian Moorhouse in 1987) with his 1:00.90. That moved Canada from fourth to third at 1:57.01.

Biondi, gold medalist in the 100 free and silver medalist in the 100 fly, was chosen to swim the butterfly leg with Jacobs anchoring since that combination was faster on paper than Jay Mortenson in the fly (sixth in the 100) and Biondi in free.

Without gold medalist Anthony Nesty in the relay, Biondi was the fastest flyer of the field. And his 52.38—second fastest all-time behind Morales' 52.31—proved it. The United States had now opened at least a body length lead over the Soviet Union, 2:48.58 to 2:50.22, which held a half body length lead over Canada at 2:50.53.

Freestyler Jacobs (second in the

100) said he knew the world record was within reach, so he "just wanted to get to the wall as soon as possible and have a real good swim." But as he waited on the blocks for Biondi, Jacobs admitted, "I had never been so scared in all my life. That was my first relay start here."

All Jacobs did was throw in a 48.35, the eighth fastest performance all-time and second fastest performer behind Biondi. Canada's Sandy Goss anchored in 48.75 as Canada overtook the Soviet Union for the silver medal with about 20 meters to go. Canada's 3:39.28 established a new Commonwealth mark, while the Soviet Union's 3:39.96 was a new European standard.

"I never felt worried," Biondi said afterward. "With Dave starting us off, we were already a second or more under the world record, and that's what we beat it by. Once he got it going, we had it in control."

Putting them in the position for the evening's climactic event were Berkoff, Schroeder, Mortenson and Tom Jager. Those four qualified the United States first in the morning prelims with a 3:43.00. Their respective splits were 55.69, 1:01.64, 54.46 and 51.21.

For Biondi, it was his seventh Olympic medal of the meet, five of which were gold. Only Mark Spitz has won as many medals in the same meet when he collected seven gold at Munich in 1972.

"It feels great," Biondi said when asked to review his performances. "I think it's going to take awhile to sink in. It's been a long week. It hasn't hit me yet, and when it does, I don't think I'll be able to sleep for a couple of days."

He talked of his high points (the 50 free) and low points (100 fly), but he seemed to enjoy the relays even more.

"I love relays," he said. "If you could have seen us four hours before we swam tonight, you'd know why. We had some fun times.

"This is the closest I've been to teammates, and that makes it more special." —By Bob Ingram

#### WHEN YOU'RE READY TO BE A WINNER . . .

Success in athletics is a result of both physical **and** mental training.

MDA is a set of 6 audio cassette tapes and workbook that will help you to master the skills that are vital to achieving success in your athletic endeavors.

Through the use of Guided Imagery, MDA will take you through your daily workouts, your next meet — and beyond.

A complete mental conditioning program that no serious athlete should be without!

#### About the Author

James Bennett, a pioneer in the area of sports psychology, has been consulting with athletes, coaches and teams for over 25 years. He has worked with athletes at all levels, from high school to world class and Olympic athletes and coaches, including those of the NFL, NBA, NASL and PGA.

#### I'M READY TO BE A WINNER!

Please send me \_\_\_\_\_ MDA Courses @ \$84.95 each (plus \$2.00 each P&H) Total enclosed \$\_\_\_

Name \_\_\_\_

Address .....

City/State/Zip\_\_\_\_\_ Allow 4-6 weeks for delivery.

Enclose checkMoney Order

Outside USA add \$5.00 all countries. Remit by International Money Order or foreign draft in U.S. Dollars.

MAIL TO: Swimming World, P.O. Box 45497, Los Angeles, CA 90045



### **GREG LOUGANIS**

As I announced my retirement from amateur diving on Sunday, October 2, at a press conference in Seoul, Korea, I was **very** saddened that the individuals and entities most responsible for my success in sports were not present for me to thank.

I would like to publicly acknowledge the help and support that I have received over many years by U.S. Diving. Had they not liberalized the rules of an "amateur" I would surely have retired after 1984. Todd Smith, Executive Director of U.S. Diving, and his assistant, Barb McLaughlin, have not only helped my diving career in many ways that they will never know, but they have also been a great source of inspiration throughout my career.

I can never thank Speedo America and Phillips Petroleum enough for their generous and selfless support of U.S. Diving and U.S. Swimming. They were sponsors long before the aquatic sports became fashionable. I salute both Speedo and Phillips and I thank them for their part in my career.

I am in debt to the National Spa and Pool Institute for allowing me to get the message of water safety to the public at their expense. Their financial support allowed me to continue diving after 1984 and I owe them a tremendous debt of gratitude.

I thank of course the media and *Swimming World* in particular for their fairness and excellent coverage of all aquatic sports. Without the media the aquatic sports would not have the high public profile that they now enjoy.

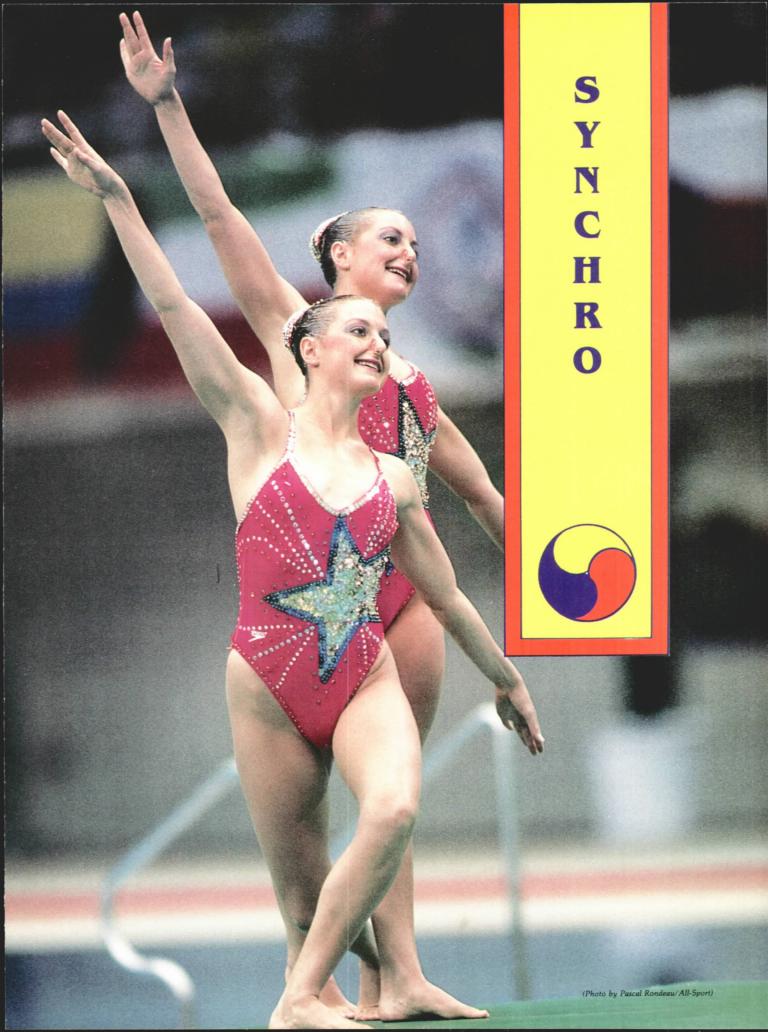
A special thank you goes out to Dr. Sammy Lee, for most of my life he has been the individual that I have turned to for motivation. He taught me how to compete and he will forever remain a role model and an anchor in my life.

In my career I have won many national titles, World Championships and Olympic medals. Each victory and each success would have been unattainable without the instruction and hard work of my coach, Dr. Ron O'Brien. He is singularly the most important individual influence in my career and my life. Besides being my coach and adviser, he was and always will remain my best friend. **Thanks, Ronnie, for a wonderful career.** 

I thank all the fans and supporters of aquatic sports that came out to the meets and I hope that my performances were worthy of your time.



Thank you,



Synchronized swimming has certainly progressed since its premiere in the Olympic Games four years ago at Los Angeles.

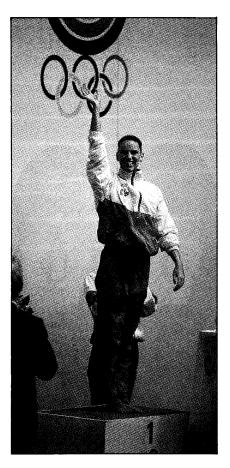
"It's gotten more difficult," says Karen Josephson, who won a silver medal for the USA with twin sister Sarah. "The swimmers are staying under longer and leaping up higher out of the water. The competition among Canada, Japan and us is making it so."

Of course, the sport needs to take another step where those three countries aren't taking home all the medals. Canada, the United States and Japan finished 1-2-3, respectively, in both the solo and duet events. The same three countries captured all the medals in 1984; the only difference being the USA grabbed the gold and Canada settled for the silver.

#### Solo

Nothing like having the weight of a country on your shoulders. And a big one at that. With three days left in the Olympics, Canada found itself without a gold medal—the only victory having been taken away when sprinter Ben Johnson failed a drug test. That placed tremendous pressure on synchronized swimmer Carolyn Waldo, the country's flag bearer and female athlete of the year for 1987.

Two years ago Waldo looked like a cinch for the gold, clobbering the opposition at the World Championships by an enormous five-point margin after running up the highest solo routine score ever awarded in the sport (99.200). Then last year Tracie Ruiz-Conforto, the 1984 solo medalist by three points over Waldo, came out of retirement. Ruiz-Conforto, who had married former Penn State linebacker Mike Conforto and gained 15 pounds, lost to Waldo in the first major competition of her comeback at the 1987 World Cup. But more hard work, which saw the 25-year-old from Redmond, Wash., reduce her body fat down to 11 percent and be able to hold her breath for 2 minutes 25 seconds, paid off with the highest score of all time and a victory over Waldo at a pre-



Olympic meet in Seoul this June.

The final showdown between the two synchro stars at Seoul went differently from the start. Of the six compulsory figures to be performed, decided by a drawing, the group selected was Ruiz-Conforto's least favorite. It consisted of a front walkover, dolpholina, barracuda, spiral, flamingo bent knee and kip continuous spin—harder for Ruiz-Conforto with her more dense body type (from weight lifting to increase her strength) than the slender Waldo because of the floating required. The figures, which make up 55 percent of the total score, put the 23-year-old Canadian ahead, 101.150 to 98.633, leading her to comment, "I would pretty much have to drown to lose the gold medal."

So far behind, Ruiz-Conforto had nothing to lose and went for it two days later in the routine portion. Her routine, which was so difficult she got dizzy and lost consciousness the first time she tried it, featured a highly anaerobic opening where she's underwater for 50 seconds. The highlight was a split crash spin with her hips climbing above the surface. In the second part, she emphasized flexibility and fluidity to portray the emotion of the "Chorus of the Lords" music, ending with a slow, controlled spin. The 5-foot-4, 120pound defending gold medalist showed off her strength by concluding with a triple split crash, a move no one else does, and finally a double leg rocket, a difficult move for the end because the swimmer is so tired at that point. The judges awarded her one 10, five 9.9s and a 9.8 with the high and low scores dropped out for a total of 99.000.

Waldo, swimming conservatively but with outstanding execution, got the judges' attention with unequalled double leg spins and a tough move where she had one leg and arm out of the water awkwardly supported by her other arm and leg. Her scores were identical to Ruiz-Conforto, giving the 5-foot-6, 119-pounder from Calgary the gold medal with a final total of 200.150.

"I felt so calm during the competition," said Waldo, who is retiring and plans a career in broadcasting. "I was kind of a numb-brain. I guess that's good because sometimes my emotions get ahead of the competition."

Debbie Muir, who coaches Waldo, explained, "She does better when she doesn't think too much, when it's automatic. What we've worked on since June was not letting her nerves get the best of her.

"That's the best she's ever done. We were happy to tie Tracie in the routine. She (Waldo) usually loses."

Ruiz-Conforto, who finished second by a wide margin with 197.633, summed up her performance simply: "I had a bad day on Wednesday during the figures. I just wasn't on. I didn't blow any figures, they just weren't sharp. I really feel good about the routine, though. Charlotte (Davis, her coach) and I feel that this is the best routine we've ever put together."

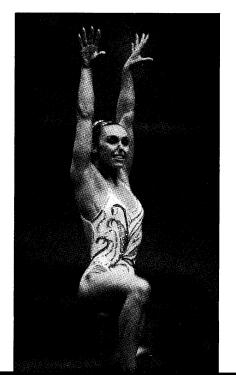
Canada's Waldo (above) was the synchro star, beating Ruiz-Conforto (right) for the solo gold and combining with Cameron (opposite above) to take the duet despite placing second in the routine which was off a little. Japan's Mikako Kotani got the bronze with 191.850 points, edging European champion Muriel Hermine of France (190.100).

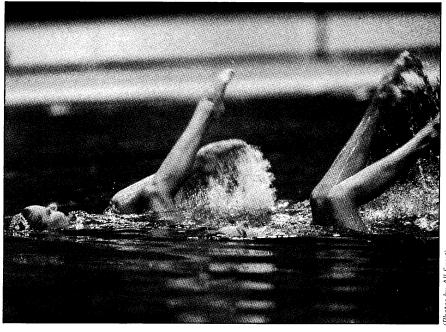
#### Duet

For the past three years the Josephson twins of Bristol, Conn., had been chasing the unbeaten duet from the North, Carolyn Waldo and Michelle Cameron of Canada. After being routed by the Canadians at the 1986 World Championships when Karen Josephson was off on her figures, the American pair gained on their rivals at last year's World Cup and the pre-Olympic meet this June where they won the routine and lost by only 15-hundredths. The Olympics offered their last chance since both teams planned to retire after the Games.

Just as in Ruiz-Conforto's case, the figures proved to be the undoing of the twins because of Waldo's tremendous score of 101.150. Sarah and Karen Josephson did well, finishing third (98.000) and fourth (97.367) behind soloist Ruiz-Conforto and ahead of Cameron (96.683), but trailed as a team going into the routine by 1.233 points.

"They're not quite as far out as Tracie was," said Davis. "They have a chance because of a better routine due to their superior synchronization."





(Photos by All-Sport)

The Josephsons, swimming fifth in the order and bedecked in pink suits with silver stars in the center. gave it their best shot with a highlydifficult routine. They opened with a perfectly-executed series of complicated leg moves, maintaining optimal height, and followed with intricate armstrokes and a rocket split crash. The Ohio State graduates demonstrated an elegant flowing change of pace where they connected in their tandem hybrid. They finished strongly with multiple spins and rocket boosts. The scores reflected their sensational performance: four 10s, two 9.9s and a 9.8 for a total of 99.60.

Still, because of their lead, Waldo and Cameron would lose only if they made a major mistake. Not happy with losing the routine in the pre-Olympic meet, the pair changed it significantly to show off the strength of their legs and ability to stay underwater more. Their opening sequence featured a long period underwater with rapid spinning of their legs. The major portion of their routine in the middle was performed to slower, ballet music and emphasized the classic, long bodies of the 5-foot-6, 119-pound Waldo and 5foot-8, 127-pound Cameron. They concluded with some fast synchronized leg moves to the tempo of Can Can music that got the crowd clapping along. Although they didn't score as high as the Josephsons because of slight timing errors at the start and end of their program, receiving two 10s, two 9.9s and three 9.8s for a 98.80 average, the Canadians took the gold with an overall score of 197.717 to win by 433-thousandths.

"We watched the Americans swim, and it was a great swim," said Cameron, 25, "so we said to ourselves, 'Get your heads in gear. Go out and keep your minds on what you are doing.' "

Waldo added, "The Americans in the solo and duet events have pushed us so hard. They have pushed us to be the best that we could possibly be."

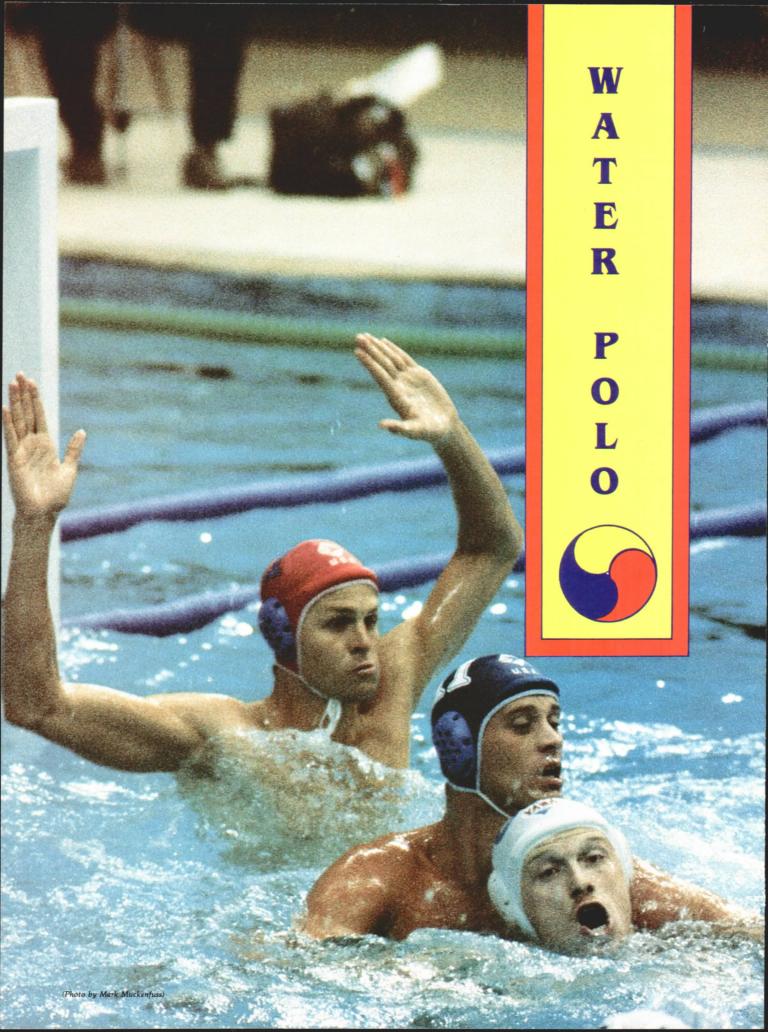
The 24-year-old Josephsons felt disappointed because they'd closed the gap on the Canadians over the years but fell short in their finale despite a great routine.

"We beat them (in the routine) by 8-tenths, which is a big margin in the finals," pointed out Sarah.

Sister Karen analyzed, "I think we were down farther than we wanted to be going into the final swim, but we did have the swim of our lives and so did they. It was up to them if they made a mistake—but I'm glad they did well, too."

Japan's Miyako Tanaka and Mikako Kotani earned the bronze with 190.159 points to finish more than five points ahead of the French pair of Karine Schuler and Anne Capron. —Stories by Russ Ewald

Swimming World/November 1988 67



During the Olympics, a Los Angeles television station aired the movie "The Best of Times." Starring Robin Williams and Kurt Russell, the film addresses a common human longing: to be able to replay one's mistakes of the past and make them right, emerging as a hero, instead of remaining the goat.

The movie is a comedy centered a long-gone, but very much remembered football game, and everything comes out rosy and romantic in the end. But life isn't like art, even when it seems to be imitating it. Just ask the United States water polo team.

You couldn't have asked for better theater than the Olympic water polo tournament. The course it took followed the media hype nearly down to the wire, bringing about a rematch of the controversial gold medal game in 1984 between the United States and Yugoslavia. Scenefor-scene it played out like a Hollywood action-romance. Heck, this could have been a musical up until the final game. But Belgrade is a long way from Hollywood. Maybe the Yugoslavs just didn't understand how it was supposed to go. The plot twist they served up in the final scene sunk a torpedo deep into the shining hull of the USS Water Polo and sent all its dancing sailors to the bottom of the ocean, or pool if you will.

Melodramatic? Maybe, but you had to watch this thing play itself out from the first game to really appreciate it. Actually it wouldn't hurt to go all the way back to 1984 . . .

Act I, Scene I: Pepperdine, Calif. It is the final match of the 1984 Olympic water polo competition, the game between Yugoslavia and the United States. There are 35 seconds left on the clock in the final period. U.S. team captain Terry Schroeder is set at two meters and is fouled by Goran Sukno. Schroeder's teammate Joe Vargas begins a drive toward the cage. A second whistle sounds and all assume the foul is again on Sukno, whose position is quickly

Deni Lusic (above, left) and Dragan Andric celebrate after their gold medal victory. Both were on the 1984 Yugoslavian gold medal team in Los Angeles. taken over by goalie Milorad Krivokapic. Schroeder does a quick giveand-take to Vargas and then flips the ball into the empty goal, giving the U.S. a 6-5 lead.

Not quite. The second foul, it turns out, is not on Sukno, who had jerked Schroeder back by the shoulder, but an offensive foul on Vargas, who clipped Dragan Andric with his arm, while driving. The Yugoslavs take possession and the game ends tied 5-5. Yugoslavia, based on goal differential, captures the gold, the Americans have to settle for the silver.

Questions about the controversial call are peaked even more when it is later revealed that the official making the call, Eugenio Ascencion, had his car towed from the competition site the previous day and was hot under the collar at the Americans as a result. The U.S. players shake their heads and wonder how it could turn out like this.

Act I, Scene II: Pepperdine, Calif., four years later. It is the final game of a six-game series between the United States and Yugoslavia. The Americans miss two good scoring opportunities in the final three minutes and lose 11-10. But they dominate the series with a 4-2 record, and go on to tie Yugoslavia two weeks later to win the eightnation Skoda Cup in Duisburg, West Germany. The two teams are still seen as close competitors, but the U.S. players now have renewed confidence that they can beat their rivals.

Act II, Scene I: Seoul, South Korea, Chamshil indoor pool. The second match of the Olympic tournament brings together the two 1984 finalists in a game that somewhat foreshadows the championship game of the tournament. The United States, struggling with an ineffective six-on-five offense (they are scoreless in their first eight man-up opportunities), is down 2-4 midway through the third quarter. Fighting back, they score three unanswered goals and are up 5-4 early in the fourth period. With 2:56 left in the game, Yugoslavia makes it a tie score of 6-6 and it looks as though it will remain that way until, with :05 on the clock, James Bergeson slips in a quick corner shot to win the game, 7-6.

**Ratko Rudic** (Yugoslavian coach): That shows the strength of the American team, they didn't get many goals with the extra man, and they still won the game. That's very, very good. If they play like today (for the rest of the tournament) the U.S. will take a very good place.

U.S. goalie **Craig Wilson** (heaving a sigh): It's nice to get that one out of the way.

**Bergeson:** Yeah, now that we've got one victory under out belts, we feel great.

But this isn't just any victory, knocking off the top-ranked team in the tournament is an important win,  $\blacktriangleright$ 



even more so since they were able to break a tie in the final seconds of play. But Bergeson, the man of the hour, downplays his game-winning goal.

**Bergeson:** I knew I had to get a quick shot off. It was pretty much a lucky shot.

**Wilson:** James will call that lucky, but I've seen him score those goals too many times to call it luck.

*U.S.* Coach Bill Barnett puts things in perspective.

**Barnett:** We played good defense today, but poor six-on-five. I also thought our counterattack should have been better. We need to move the ball a little more aggressively. We have a hard game (tomorrow) with Spain. I've said many times, this is a coach's nightmare. We play the top team in the world and come back against a team like Spain (ranked sixth). I'm really worried about Spain.

The U.S. has not lost a game to the Spaniards since 1985. At the Skoda Cup, they were beaten 16-6 by the United States. But as Barnett speaks his ominous worrisome thoughts, sinister music floods in from the background, foreshadowing what he has been predicting ever since the game schedule was announced months earlier: trouble for the Americans.

Act II, Scene II: Chamshil indoor pool, the following day. The team arrives by bus and enters the locker room area. Unlike the day before, when they seemed up and ready to play, today they are introspective, there is little or no conversation among them. Things are not altogether right, and it soon shows up in the water.

Less than two minutes into the game, Spain's Salvador Gomez has scored two quick goals, placing the Americans in a hole they will never completely climb out of.

Spain clogs up the U.S. team's offensive hole position, sluffing in for numerous steals. But instead of going to its strong outside shooters, the United States continues in its effort to make the hole offense work. It never does. Spain wins the game, 9-7, helped not only by strong shooting, but also brilliant play from goalie Jesus Rollan.

Manuel Estiarte, who will even-



tually become the tournament's high scorer (27 points), to no one's surprise, gives much of the win credit to Rollan.

**Estiarte:** I think the merits of Spain were with the goal keeper. He stopped a lot of goals. The American goal keeper didn't play to the level we expected. Our coach told us to adopt a defensive tactic—defense, defense, defense—and take advantage of any errors.

Errors like the Americans giving up defense with two seconds of the shot clock, figuring Spain would ditch the ball. But instead, Spain pumped the ball into the goal on two such occasions. That situation, just by itself, seemed to indicate a lack of concentration on the part of the Americans.

**Barnett** (in the press conference): I'd say that's true. We made a lot of mental errors. We dropped a lot of passes at two meters and missed some opportunities.

U.S. team captain Terry Schroeder is in the stands getting an after-game rubdown from his wife Lori, who, like him, is a chiropractor.

Schroeder: That's the first game the five of us from '84 have lost in an Olympics. It hurts a lot. After beating the Yugoslavians, everybody's been thinking we've got the inside track, but there's a lot of tough competition left. Hopefully a loss like this will help us come back harder.

Bridge: The United States does

come back hard, beating the far weaker teams from China and Greece by respective scores of 14-7 and 18-9. Notable only is an injury to Jody Campbell in the game against Greece. In the first quarter of that game, Campbell is on the receiving end of a shot follow-through by one of the Greek players. He is stunned by the head blow, but convinces the team physician to allow him to continue to play. He goes on to score four goals, but after the game cannot remember playing. He is diagnosed as having a mild concussion.

Meanwhile, Yugoslavia squeaks by Hungary 10-9, easily handles Greece 17-7, and beats Spain 10-8. Emerging from the other bracket are West Germany, unbeaten going into the final day of preliminary matches, and the Soviet Union, all wins except a tie with Italy.

On the final prelim day, Yugoslavia faces an easy mark with China (and wins 17-7), West Germany and the Soviet Union are assured spots in semi-final play. The Soviets lose to West Germany (it is rumored that the loss is deliberate so that the Soviets can avoid meeting Yugoslavia in the semis), 8-9. The last

Igor Milanovic (above, center), who led the Yugoslavians with 16 goals, struggles in the hole during his team's victory over Spain. Jody Campbell (right) was top U.S. scorer with 12. final-four team will be decided by the United States-Hungary game. The Americans must win in order to advance. If they lose or even tie, Spain advances instead.

Act II, Scene III: Seoul's Olympic Park indoor pool. It is the final quarter in the game between Hungary and the United States. Hungary leads at the start of the quarter, 6-5, and by the final seconds, the United States has only managed to tie the score, 9-9. In the last five seconds, Schroeder is set in the hole and the ball is passed into him. He grabs the ball, turns his man and stuffs the winning goal into the cage with :02 on the clock, giving the Americans their medal-round berth. Schroeder and Kevin Robertson, the most veteran players on the team, embrace in front of the goal.

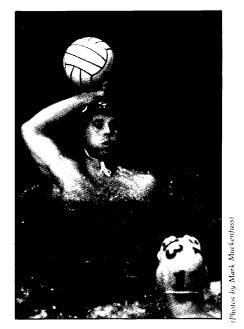
In the interview room, Schroeder, along with his teammates, is all smiles.

Schroeder: We saw a lot of years of practice going down the tubes if we didn't score there. That was a play we worked on a number of times during practice. We just try to get the ball in deep and get a foul. The guy didn't foul me and I was able to turn him and score. That was your basic slam dunk, the goalie got out of position.

The United States team will now face the Soviets. The last time the Russians had fallen to the Americans was at the 1986 World Championships in preliminary rounds. Outside of that game, the Soviets had held the upper hand in the majority of meetings between the teams. Already, some people were thinking beyond that game, however, and the possible repeat matchup of the 1984 final.

Wilson: I think it would make a real good story if the Yugoslavians and the United States met again for the gold—history being repeated. But first we have to worry about the Soviets and we're going to have to play the game of our lives to beat them.

Act II, Scene IV: Olympic Park, outside the swimming pool. Schroeder is walking back to the athletes' village and agrees to talk on the way. During the conversation he discusses the possible U.S.-Yugoslav matchup and what it could mean.



Schroeder: It's funny, Igor Milanovic has said to me a couple of times, "I hope we meet in the gold medal game. I would be happy with the silver." He said he's got his gold. He'd be satisfied with a silver. I don't know if he was just trying to psyche me out, or what.

Act III, Scene I: Olympic Park pool. Despite placing a tiny good luck totem on top of the scoreboard prior to the game, West Germany's coach watches his team come out flat in their game against the Yugoslavians, and end up getting manhandled 10-14.

**Rudic** (a bright-eyed smile at advancing to the gold-medal game): For me it would be good to play with the Americans, but it would be good against the Soviets too.

Rudic's favorable words introduce the first strains of the U.S. team's victory anthem, which begins playing quietly in the background and gradually builds to a dominating overlay as the Americans come out strong against the Soviets, build up a two-goal lead in the second quarter and hang on to win 8-7, this despite losing key player Jody Campbell in the first quarter on three major fouls. The crowd, the bench and the players erupt in celebration and the stage is set. The showdown in Seoul will be a rematch of the 1984 Los Angeles final, a fitting finale for those who put off retirement for four more years of hard work and a chance to capture what had eluded them by a single point, the Olympic gold medal.

Wilson (nearly floating with joy at the press conference): How many people get a second chance? I don't think many people get back into a gold medal game.

Schroeder: This is something we've worked for for four years now. We've been reminded of it every day in workout. We won a silver last time, and that's why we stuck around and decided to go at it one more time. Tomorrow we're going to come out sky high and you're going to see a ready, peaked U.S. water polo team out there.

Wilson: The key to this team is that we take water polo very seriously. We came here to win a gold medal, not just for the thrill of being an Olympian. We don't practice to just be Olympians, we practice to be winners.

I think up to the beginning of today's game, we've been playing a little bit below our potential. But tonight I think we played the best we've ever played.

The coming game is not just four years on the line, it's a career for at least eight of the 13 players involved. It even goes so far as the history of the sport in the United States. America has never won a legitimate Olympic gold medal in water polo. In 1904 the United States swept the medal category in the sport, but only U.S. club teams competed. Only once, in 1984, had the United States gotten to the gold medal game. And now the same team was being given the chance again, against the same competitor. Was it fate?

Schroeder: I don't know if it's fate or what. We didn't really care about who we faced in the gold medal game. We just cared about getting there.

Act III, Scene II: Olympic Park pool. The Soviets have come back earlier in the day to beat West Germany, 14-13, for the bronze, but now it's time for the real game.

On the south side of the pool, the American fans, bristling with flags, NBC banners and "Hi Mom" signs, have set up camp. Even before the player introductions they are in a cheerleading war with the Yugoslavian contingent (U-S-A! U-S-A! U-S-A! vs. Yu-go-sla-VYA! Yu-go-sla-►



VYA!) on the north side, which is waving its own standards. Destiny, the Americans feel, is with them. The struggle to get here was too long and hard for them and their players for anyone to give up now. And for the first half of the game, and a little, they seem to be right. The U.S. team builds a 4-2 halftime lead, and early in the third period, they go ahead 5-2. Echoes of the past. It was by the same score, 5-2, that the U.S. team led in the gold medal match of 1984. And, as though they've hit some kind of invisible barrier, the offense suddenly sputters. The Yugoslavs pick up three ejections during the rest of the auarter and score on all three of them. So, when the buzzer sounds, it's a 5-5 tie.

The U.S. victory theme which had been brightly playing in the background is now subdued and clouded with minor notes and diminished chords. There is still a quarter to go, but a gloom has descended. While hope has not been lost, the certainty of a happy ending has been overcome by doubt. Are these Yugoslavians sure they're reading the right script? That hardly seems possible when Igor Milanovic scores in the fourth quarter to move Yugoslavia ahead 6-5. With 2:12 left in the quarter, Jody Campbell ties the score 6-6. The United States fends off their opponents on two mandown situations, but they fail to even get a shot off during the remainder of the quarter. The game ends as it did in 1984, in a tie.

But the rules have changed since 1984, there are no ties in final round play in Olympic water polo any longer. The game goes into overtime. Ah, surely this is the plan, retribution will be taken in the way the gold should have been taken in 1984, in overtime play. We should have expected it all along. In fact, isn't the light breaking through the darkness? If it is, it's shining only on the Yugoslavians, who score two goals in the first overtime period and another 35 seconds into the second period to give them an insurmountable 6-9 lead with a little more than two minutes to play. Schroeder scores with 1:57 on the clock to make it 7-9, but it's almost a token gesture. The golden comeback dream is over. This happy ending belongs to the Yugoslavians, who rejoice in back-to-back golds and are gulping victory champagne before they are even out of the pool.

The U.S. players are in silent shock. They march blindly to the awards stand. Jody Campbell cries during the medal ceremony as Schroeder, standing next to him, stares emptily into the distance. The silver seems to mean nothing.

Act III, Scene III: The aftermath in the interview room. Yugoslavian and United States players share the podium. They know each other well and respect one another. They are friends outside of the pool. The Yugoslavians are smiling. The Americans are trying to.

Wilson: I really didn't feel the game slipping away. I kept the faith the whole way through. We had a very strong first half and they had a very strong second half. I'm glad the game was played to conclusion. They earned it. They beat us.

Schroeder: You know, I said in '84 that I wished that they had overtime because it would have been easier if we had lost the game and not tied, so I'll tell you now, it's not any easier. But I'm very proud of what our team was able to accomplish. We put in a lot of hard work. These two teams were very close, but tonight they were better than us.

Milanovic: The difference between the USA and Yugoslavian teams is very little. This night we were better. We were lucky this night.

Rudic takes exception somewhat to Milanovic's putting the win in the arena of luck.

**Rudic:** In these final games it's not only tactics and technique, it's motivation and mental strength and toughness. If you have a player with a strong personality that can work under a big stressful situation, that's the first thing you need for a championship team. On both sides the mistakes were what is natural for such an important game. But at the end, we made less mistakes.

Maybe this medal is more valuable because it's much more difficult to defend first place than to take first place.

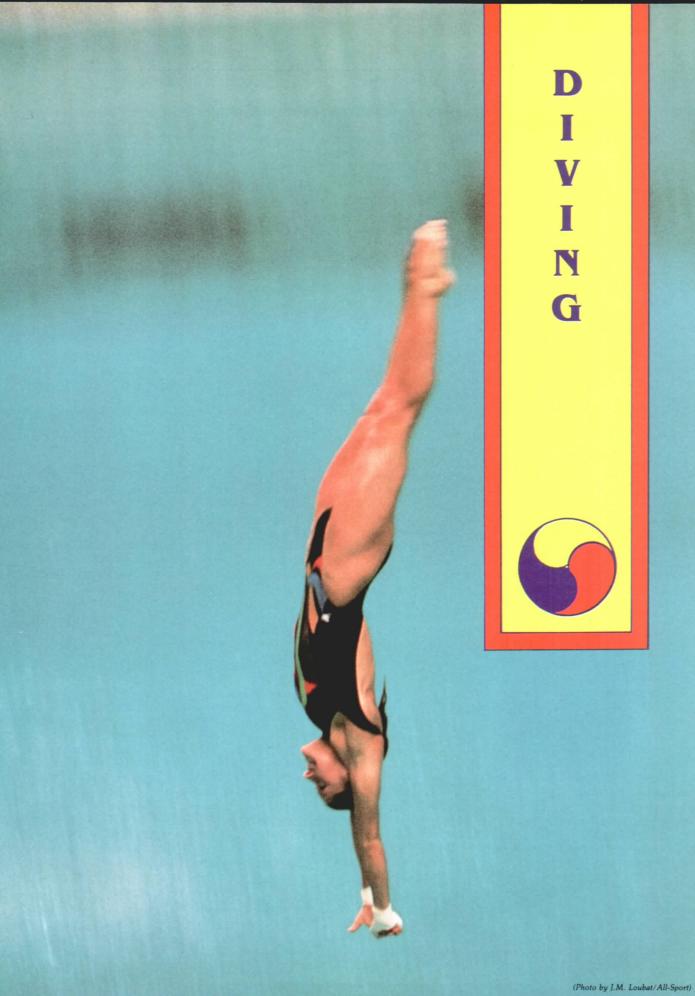
**Wilson:** What hurts the most, I think, is it's kind of like a repeat of '84. We ended up losing to the Yugo-slavians and they're a fantastic team, but we came back not to repeat what happened four years ago. The hardest part is, the same thing happened.

The Yugoslavian national anthem is playing softly in the background.

Wilson forces a what-else-canyou-do? smile onto his face, but his eyes aren't buying the lie.

Fade out. —By Mark Muckenfuss

USA's (above, from left) Alan Mouchewar, Greg Boyer, Terry Schroeder, Jody Campbell, Chris DuPlanty and Mike Evans suffer through the awards ceremony.



Other than Greg Louganis hitting his head on the springboard—the first time he's ever done that on 3meter—the Olympic diving competition followed a predictable scenario.

Louganis, who had swept the men's events at the 1984 Olympics and 1982 and 1986 World Championships, shook off his injury to again take the gold in the 3- and 10meter events. He's the only American to win at the past two Olympics and most recent World Championship.

China's Gao Min, titlist at the 1986 World Championships and 1987 World Cup, also remained on top in the women's springboard.

The women's platform offered a mild surprise when young Chinese phenom Chen Xiaodan, who qualified first in the preliminary round by a big margin, failed to medal in the finals. But teammate Xu Yanmei, last year's World Cup champion, continued the Chinese domination in the event. The Asian country has won the women's 10-meter at the world competition (World Cup, World Championships, Olympics) each of the last six years.

Tight judging eliminated any chance for new scoring highs in any of the events. Just the opposite of gymnastics where judges gave away a perfect score of 10 on 44 occasions, the diving arbiters didn't award a single 10 during the four events and hardly gave any 9.5s.

Although the United States captured only five medals after going an unprecedented 8-for-8 in 1984, the Americans did as well as expected and showed improvement over two years ago at the World Championships in Madrid where they took home only four. Ron O'Brien, one of the four U.S. Olympic coaches, said prior to the Games that he thought five medals was a reasonable goal. He was surprised to get two in the women's platform and only two (the two golds from Louganis) in the men's events.

China, which took over as the world's top diving team with seven medals in Madrid, retained its leadership by winning six, including another split of the gold with the USA.

With Louganis announcing his retirement at a United States Olympic Committee news conference Oct. 3, the future doesn't look good for U.S. diving in international competition. However, there is a chance the U.S. superstar will come out of retirement for the 1992 Games in Barcelona, Spain, if professionals are allowed in the diving competition as they were in tennis this year. Louganis would compete in the 1- (which is being added) and 3-meter events. He's endured too much pain entering the water off the 10-meter tower to ever enter that event again, he says.

## Women's Platform

American divers Michele Mitchell and Wendy Williams felt like Rodney Dangerfield. No one gave them much respect going into the women's platform event. Mitchell, a 1984 silver medalist and 1985 World Cup champion, wondered about all the media attention going to the young Chinese divers. Williams, who won at both U.S. nationals this year, opened up a copy of *Sports Illustrated* to the Olympic predictions and found, to her disgust, no U.S. competitors listed for medals.

Of course, Williams had only begun competing on platform this year after a two-year layoff because she began fearing the 10-meter tower. Mitchell wasn't afraid of the platform, but had a mental block about doing an inward  $3\frac{1}{2}$  tuck on it which, along with a recurring shoulder problem (the occupational hazard of platform diving) and an ear infection, made her an also-ran internationally.

The favorites in Seoul were the Chinese duo of 1987 World Cup titlist Xu Yanmei and Chen Xiaodan, winner of the McDonald's meet at Mission Bay in her first international appearance this May. Elena Miroshina of the Soviet Union, who attained the highest score ever of 508.65 last year at age 12, also figured to contend. Forgotten was the fact that both Chen and Miroshina were a pair of 14-year-olds facing the Olympic pressure.

In the prelims held immediately following Opening Ceremonies, a cool Chen looked like gold as she hit her difficult optional dives to outdistance the field by 30 points with a total of 456.45 points. The Chinese teenager's four optionals are the same dives Greg Louganis uses. Her total optional degree of difficulty (DD) is 12.8 compared to 11.8 for Miroshina; Xu, 11.4; Williams, 11.2; and Mitchell, 11.1.

"If she's on, no one can beat her in the finals," predicted O'Brien.

But Chen started the final by going over on a simple forward  $1\frac{1}{2}$  pike (1.6) for 6.5s and never held the lead. Miroshina also dived erratically and failed to contend. Veterans Mitchell, 26, and 17-year-old Xu took advantage of the youngsters' misfortunes and staged a duel for the gold that went down to their last dives. Both were a picture of consistency, neither receiving an award under 7.

Entering the final round, less than a point separated the pair—Xu leading at 376.47 and Mitchell with 376.20. Xu had the advantage of diving first and finishing with a higher DD dive (2.9 to 2.7). She capitalized with a beautiful back  $2\frac{1}{2}$  pike for four 8s and a 7.5. Mitchell entered a hair short on a forward  $3\frac{1}{2}$  tuck, getting 7.5s, to wind up with 436.95 in back of Xu's 445.20.

Even though Xu has an experience edge on her teammate, she uses a more conservative list because "I thought that (executing difficult dives) is not my specialty," she said. "I thought if I didn't do high degree of difficulty but did the dives with more grace I could score higher."

While Mitchell wasn't listening to the scores, she knew the gold medal was coming down to the last dive.

"I could tell from the splashes that the opportunity was there," said Mitchell, who likely competed for the last time.

Her coach, Ron O'Brien thought she played it too cautious on the final dive. "It was a good dive, but she didn't take off aggressively because the platform was slippery."

Williams, not sharp on her early dives, looked out of the running for a medal but never gave up and concluded with a flourish, getting all 8s on an inward  $2\frac{1}{2}$  pike (2.8) to finish with 400.44 points. Chen, meanwhile, seemingly locked up the bronze by nailing a reverse  $1\frac{1}{2}$  with  $3\frac{1}{2}$  twists (3.3) for mainly 8s on her second-to-last dive. But, in the final round, she went way over on a back



 $3\frac{1}{2}$  tuck (3.3) and received only 2s and 3s, giving third place to Williams.

"My coach (Scott Reich) told me if I do the inward 2<sup>1</sup>/<sub>2</sub> like I can, I have a chance for a medal," said Williams, the youngest U.S. Olympic diver at 21. "I thought, 'Yeah, really.' I was teary-eyed on the side of the pool, expecting to get fourth. When she opened the door for me, I was flabbergasted."

## **Men's Springboard**

Greg Louganis, who wants to become an actor, couldn't have found a more dramatic performance than he delivered in the men's springboard competition.

Not many spectators or media were watching the marathon preliminary contest at the Chamsil Indoor Swimming Pool that had started at 4 p.m. and was only in the ninth round at 6 p.m. Louganis, the seventh diver at that round, took off and reverse somersaulted twice. Then, as he layed out from the pike position, his head hit the end of the board. He splashed in the water on his back and

Seventeen-year-old Xu (above) came through in the clutch to give China a repeat Olympic victory on the women's platform. came to the surface holding his head. He was well enough to get out of the pool and walk with his longtime coach, Ron O'Brien, out of the pool area, disappearing into a room nearby.

Louganis had a long time to receive attention and recover, about 35 minutes until his next turn because of the huge prelim field of 35 competitors. There was no announcement of his condition, giving an element of suspense as to whether he would return. Finally, he appeared shortly before his turn. The disastrous previous dive earned only 6.3 points and bumped him down from first to fifth in the standings. When he stepped up to the board, he had to perform a reverse  $2^{1/2}$  with  $3^{1/2}$ twists, one of the toughest dives with a degree of difficulty of 3.3. A loud ovation greeted the announcement of his name. He set up, leaped up safely over the water and nailed the entry. The crowd reacted with a thunderous cheer as the scores appeared—8, 8.5, 8.5, 9, 9.5, 9.5, 9.

The final round, Louganis got mainly 6.5s on a reverse  $3\frac{1}{2}$  tuck (3.5)—the most difficult on springboard and a dive only two others do—to finish the prelims in third place with 629.67 points.

It was reported that Louganis had needed four temporary stitches for a wound on the back of his head. United States Olympic Committee head physician James Puffer, who happened to be at the competition, attended to the diver. After his last dive, Louganis was rushed to the athletes village hospital where he received five permanent stitches. He used ice on his shoulder and neck and endured a mostly sleepless night. In the morning he was back at the pool, though, practicing for 40 minutes with special emphasis on the reverse  $2^{1/2}$  pike to regain his confidence.

When the finals began, the 1984 double Olympic gold medalist looked as good as new. He had to be, facing a formidable challenge from 1984 silver medalist Tan Liangde of China. Tan had finally beaten Louganis twice this year after several defeats over the years.

In the compulsories, Louganis sparkled with no scoring awards below an 8.5. Tan almost matched him and trailed by less than nine points. He closed to five in the first optional. However, he also found the reverse  $2\frac{1}{2}$  pike a problem and got mainly 7.5s to drop 20 points back.

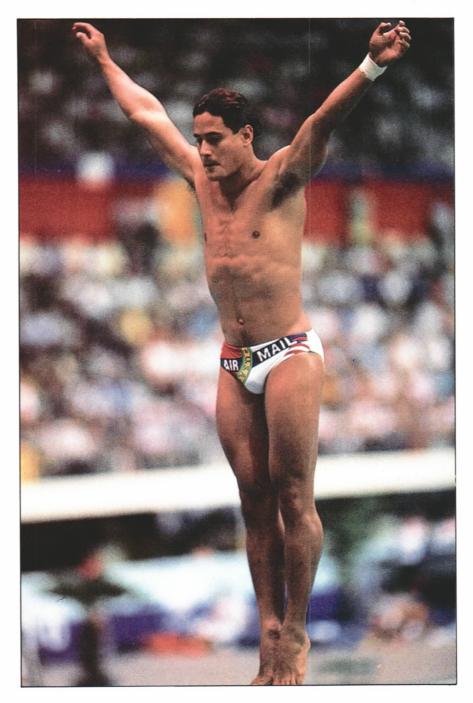
Louganis looked in command. But the reverse pike loomed in the ninth. The large crowd was silent as Louganis slowly set up at the end of the board. This time he leaped the usual four or five feet away from the board and hit the dive for all 8.5s from the judges. With the big psychological hurdle surmounted, he made his difficult last two dives and claimed a second successive Olympic title on springboard. His final total of 730.80 points gave him the gold by a 25point margin over Tan. China's Li Deliang placed third at 665.28.

"I was very nervous today going into the competition," said the 28year-old Louganis, competing in his third Olympics. "When I hit my head on the board, it shook my confidence a lot. That's why the workout this morning was important. I did a lot of dives to get my weight out from the board.

"My pride was hurt more than anything yesterday. I'm lucky I came out of it with only a cut on my head.

"The mistake I made yesterday was that I went up too straight and didn't push out enough. I didn't realize at the time I was that close. It was quite a shock when I hit the board with my head."  $\blacktriangleright$ 

Swimming World/November 1988 75



O'Brien thought Louganis would have bettered the all-time scoring high of 755.49 he did in 1983 if the judging had not been so low compared to other meets. "They didn't give a single 10 and there were some awfully good dives," he said.

Mark Bradshaw, the other American, never showed the form that earned him an Olympic berth. He missed his sixth (back 21/2 pike) and eighth (reverse  $2^{1/2}$  pike) dives in the prelims and stood just 19th. He came back to hit his two most difficult dives to move up to seventh. However, in the final, he came out of the compulsories in just sixth place and never climbed higher than fifth where he wound up with 642.99 points.

"I was disappointed I didn't medal," he said. "Medaling is such a big deal here. My number six position in the dive order today because of vesterday's prelims didn't help."

The 26-year-old diver had a lot on his mind: his first time in the Olympics; his pregnant wife a week overdue; and the competition being the last of his career.

## Women's Springboard

The work ethic is alive on the Chinese national diving team where workouts last six or seven hours a day. In the case of Gao Min, practice makes perfect.

"Gao trains the hardest of all," said Xu Yiming, the national coach in China. "She is the first one in the pool and the last to leave. As far as talent goes, Li Qing (the other Chinese entrant on springboard) has more potential."

Gao emerged on the international scene two years ago with a convincing victory at the World Championships, and has remained the world's best ever since. She's the only female diver ever to score over 600 on springboard-and she's done it three times.

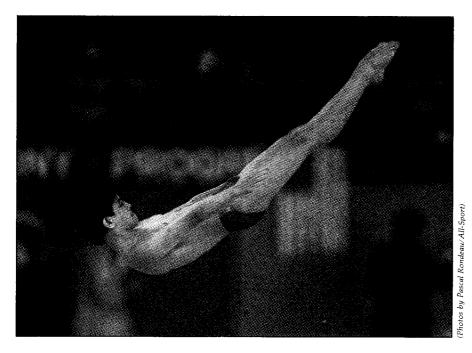
The 18-year-old from Beijing displayed the remarkable consistency that is her trademark in adding an Olympic gold medal to her laurels. She scored 8 or higher on all but a single dive to amass 580.23 points and win by 46 points.

Gao, who is a whiz at Old Maid, didn't show all her cards afterward. When asked what is the secret to her success, she replied, "I have no special secret. The major attribute is our national coach has a very high standard."

Despite appearing in the Olympics for the first time, Gao said she wasn't nervous because "I didn't think about that, and I thought if I can do well I will probably get something.'

The silver medal wasn't so easily decided, staying in doubt until the end. In the penultimate round, Li Qing led both Kelly McCormick and the Soviet Union's Irina Lashko by just three points going into the last dive after passing them with an exquisite reverse  $2^{1/2}$  tuck (2.8) for 8.5s. McCormick went first in the eighth and final round and got mainly 8s on a reverse  $1\frac{1}{2}$  with  $2\frac{1}{2}$  twists (2.9). Lashko couldn't match her, receiving mostly 7.5s on an easier

Louganis (above) overcame a head injury on 3-meter and cool 14-year-old Xiong of China (opposite) in a close tower contest for a second Olympic double.



inward  $2\frac{1}{2}$  tuck (2.7). Li, though, earned just enough, three 7.5s, a 7 and a 6.5 on a more difficult back  $2\frac{1}{2}$  pike (3.0), to edge McCormick, 534.33 to 533.19.

"When I noticed I was down in fourth place, I was nervous," said Li. "But I thought I could still get to the top if I did my dives well."

McCormick, the silver medalist in 1984, didn't seem disappointed with the bronze. After a terrible prelim round when she scored just 473.73 to rank fifth, she rebounded well in the final.

"Yesterday, I was in the twilight (zone)," said McCormick, 28, "I was scared. I didn't know which way to twist.

"I went all out today. I am diving to my potential. It just wasn't my day. I didn't do any dive poorly. I just could have done them all a little better."

Wendy Lucero, representing the USA for the first time in a major international competition, placed sixth with 498.81 points. She was in contention for a medal until missing a back  $2^{1/2}$  tuck (2.8) for 5s in the seventh round, a dive she's always had trouble with.

"It's very scary," said Lucero, 25, about the Olympics. "You can fail before millions of people. But you'll never know how good you are unless you try. Nobody expected me to get in the top three, but I wanted to do my best."

## **Men's Platform**

Divers are always talking about having to overcome the heavy mental pressure of the sport. No one probably has ever felt it like Greg Louganis going into the men's platform event.

"You don't know what type of pressure he's under," said his coach, Ron O'Brien. "If he wins, it's expected. If he comes in second, he's asked what happens."

There was added tension to the platform event because Louganis would be seeking to complete an Olympic back-to-back "doubledouble," meaning victories in both diving events in two Games. No one had ever swept the men's events in two Olympics. U.S. diver Pat Mc-Cormick was the only woman with successive sweeps in 1952 and 1956.

Louganis was coming off the "scariest" experience of his career, the freak accident when he hit his head in the springboard prelims.

If all this wasn't enough, the 28year-old diver found himself in his tightest match ever in international competition against an opponent half his age. Dueling China's Xiong Ni, 14, reminded Louganis of his 1976 Olympic confrontation with Italian great Klaus Dibiasi, only in reverse. Then, Dibiasi, 29, beat 16-year-old Louganis for his third successive gold medal on platform by a 16-point margin.

Louganis and Xiong staged a closer battle with the lead exchanging hands four times. The American veteran appeared to be in command when he did his best inward  $3\frac{1}{2}$  tuck in quite awhile to take an eight-point advantage after seven rounds. The next round, though, he went a little over on a forward  $2\frac{1}{2}$  pike for scores in the 6.5 to 7.5 range and fell two points behind.

The consistent Xiong never cracked and got at least two 8.5s, and usually more, on all his optionals. He led by exactly three points going into the final round and came through by ripping his inward  $3\frac{1}{2}$  tuck for a 9 and four 8.5s. To beat the plucky Chinese kid, Louganis needed at least four 8.5s and an 8 on a reverse  $3\frac{1}{2}$  tuck (3.4), the toughest dive of the event. His entry into the water went a little over, but a strong jump and his grace in the air earned him awards of 8.5 and a narrow victory by 1.14 points with a total of 638.61. Upon seeing the result on the scoreboard, he embraced O'Brien with tears of joy coming from his eyes.

"I knew I was trailing going into the last dive," said Louganis. "I didn't know what the lead was. I knew I had a 3.4 and he had a 3.2, so I had a slight advantage in DD.

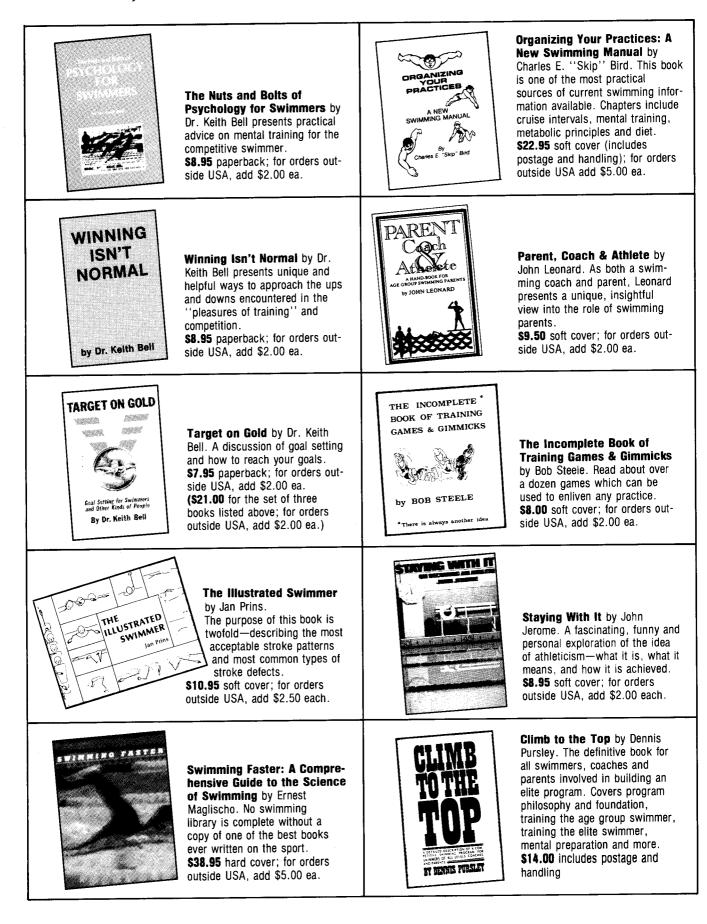
"I kept telling myself on the board that my mother loves me just as I did on my final dive in 1984. I didn't see the dive, so I don't know how good it was. I knew it felt good."

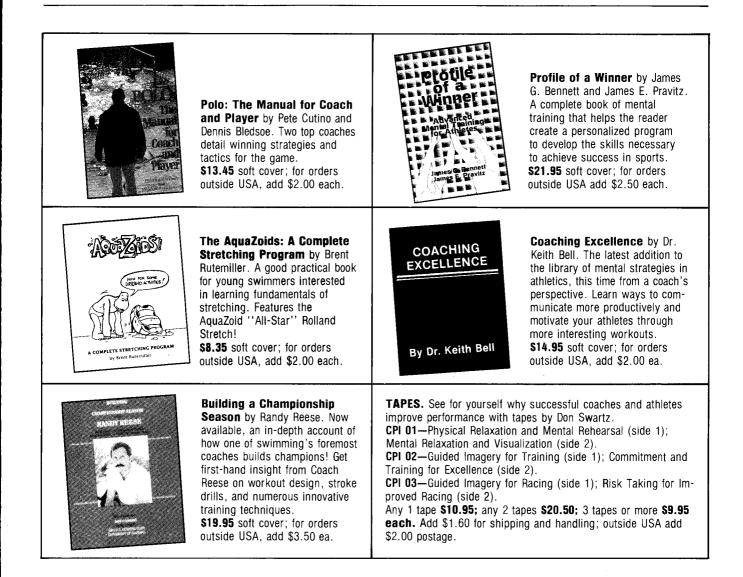
Xiong, who took up diving in 1981 when he was 7 and made his debut in a national diving competition after only a year of training, always considered Louganis an idol.

"I know that I'm young and I think it's an honor that I competed against him," said Xiong, 5-foot-2 and 104 pounds. "I felt the pressure was very great because the points were so close. I knew if I did not do the last dive well, I would not win."

Jesus Mena of Mexico finished a surprising third with 594.39 points. China's other diver, 1984 bronze medalist Li Kongzheng, missed several optionals and placed just sixth at 543.81. Pat Jeffrey of the USA had a miserable night and wound up last in the finals with 483.54. —Stories by Russ Ewald

# **Books** for the Athlete, Coach and Parent





Swimming World Magazine P.O. Box 45497 Los Angeles, CA 90045	quantity	item (price includes postage and ha	Indling)	cost per item	outside USA add	total cost
Please send to:						
Name						
Address						
City						
State, Zip						
(Allow 4 weeks for delivery.)			SUBTOTAL			
			CALIFORNIA RESIDENTS ADD 612% SALES TAX			
			TOTAL AMOUNT ENCLOSED			

## SWIMMING

XXIV OLYMPIC GAMES SWIMMING EVENTS Seoul, South Korea Sept. 18-25, 1988 (50 M)

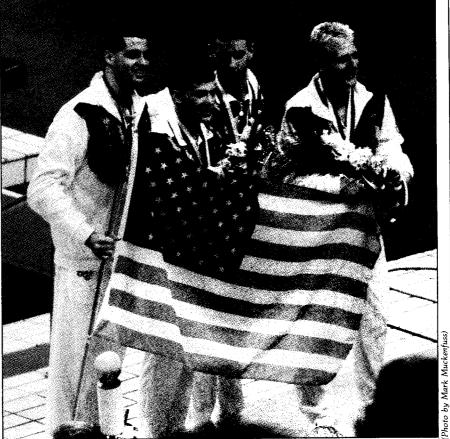
w World Record

- e European Record c Commonwealth Record
- n National Record

#### WOMEN

50 FREES	
Unampior	ship Finals—Sept. 25
23.490	Kristin Otto, GDR Wenyi Yang, CHN
23.04	Katrin Meissner, GDR
25.71 25.71	fill Storkel LISA
25.78	Leich Ann Fetter 11SA
25.80	Jill Sterkel, USA Leigh Ann Fetter, USA Tamara Costache, ROM
25.90	Catherine Plewinski, FRA
26.01	Karen Van Wirdum AUS
Consolati	on Finals—Sept. 25
26.17	Marion Aizpors, FRG
26.22	Marion Aizpors, FRG Christiane Pielke, FRG
26.34	Marie-T. Armentero, SU
26.45	Kristin Topham, CAN
	Ayako Nakano, JPN
26.48	Inna Abramova, URS
26.66 26.80	Karin Brienesse, HOL Oiana van der Plaats, HOL
Prelims-	Cont 25
25.67	Wenyi Yang, CHN
25.77	Katrin Meissner, GOR
25.85	Kristin Otto, GDR
25.91	Leigh Ann Fetter, USA
26.01	Catherine Plewinski, FRA
26.02	Jill Sterkei, USA
26.06	Tamara Costache, ROM
26.12	Karen van Wirdum, AUS
26.20	Marion Aizpors, FRG
26.27	Inna Abramova, URS
26.32 26.33	Marie T. Armentero, SUI Christiane Pielke, FRG
26.44	Avako Nakano, JPN
26.49	Diana van der Plaats, HOL Kristin Topham, CAN
26.50	Kristin Topham, CAN
26.54	Karin Brienesse, HOL
26.56	Adriana Pereira, BRA
26.56	Luminita Dobrescu, ROM
26.60	Andrea Nugent, CAN
26.61 26.61	Gitta Jensen, OEN Kaori Sasaki, JPN
26.66	Fujie Xia, CHN
26.67	Helena Aberg, SWE
26.85	Helena Aberg, SWE Karin Furuhed, SWE
27.14 27.16 27.17 27.27 27.27	Alison Sheppard, GBR
27.16	Maria Rivera, MEX
27.17	Annabelle Cripps, GBR
27.27	Karen Dieffenthaller, TRI
27.34 27.43 27.44	Senda Gharbi, TUN Akiko Thomson, PHI
27.44	Monica Resemde, BRA
27.45 27.96	Patricia Kohlmann, MEX
27.96	Carolina Mauri, CRC
28.02	Young-Hee Han, KOR
28.15	Cee Kay Hung, HKG
28.20	Joo-Li Park, KOR
28.38	Bryndis Ollafsdottir, ISL
28.46 28.55	Ana Joselina Forlin, HON Cina Munch, FIJ
28.66	Catherine Fogarty, ZIM
28.73	Chi Wang, TPE
28.82	Chi Wang, TPE Sabrina Lum, TPE
28.94	Veronica Cummings, GUM
29.01	Angela Birch, FIJ Wing Sze Tsang, HKG
29.14	Wing Sze Tsang, HKG
29.42 29.54	Katerine Moreno, BOL
29.54	Elsa Freire, ANG Carolina Araujo, MOZ
29.04	
30.77	Ana Martins, ANG Nancy Khalaf, LIB
100 FRE Champio	ESTYLE nship Finals—Sept. 19

Champion	snip Finals—Sept. 19
54.93	Kristin Otto, GDR
55.47	Yong Zhuang, CHN
55.49	Catherine Plewinski, FRA
55.52	Manuela Stellmach, GDR
55.90	Silvia Poll, CRC
56.15	Karin Brienesse, HOL
56.25	Dara Torres, USA
56.54	Conny van Bentum, HOL
Consolatio	on Finals—Sept. 19
56.48	Natalia Trefilova, URS
56.72	Ayako Nakano, JPN
56.79	Luminita Dobrescu, ROM
56.83	Mitzi Kremer, USA
57.02	Gitta Jensen, DEN
57.04	Karen van Wirdum, AUS
57.07	Svetlana Issakova, URS
57.11	Tamara Costache, ROM
	Sept. 18
55.53	Catherine Plewinski, FRA
55.80	Kristin Otto, GDR
55.84	Yong Zhuang, CHN
56.14	Manuela Stelimach, GDR
56.16	Silvia Poll, CRC
56.29	Karin Brienesse, HOL
56.37	Dara Torres, USA
56.50	Conny van Bentum, HOL



56.66 Natalia Trefilova, URS 56.67 56.79 56.84 56.97 Luminita Dobrescu, ROM Tamara Costache, ROM Karen van Wirdum, AUS Mitzi Kremer, USA Svetlana Issakova, URS 57.17 57.28 57.29 Gitta Jensen, DEN Ayako Nakano, JPN Ayako Nakano, JPN Andrea Nugent, CAN Marie-T. Armentero, SUI Christiane Pielke, FRG Jane Kerr, CAN Eva Nyberg, SWE Susio Reumor, AUS 57.33 57.35 57.47 57.55 57.57 57.76 57.79 57.80 Susie Baumer, AUS Yaping Lou, CHN Natacha Hristova, BUL Annabelle Cripps, GBR 57.81 Pia Sorensen, OEN 57.82 57.97 Karin Furuhed, SWE 57.97 58.19 58.22 58.22 58.39 58.40 58.51 June Croft, GBR June Croft, GBR Jacqueline Delord, FRA Silvia Persi, ITA Katja Ziliox, FRG Kaori Sasaki, JPN Senda Gharbi, TUN 58.53 Adriana Pereira, BRA Karen Dieffenthaller, TRI Patricia Kohlmann, MEX Isabelle Vieira, BRA Maria Rivera, MEX Akiko Thomson, PHI 59.04 59.05 59.15 59.32 59.41 AKIKO INOMSON, PHI Bryndis Ollafsdottir, ISL Carolina Mauri, CRC Cee Kay Hung, HKG Eun-Jung Kim, KOR Ana Joselina Fortin, HON Fenella Ng, HKG Yung, HKG 59.56 1:00.14 1:00.18 1:00.39 1:01.11 1:01.27 1:01.27 Fenella Ng, HKG 1:01.55 Young-Hee Han, KKR 1:01.72 Chi Wang, TPE 1:02.11 Sabrina Lum, TPE 1:02.47 Catherine Fogarty, ZIM 1:02.63 Veronica Cummings, GUM 1:03.06 Cina Munch, FJJ 1:03.06 Cina Munch, FJJ 1:03.06 Cina Munch, FIJ 1:05.11 Carolina Araujo, MOZ 1:05.39 Katerine Moreno, BOL 1:05.47 Elsa Freire, ANG 1:06.73 Nancy Khalaf, LIB 1:08.15 Carla Fernandes, ANG 200 FREESTYLE Championship Finals—Sept. 21 1:57.650 Heike Friedrich, GDR 1:58.67 Silvia Poll, CRC 1:59.01 Manuela Stellmach, GOR 1:59.04 Mary Wayte, USA 1:59.24 Natalia Trefilova, URS

2:00.23 Mitzl Kremer, USA 2:00.73 Stephanie Ortwig, FRG 2:02.88 Cecile Prunier, FRA Consolation Finals-Sept. 21 Consolation Finals—Sept. 21 2:00.77 Patricia Noali, CAN 2:01.66 Ruth Gilfillan, GBR 2:01.84 Mette Jacobsen, DEN 2:01.98 Luminita Dobrescu, ROM 2:02.30 Stela Pura, ROM 2:02:30 Stela Pura, ROM 2:02:31 Chikako Nakamori, JPN 2:02:32 Birgit Lohberg-Schulz, FRG 2:14:33 Yong Zhuang, CHN Prolims—Sept. 20 1:59:02 Heike Friedrich, GDR 1:59:22 Silvia Poli, CRC 1:59:22 Silvia Poli, CRC 1 59.22 Silvia Poll, CRC 1 59.22 Silvia Poll, CRC 1 595.50 Mary Wayte, USA 200.30 Manuel Stelimach. GDR 200.54 Natalia Trefliova. URS 200.66 Stepanie Ortwoje. FR6 2:01.45 Mitzi Kremer, USA 2:01.60 Cecie Prunier, FRA 2:01.76 Chikako Nakamori, JPN 2:01.93 Luminia bobrescu, ROM 2:02.21 Ruth GitHlan. GBR 2:02.24 Stela Pura, ROM 2:02.21 Patricia Noali, CAN 2:02.26 Stela Pura, ROM 2:02.31 Patricia Noali, CAN 2:02.40 Yong Zhuang, CHN 2:02.77 Birgit Lohberg-Schulz, FRG 2:03.02 Adriana v. d. Plaats, HOL 2:03.32 Isabelle Arnould, BEL 2:03.32 Suzanne Nilsson, SWE 2:03.42 Steriden Burget Jonez AUS 2:03.32 2:03.42 2:03.42 Sheridan Burge-Lopez, AUS 2:03.63 June Croft, GBR 2:03.63 June Croft, GBR 2:04.36 Karin Brienesse, HOL 2:04.40 Silvia Persi, ITA 2:04.71 Annette Jorgensen, DEN 2:04.74 Patricia Amorim, BRA 2:04.82 Susie Baumer, AUS Huda Abdullah Nurul, MAL 2.04.85 2:04 92 Jane Kerr CAN 2:04.92 Jane Kerr, CAN 2:06.18 Kaori Sasaki, JPN 2:06.60 Senda Gharbi, TUN 2:07.09 Karen Dieffenthaller, TRI 2:07.11 Bryndis Ollafsdottir, ISL 2:07.44 Ritajean Garay, PUR 2:07.44 Ritajean Garay, PUR 2:10.22 Natasha Aguilar, CRC 2:10.36 Patricia Kohimann, MEX 2:10.43 Fenella Ng, HKG 2:10.85 Eum-Jung Kim, KOR 2:11.50 Hui-Chien Chang, TPE 2:11.53 Joo-Li Park, KOR 2:12:44 Hong Oian, CHN 2:13:44 Catherine Fogarty, Z 2:13:61 Cee Kay Hung, HKG 2:16:79 Angela Birch, FIJ 2:18:45 Cina Munch, FIJ 71M

400 FREESTYLE Championship Finals—Sept. 22 4:03 Soy Janet Evans, USA 4:05,294 Heike Friedrich, 6DR 4:08,16 Zanke Mohring, 6DR 4:08,16 Tami Bruce, USA 4:10,64 Janelle Elford, AUS 4:11,73 Isabelle Arnould, BEL 4:13,05 Stephanie Ortwig, FR6 4:13,42 Natalia Treflova, URS Consolation Finals—Sept. 22 4:10,21 Sheridan Burge-Lopez, AUS 4:11,88 Neam Lung, ROM 4:12,14 Stela Pura, ROM 4:13,43 A. Strumenlieva, BUL 4:14,70 Partica Noall. CAN 4:14,70 Partica Noall. CAN 4:15,59 Chickao Nakamori, JPN 4:21,03 Cecile Prumer, FRA **Prelims—Sept. 22** 4:10,12 Janet Evans, USA 4:10,64 Anke Mohring, GOR 4:10,73 Tami Bruce, USA 4:11,20 Heike Friedrich, GOR 4:11,27 Sheridan Boll, CAN 4:12,24 Noemi Lung, ROM 4:12,14 Stela Pura, ROM 4:12,14 Stela Pura, ROM 4:13,159 Chickao Nakamori, JPN 4:21,03 Cecile Prumer, FRA **Prelims—Sept. 22** 4:10,12 Janet Evans, USA 4:11,07 Janelle Elford, AUS 4:11,07 Janelle Elford, AUS 4:11,27 Sheridan Torflova, URS 4:13,258 A. Strumentleva, BUL 4:15,150 Chickao Nakamori, JPN 4:15,153 Chickao Nakamori, JPN 4:15,153 Chickao Nakamori, JPN 4:15,153 Chicle Pura, ROM 4:15,153 Strumentleva, BUL 4:15,154 Manuela Meichiorri, 11A 4:15,155 Chickao Nakamori, JPN 4:15,155 Chickao Nakamori, JPN 4:15,157 Steila Pura, ROM 4:15,25 Lourant Evans, USA 4:15,39 Patricia Anoli. CAN 4:15,39 Patricia Anoli. CAN 4:15,39 Unicia Anoli. CAN 4:15,30 Extent Funas, SEL 4:20,30 Anoli Evans, USA 
al and a	10
8:30.86	Tami Bruce, USA
8:30.94	Janelle Elford, AUS
8:37.47	isabelle Arnould,
8:41.05	A. Strumenlieva, BUL
Prelims-	-Spet. 23
8:28.07	Astrid Strauss, GDR
8:28.13	Janet Evans, USA
8:29.68	Julie McDonald, AUS
8:30.95	Anke Mohring, GDR
8:31.57	Tami Bruce, USA
8:32.14	Janelle Elford, AUS
8:34.56	isabelle Arnould, BEL
8:35.40	A. Strumenlieva, BUL
8:36.24	Debbie Wurzburger, CAN
8:38.33	Irene Dalby, NOR
8:39.55	Tomomi Hosoda, JPN
8:40.63	Manuela Melchiorri, ITA Karvn Faure, FRA
8:41.64	
8:41.95 8:43.19	Stephanie Ortwig, FRG Natalia Trefilova, URS
8:43.19	Karen Meilor, GBR
8:49.31	Alexandra Russ, FRG
8:50.82	Pernille Jensen, DEN
8:50.84	Huda Abdullah Nurul, MAL
8:51.22	Christelle Janssens, BEL
8:51.95	Patricia Amorim, BRA
8:53.67	Eva Mortensen, DEN
8:56.37	Judit Csabai, HUN
8:57.22	Cecile Prunier, FRA
9:00.04	Tracey Atkin, GBR
9:00.81	Ming Yan, CHN
9:04.62	Ritajean Garay, PUR
100 BAC	KSTROKE
Champion	nship Finals—Sept. 22
1:00.89	Kristin Otto, GDR
	Krisztina Egerszegi, HUN
1:01.57	
1:02.71	Betsy Mitcheli, USA
	Beth Barr, USA
	Silvia Poll, CRC
1:04.15	Nicole Livingstone, AUS

	Aneta Patrascoiu, ROM
1:03.68	
1:03.68 1:03.80 1:03.87	Svenja Schlicht, FRG Manuela Carosi, ITA Lori Melien, CAN
1.03.87	Lori Melien CAN
1:03.88	Lorenza Vigarani, ITA Jolanda de Rover, HOL Sharon Musson, NZL
1:04.11	Jolanda de Rover, HOL
1:04.17	Katharine Read, GBR
Prelims-	
1:01.45	Sept. 22 Kristin Otto, GDR Cornelia Sirch, GDR Krisztina Egerszegi, HUN - Beth Barr, USA
1:01.63	Cornelia Sirch, GDR
1:02.09	Krisztina Egerszegi, HUN ·
1:02.63	Beth Barr, USA Betsy Mitchell, USA
1:02.85	Betsy Mitchell, USA Silvia Poll, CRC
1:03.26	Nicole Livingstone, AUS
1:03.27	Marion Aizpors, FRG
1:03.27 1:03.29	Aneta Patrascolu, RUM
1:03.72	Svenja Schlicht, FRG
1:03.96	Lorenza Vigarani, ITA
1:04.29 1:04.39	Lori Melien, CAN Jolanda de Rover, HOL
1:04.55	Sharon Musson, NZL
1:04.62	Katharine Read, GBR
1:04.58 1:04.62 1:04.69	Manuela Carosi, ITA
1:04.69	Karen Lord, AUS Swim-off: 1:05.05/1:04.75
4.04.75	Swim-off: 1:05.05/1:04.75
1:04.75	Swim-off: 1:05.0571.04.75 Sharon Page, GBR Bistra Gospodinova, BUL Laurence Guillou, FRA Eva Gysling, SUI Johanna Larsson, SWE
1:05.07	Laurence Guiliou FBA
1:05.07	Eva Gysling, SUI
1:05.10	Johanna Larsson, SWE
1:05.15	Bolin Wang, CHN
1:05.38	Satoko Morishita, JPN
1:05.81	Sylvia Hume, NZL
1:06.14	Nichelle Smith IPI
1:06.51	Akika Thomson PHI
1:06.73	Akiko Thomson, PHI Alieen Convery, IRL Ji-Hee Hong, KOR
1:08.33	Ji-Hee Hong, KOR
1:08.58	Ritajean Garay, PUR
1:09.56	Chi Wang, TPE
1:10.10	Eva Gysling, SUI Johana Larsson, SWE Bolin Wang, CHN Satoko Morishita, JPN Sylvia Hume, NZL Tomoko Onogi, JPN Michelle Smith, IRL Akiko Thomson, PHI Alieen Convery, IRL Ji-Hee Hong, KOR Ritajean Garay, PUR Chi Wang, TPE Ana Joselina Fortin, HON Tricia Duncan, ISW
1:10.37	Tricia Duncan, ISV Wing Sze Tsang, HKG
1:10.50	Sharon Pickering, FIJ
1:13.48	Angela Birch, FIJ
1:14.42	Katerine Moreno, BOL
1:15.56	Elsa Freire, ANG
1:15.86	Carolina Arauin M(1/
	Carolina Araujo, MOZ
1:15.86 1:21.58	Carla Fernandes, ANG
1:21.58	Carla Fernandes, ANG
1:21.58	Carla Fernandes, ANG
1:21.58 200 BAC	Carla Fernandes, ANG
1:21.58 200 BAC Champio	Carla Fernandes, ANG KSTROKE nship Finals—Sept. 25 o Krisztina Egerszegi, HUN
1:21.58 200 BAC Champio 2:09.29e	Carla Fernandes, ANG KSTROKE nship Finals—Sept. 25 o Krisztina Egerszegi, HUN
1:21.58 200 BAC Champio 2:09.29e	Carla Fernandes, ANG KSTROKE nship Finals—Sept. 25 o Krisztina Egerszegi, HUN
1:21.58 200 BAC Champio 2:09.29e	Carla Fernandes, ANG KSTROKE nship Finals—Sept. 25 o Krisztina Egerszegi, HUN
1:21.58 200 BAC Champio 2:09.29e	Carla Fernandes, ANG KSTROKE nship Finals—Sept. 25 o Krisztina Egerszegi, HUN
1:21.58 200 BAC Champio 2:09.29e	Carla Fernandes, ANG KSTROKE nship Finals—Sept. 25 o Krisztina Egerszegi, HUN
1:21.58 200 BAC Champio 2:09.29e	Carla Fernandes, ANG KSTROKE nship Finals—Sept. 25 o Krisztina Egerszegi, HUN
1:21.58 200 BAC Champio 2:09.29e 2:10.61 2:11.45 2:12.39 2:13.43 2:15.02 2:15.17 2:15.94	Carla Fernandes, ANG KSTROKE Inship Finals—Sept. 25 o Krisztina Egerszegi, HUN Kathriz Timmermann, GDR Cornelia Sirch, GDR Beth Barr, USA Nicole Livingstone, AUS Andrea Hayes, USA Jolanda de Rover, HOL Svenja Schlicht, FRG
1:21.58 200 BAC Champio 2:09.29e 2:10.61 2:11.45 2:12.39 2:13.43 2:15.02 2:15.17 2:15.94	Carla Fernandes, ANG KSTROKE Inship Finals—Sept. 25 o Krisztina Egerszegi, HUN Kathriz Timmermann, GDR Cornelia Sirch, GDR Beth Barr, USA Nicole Livingstone, AUS Andrea Hayes, USA Jolanda de Rover, HOL Svenja Schlicht, FRG
1:21.58 200 BAC Champio 2:09.29e 2:10.61 2:11.45 2:12.39 2:13.43 2:15.02 2:15.17 2:15.94	Carla Fernandes, ANG KSTROKE Inship Finals—Sept. 25 o Krisztina Egerszegi, HUN Kathriz Timmermann, GDR Cornelia Sirch, GDR Beth Barr, USA Nicole Livingstone, AUS Andrea Hayes, USA Jolanda de Rover, HOL Svenja Schlicht, FRG
1:21.58 200 BAC Champio 2:09.29e 2:10.61 2:11.45 2:12.39 2:13.43 2:15.02 2:15.17 2:15.94	Carla Fernandes, ANG KSTROKE Inship Finals—Sept. 25 o Krisztina Egerszegi, HUN Kathriz Timmermann, GDR Cornelia Sirch, GDR Beth Barr, USA Nicole Livingstone, AUS Andrea Hayes, USA Jolanda de Rover, HOL Svenja Schlicht, FRG
1:21.58 200 BAC Champio 2:09.29e 2:10.61 2:11.45 2:12.39 2:13.43 2:15.02 2:15.17 2:15.94	Carla Fernandes, ANG KSTROKE Inship Finals—Sept. 25 o Krisztina Egerszegi, HUN Kathriz Timmermann, GDR Cornelia Sirch, GDR Beth Barr, USA Nicole Livingstone, AUS Andrea Hayes, USA Jolanda de Rover, HOL Svenja Schlicht, FRG
1:21.58 200 BAC Champio 2:09.29e 2:10.61 2:11.45 2:15.02 2:15.17 2:15.75 2:16.16 2:16.68 2:16.68 2:18.20 2:18.69 2:18.79	Carla Fernandes, ANG KSTROKE Inship Finals—Sept. 25 o Krisztina Egerszegi, HUN Kathrin Zimmermann, GOR Cornelia Sirch, GDR Beth Barr, USA Nicole Livingstone, AUS Andrea Hayes, USA Jolanda de Rover, HOL Svenja Schlicht, FRG on Finals—Sept. 25 Aneta Patrascolu, ROM Sharon Musson, NZL Li Lin, CHN Katharine Read, GBR Lorenza Vigarani, ITA Karen Lord, AUS
1:21.58 200 BAC Champio 2:09.29e 2:10.61 2:11.45 2:12.39 2:15.17 2:15.94 Consolati 2:16.06 2:16.06 2:16.08 2:18.20 2:18.69 2:18.78	Carla Fernandes, ANG KSTROKE Inship Finals—Sept. 25 o Krisztina Egerszegi, HUN Kathrin Zimmermann, GOR Cornelia Sirch, GDR Beth Barr, USA Nicole Livingstone, AUS Andrea Hayes, USA Jolanda de Rover, HOL Svenja Schlicht, FRG on Finals—Sept. 25 Aneta Patrascolu, ROM Sharon Musson, NZL Li Lin, CHN Katharine Read, GBR Lorenza Vigarani, ITA Karen Lord, AUS
1:21.58 200 BAC Champio 2:09.29e 2:10.61 2:11.45 2:12.39 2:13.40 2:15.17 2:15.94 Consolat 2:15.75 2:16.06 2:16.68 2:18.78 2:18.78 2:18.78 DO	Carla Fernandes, ANG KSTROKE nship Finals—Sapt. 25 o Krisztina Egerszegi, HUN Kathrin Zimmermann, GDR Cornelia Sirch, GDR Beth Barr, USA Nicole Livingstone, AUS Andrea Hayes, USA Jolanda de Rover, HOL Svenja Schlicht, FRG Ion Finals—Sapt. 25 Aneta Partascolu, ROM Sharon Musson, NZL Li Lin, CHN Katharine Read, GBR Lorenza Vigarani, ITA Karen Lord, AUS Satoko Morishita, JPN Johanna Larsson, SWE
1:21.58 200 BAC Champio 2:09.290 2:10.61 2:11.45 2:12.39 2:15.02 2:15.17 2:15.94 Consolati 2:15.75 2:16.06 2:16.68 2:18.20 2:18.78 00 Prelims-	Carla Fernandes, ANG KSTROKE Inship Finals—Sept. 25 o Krisztina Egerszegi, HUN Kathrin Zimmermann, GDR Gornelia Sirch, GDR Beth Barr, USA Nicole Livingstone, AUS Andrea Hayes, USA Jolanda de Rover, HOL Svenja Schlicht, FRG on Finals—Sept. 25 Aneta Patrascolu, ROM Sharon Musson, NZL Li Lin, CHN Katharine Read, GBR Lorenza Vigarani, ITA Karen Lord, AUS Satoko Morishila, JPN Johanna Larsson, SWE -Sept. 25
1:21.58 200 BAC Champio 2:09.290 2:10.61 2:11.45 2:12.39 2:15.02 2:15.17 2:15.94 Consolati 2:15.75 2:16.06 2:16.68 2:18.20 2:18.78 00 Prelims-	Carla Fernandes, ANG KSTROKE Inship Finals—Sept. 25 o Krisztina Egerszegi, HUN Kathrin Zimmermann, GDR Gornelia Sirch, GDR Beth Barr, USA Nicole Livingstone, AUS Andrea Hayes, USA Jolanda de Rover, HOL Svenja Schlicht, FRG on Finals—Sept. 25 Aneta Patrascolu, ROM Sharon Musson, NZL Li Lin, CHN Katharine Read, GBR Lorenza Vigarani, ITA Karen Lord, AUS Satoko Morishila, JPN Johanna Larsson, SWE -Sept. 25
1:21.58 200 BAC Champio 2:09.290 2:10.61 2:11.45 2:12.39 2:15.02 2:15.17 2:15.94 Consolati 2:15.75 2:16.06 2:16.68 2:18.20 2:18.78 00 Prelims-	Carla Fernandes, ANG KSTROKE Inship Finals—Sept. 25 o Krisztina Egerszegi, HUN Kathrin Zimmermann, GDR Gornelia Sirch, GDR Beth Barr, USA Nicole Livingstone, AUS Andrea Hayes, USA Jolanda de Rover, HOL Svenja Schlicht, FRG on Finals—Sept. 25 Aneta Patrascolu, ROM Sharon Musson, NZL Li Lin, CHN Katharine Read, GBR Lorenza Vigarani, ITA Karen Lord, AUS Satoko Morishila, JPN Johanna Larsson, SWE -Sept. 25
1:21.58 200 BAC Champio 2:09.290 2:10.61 2:11.45 2:12.39 2:15.02 2:15.17 2:15.94 Consolati 2:15.75 2:16.06 2:16.68 2:18.20 2:18.78 00 Prelims-	Carla Fernandes, ANG KSTROKE Isship Finals—Sapt. 25 o Krisztina Egerszegi. HUN Kathrin Zimmermann, GDR Gornelia Sirch, GDR Beth Barr, USA Nicole Livingstone, AUS Andrea Hayes, USA Jolanda de Rover, HOL Svenja Schlicht, FRG on Finals—Sapt. 25 Aneta Patrasolu, ROM Sharon Musson, NZL Li Lin, CHN Katharine Read, GBR Lorenza Vigarahi, ITA Karen Lord, AUS Satoko Morishila, JPN Johanna Larsson, SWE -Sopt. 25 Corneiia Sirch, GDR Krisztina Egerszegi, HUN Katharin Zimmermann, GDR
1:21.58 200 BAC Champio 2:09.29e 2:10.61 2:11.45 2:12.39 2:15.02 2:15.17 2:15.94 Consolat 2:15.75 2:16.06 2:16.06 2:16.06 2:16.869 2:18.78 D0 Prelims- 2:10.46 2:12.81 2:12.81 2:13.91 2:13.91	Carla Fernandes, ANG KSTROKE Isship Finals—Sapt. 25 o Krisztina Egerszegi. HUN Kathrin Zimmermann, GDR Gornelia Sirch, GDR Beth Barr, USA Nicole Livingstone, AUS Andrea Hayes, USA Jolanda de Rover, HOL Svenja Schlicht, FRG on Finals—Sapt. 25 Aneta Patrasolu, ROM Sharon Musson, NZL Li Lin, CHN Katharine Read, GBR Lorenza Vigarahi, ITA Karen Lord, AUS Satoko Morishila, JPN Johanna Larsson, SWE -Sopt. 25 Corneiia Sirch, GDR Krisztina Egerszegi, HUN Katharin Zimmermann, GDR
1:21.58 200 BAC Champio 2:109.29e 2:10.61 2:11.45 2:12.39 2:13.43 2:15.02 2:15.17 2:15.94 Consolati 2:16.68 2:16.68 2:18.69 2:18.79 2:18.78 DO Prelims- 2:10.10 2:11.01 2:13.91 2:13.91 2:13.91 2:13.91 2:14.77	Carla Fernandes, ANG KSTROKE Isship Finals—Sapt. 25 o Krisztina Egerszegi. HUN Kathrin Zimmermann, GDR Gornelia Sirch, GDR Beth Barr, USA Nicole Livingstone, AUS Andrea Hayes, USA Jolanda de Rover, HOL Svenja Schlicht, FRG on Finals—Sapt. 25 Aneta Patrasolu, ROM Sharon Musson, NZL Li Lin, CHN Katharine Read, GBR Lorenza Vigarahi, ITA Karen Lord, AUS Satoko Morishila, JPN Johanna Larsson, SWE -Sopt. 25 Corneiia Sirch, GDR Krisztina Egerszegi, HUN Katharin Zimmermann, GDR
1:21.58 200 BACC Champio 2 :09.29e 2 :10.61 2 :11.45 2 :12.39 2 :15.02 2 :15.02 2 :15.02 2 :16.02 2 :17.02 2 :16.02 2 :17.02 2 :1	Carla Fernandes, ANG KSTROKE Isship Finals—Sapt. 25 o Krisztina Egerszegi. HUN Kathrin Zimmermann, GDR Cornelia Sirch, GDR Beth Barr, USA Nicole Livingstone, AUS Andrea Hayes, USA Jolanda de Rover, HOL Svenja Schlicht, FRG on Finals—Sapt. 25 Aneta Patrascolu. ROM Sharon Musson, NZL Li Lin, CHN Katharine Read. GBR Lorenza Vigarah, ITA Karen Lord, AUS Satoko Morishila. JPN Satoko Morishila, JPN Satoko Morishila, JPN Satoko Morishila, JPN Sofania Egerszegi, HUN Kathrini Zimmermann, GDR Beth Barr, USA Nicole Livingstone, AUS Jolanda de Rover, HUS
1:21.58 200 BACC Champio 2:09.29e 2:10.61 2:11.45 2:12.39 2:15.02 2:15.02 2:15.02 2:15.02 2:16.06 2:16.02 2:16.21 2:16.21 2:16.21 2:16.21 2:17.57 5 2:10.46 2:11.04 2:	Carla Fernandes, ANG KSTROKE nship Finals—Sapt. 25 o Krisztina Egerszegi. HUN Kathrin Zimmermann, GOR Beth Barr, USA Nicole Livingstone, AUS Andrea Hayes, USA Jolanda de Rover, HOL Svenja Schlicht, FRG Sornias—Sapt. 25 Aneta Patrascolu. ROM Sharon Musson, NZL Li Lin, CHN Katharine Read, GBR Lorenza Vigarani, ITA Katharine Read, CBR Lorenza Vigarani, ITA Katharine Lorenza Vigarani, ITA Katharine Lorenza Vigarani, ITA Katharine Zimana, Katharine
1:21.58 200 BACC 200 BACC 200 BACC 2:00.29 2:00.61 2:10.61 2:11.43 2:12.93 2:10.21 2:15.17 2:15.94 2:15.77 2:15.94 2:16.06 2:18.09 2:18.78 2:1	Carla Fernandes, ANG KSTROKE nship Finals—Sapt. 25 o Krisztina Egerszegi. HUN Kathrin Zimmermann, GDR Cornelia Sirch, GDR Beth Barr, USA Nicole Livingstone, AUS Andrea Hayes, USA Jolanda de Rover, HOL Svenja Schlicht, FRG Ion Finals—Sapt. 25 Aneta Partascolu, ROM Sharon Musson, NZL Li Lin, CHN Katharine Fead, GBR Lorenza Vigarani, ITA Karen Lord, AUS Satoko Morishila. JPN Johanna Larsson. SWE Sornelia Sirch, GOR Krisztina Egerszegi, HUN Kathrin Zimmermann, GDR Beth Barr, USA Andrea Hayes, USA Nicole Livingstone, AUS Jolanda de Rover, HOL Svenja Schlicht, FRG Katharine Red, GBR
1:21.58 200 BACC Champio 2:00.292 2:10.61 2:02.292 2:10.61 2:11.45 2:15.75 2:15.94 Consult 2:15.75 2:15.64 2:18.20 2:18.20 2:18.62 2:18.78 2:10.47 2:15.75 2:10.66 2:18.20 2:11.01 2:12.81 2:10.21 2:14.73 2:16.58 2:16.29 2:17 2:2 2:16.29 2:17 2:12 2:16.29 2:17 2:17 2:17 2:17 2:17 2:17 2:17 2:17	Carla Fernandes, ANG KSTROKE Isship Finals—Sapt. 25 o Kristina Egerszegi. HUN Kathrin Zimmermann, GDR Gornelia Sirch, GDR Beih Barr, USA Nicole Livingstone, AUS Andrea Hayes, USA Jolanda de Rover, HOL Svenja Schlicht, FRG on Finals—Sapt. 25 Aneta Patrasolu, ROM Sharon Musson, NZL Li Lin, CHN Katharine Read, GBR Lorenza Vigarani, ITA Karen Lord, AUS Satoko Morishila, JPN Johanna Larsson, SWE -Sapt. 25 Cornelia Sirch, GDR Kriszlina Egerszegi, HUN Kathrin Zimmermann, GDR Beih Barr, USA Andrea Hayes, USA Nicole Livingstone, AUS Jolanda de Rover, HOL Svenja Schlicht, FRG Karen Lord, AUS Katharine Read, GBR Karen Lord, AUS
1:21.58 200 BACC Champio 2:00.292 2:10.61 2:02.292 2:10.61 2:11.45 2:15.75 2:15.94 Consult 2:15.75 2:15.64 2:18.20 2:18.20 2:18.62 2:18.78 2:10.47 2:15.75 2:10.66 2:18.20 2:11.01 2:12.81 2:10.21 2:14.73 2:16.58 2:16.29 2:17 2:2 2:16.29 2:17 2:12 2:16.29 2:17 2:17 2:17 2:17 2:17 2:17 2:17 2:17	Carla Fernandes, ANG KSTROKE nship Finals—Sapt. 25 o Krisztina Egerszegi, HUN Kathrin Zimmermann, GDR Cornelia Sirch, GDR Beth Barr, USA Nicole Livingstone, AUS Andrea Hayes, USA Jolanda de Rover, HOL Svenja Schliett, FRG Ion Finals—Sapt. 25 Aneta Partascolu, ROM Sharon Musson, NZL Li Lin, CHN Sharon Musson, NZL Li Lin, CHN Statoko Morishita. JPN Johanna Larsson. SWE Sept. 25 Cornelia Sirch. GDR Krisztina Egerszegi, HUN Kathrin Zimmermann, GDR Beth Barr, USA Andrea Hayes, USA Nicole Livingstone, AUS Jolanda de Rover, HOL Svenja Schlicht, FRG Katharine Red, GBR Andrea Hayes, USA Nicole Livingstone, AUS Nicole Livingstone, AUS Katharine Read, GBR Aneta Patrascoiu, ROM Lorenza Vigarani, ITA
1:21.58 200 BACC Champio 2:00.292 2:10.61 2:02.292 2:10.61 2:11.45 2:15.75 2:15.94 Consult 2:15.75 2:15.64 2:18.20 2:18.20 2:18.62 2:18.78 2:10.47 2:15.75 2:10.66 2:18.20 2:11.01 2:12.81 2:10.21 2:14.73 2:16.58 2:16.29 2:17 2:2 2:16.29 2:17 2:12 2:16.29 2:17 2:17 2:17 2:17 2:17 2:17 2:17 2:17	Carla Fernandes, ANG KSTROKE Isship Finals—Sapt. 25 o Krisztina Egerszegi. HUN. Kathrin Zimmermann, GDR Gornelia Sirch, GDR Behl Barr, USA Nicole Livingstone, AUS Andrea Hayes, USA Jolanda de Rover, HOL Svenja Schlicht, FRG on Finals—Sapt. 25 Aneta Patrasolu, ROM Sharon Musson, NZL Li Lin, CHN Katharine Read, GBR Lorenza Vigarani, ITA Solanda Egerszegi, HUN Kathrin Zimmermann, GDR Beth Barr, USA Andrea Hayes, USA Nicole Livingstone, AUS Jolanda de Rover, HOL Svenja Schlicht, FRG Karen Lord, AUS Stahton Morss, USA Nicole Livingstone, AUS Jolanda de Rover, HOL Svenja Schlicht, FRG Karen Lord, AUS Stahton Misson, NZL
1:21.58 200 BAC Champio 2 (09.2%) 2 (09.2%) 2 (10.61) 2 (11.2%) 2 (11.2%) 2 (11.2%) 2 (11.5%) 2 (15.6%) 2 (15.6%) 2 (15.6%) 2 (15.6%) 2 (15.6%) 2 (15.6%) 2 (15.6%) 2 (15.6%) 2 (11.6%) 2	Carla Fernandes, ANG KSTROKE nship Finals—Sapt. 25 o Krisztina Egerszegi, HUN Kathrin Zimmermann, GDR Cornelia Sirch, GDR Beth Barr, USA Nicole Livingstone, AUS Andrea Hayes, USA Jolanda de Rover, HOL Svenja Schlicht, FRG Infinis—Sapt. 25 Aneta Patrasolu, ROM Sharon Musson, NZL Li Lin, CHN Katharine Read, GBR Lorenza Vigarani, ITA Karen Lord, AUS Satoko Morishila, JPN Johanna Larsson, SWE Staptica Jegrszegi, HUN Kathrin Zimmermann, GDR Heih Barr, USA Nicole Livingstone, AUS Jolanda de Rover, HOL Svenja Schlicht, FRG Karen Lord, AUS Staptica Berszegi, HUN Kathrin Zimmermann, GDR Heih Barr, USA Nicole Livingstone, AUS Jolanda de Rover, HOL Svenja Schlicht, FRG Katharine Read, GBR Andrea Hayes, ISA Nicole Livingstone, AUS Jolanda de Rover, HOL Svenja Schlicht, FRG Katharine Read, GBR Andrea Hayerani, ITA Sharon Musson, NZL Johanna Larsson, SWE
1:21.58 200 BAC Champio 2 (09.2%) 2 (09.2%) 2 (10.61) 2 (11.2%) 2 (11.2%) 2 (11.2%) 2 (15.0\%) 2 (15.0\%) 2	Carla Fernandes, ANG KSTROKE nship Finals—Sapt. 25 o Kritsztina Egerszegi, HUN Kathrin Zimmermann, GDR Cornelia Sirch, GDR Beth Barr, USA Nicole Livingstone, AUS Andrea Hayes, USA Jolanda de Rover, HOL Svenja Schlicti, FRG Ion Finals—Sapt. 25 Aneta Patrasolu, ROM Sharon Musson, NZL Li Lin, CHN Katharine Read, GBR Lorenza Vigarani, ITA Kathrinzina Egerszegi, HUN Kathrini Zimmermann, GDR Beth Barr, USA Andrea Hayes, USA Nicole Livingstone, AUS Jolanda de Rover, HOL Svenja Schlicht, FRG Kathrinz Read, GBR Andrea Hayes, USA Nicole Livingstone, AUS Jolanda de Rover, HOL Svenja Schlicht, FRG Kathrin Zimmermann, GDR Hondrea Hayes, USA Nicole Livingstone, AUS Jolanda de Rover, HOL Svenja Schlicht, FRG Katharine Read, GBR Aneta Patrasson, SWE Li Lin, CHN Satoko Morishita, JPN
1:21.58 200 BAC Champio 2 (0.2) 2 (0.2) 2 (0.2) 2 (0.2) 2 (10.61 2 (11.2) 2 (10.61 2 (11.2) 2 (10.61 2 (11.6) 2 (11.6) 2 (15.62 2 (15.62 2 (15.62 2 (15.62 2 (15.62 2 (15.62 2 (15.62 2 (15.62 2 (15.62 2 (15.62 2 (15.62 2 (15.62 2 (17.62 2	Carla Fernandes, ANG KSTROKE Isship Finals—Sapt. 25 o Krisztina Egerszegi, HUN Kathrin Zimmermann, GOR Cornelia Sirch, GOR Beth Barr, USA Nicole Livingstone, AUS Andrea Hayes, USA Jolanda de Rovet, HOL Svenja Schlicht, FRG on Finals—Sapt. 25 Aneta Patrasolu, ROM Sharon Musson, NZL Li Lin, CHN Katharine Read, GBR Lorenza Vigarahi, ITA Solako Morishita, JPN Nicole Livingstone, AUS Jolanda de Nover, HOL Svenja Schlicht, FRG Rathrine Read, GBR Lorenza Vigarahi, ITA Sharon Musson, NZL Jolanda de Nover, HOL Svenja Schlicht, FRG Karen Lord, AUS Skatharine Read, GBR Andrea Hayes, USA Nicole Livingstone, AUS Jolanda de Nover, HOL Svenja Schlicht, FRG Karen Lord, AUS Katharine Read, GBR Aneta Patrasoli, ROM Lorenza Vigarahi, ITA Sharon Musson, NZL Johanna Larsson, SWE Li Lin, CHN Satoko Morishita, JPN
1:21.58 200 BAC Champio 2 2:09.29e 2:10.61 2:11.42 2:12.39 2:12.39 2:13.43 2:15.75 2:16.68 2:18.78 2:19.81 2:18.78 2:19.81 2:18.78 2:19.81 2:18.78 2:19.81 2:1	Carla Fernandes, ANG KSTROKE Isship Finals—Sapt. 25 o Krisztina Egerszegi, HUN Kathrin Zimmermann, GOR Cornelia Sirch, GOR Beth Barr, USA Nicole Livingstone, AUS Andrea Hayes, USA Jolanda de Rovet, HOL Svenja Schlicht, FRG on Finals—Sapt. 25 Aneta Patrasolu, ROM Sharon Musson, NZL Li Lin, CHN Katharine Read, GBR Lorenza Vigarahi, ITA Solako Morishita, JPN Nicole Livingstone, AUS Jolanda de Nover, HOL Svenja Schlicht, FRG Rathrine Read, GBR Lorenza Vigarahi, ITA Sharon Musson, NZL Jolanda de Nover, HOL Svenja Schlicht, FRG Karen Lord, AUS Skatharine Read, GBR Andrea Hayes, USA Nicole Livingstone, AUS Jolanda de Nover, HOL Svenja Schlicht, FRG Karen Lord, AUS Katharine Read, GBR Aneta Patrasoli, ROM Lorenza Vigarahi, ITA Sharon Musson, NZL Johanna Larsson, SWE Li Lin, CHN Satoko Morishita, JPN
1:21.58 200 BACC Champio 2 (0.9 BACC Champio 2 (0.9	Carla Fernandes, ANG KSTROKE nship Finals—Sapt. 25 o Krisztina Egerszegi, HUN Kathrin Zimmermann, GDR Beth Barr, USA Nicole Livingstone, AUS Andrea Hayes, USA Jolanda de Rover, HOL Svenja Schlicht, FRG Svenja Schlicht, FRG Soreina Schlich, ERG Narla Partascolu, ROM Sharon Musson, NZL Li Lin, CHN Katharine Fead, GBR Lorenza Vigarani, ITA Karen Lord, AUS Satoko Morishita, JPN Johanna Larsson, SWE Soreila Sirch, GOR Krisztina Egerszegi, HUN Kathrine Zimmermann, GDR Beith Barr, USA Andrea Hayes, USA Nicole Livingstone, AUS Jolanda de Röver, HOL Svenja Schlicht, FRG Katharine Red, GBR Andra Hayes, USA Nicole Livingstone, AUS Jolanda de Röver, HOL Svenja Schlicht, FRG Katharine Red, GBR Andra Hayes, USA Nicole Livingstone, AUS Jolanda de Röver, HOL Svenja Schlicht, FRG Katharine Red, GBR Andra Hayes, USA Nicole Livingareni, ITA Sharon Musson, NZL Johanna Larsson, SWE Li Lin, CHN Satoko Morishita, JPN Michelle Smith, IRL Alleen Convery, IRL Loir Melin, CAN
1:21.58 200 BAC Champio 2 2:09.29e 2:10.61 2:11.42 2:12.39 2:12.39 2:12.39 2:15.75 2:16.68 2:18.78 2:28.78 2:2	Carla Fernandes, ANG KSTROKE Isship Finals—Sapt. 25 o Kritsztina Egerszegi, HUN Kathrin Zimmermann, GDR Cornelia Sirch, GDR Beth Barr, USA Nicole Livingstone, AUS Andrea Hayes, USA Jolanda de Rover, HOL Svenja Schlicti, FRG Ison Finals—Sapt. 25 Aneta Patrasolu, ROM Sharon Musson, NZL Li Lin, CHN Katharine Read, GBR Lorenza Vigarani, ITA Kathrinzina Egerszegi, HUN Kathrinia Sirch, GOR Kritsztina Egerszegi, HUN Kathrinia Sirch, GOR Kritsztina Egerszegi, HUN Kathrinia Sirch, GOR Kritsztina Egerszegi, HUN Kathrinia Read, GBR Andrea Hayes, USA Nicole Livingstone, AUS Jolanda de Rover, HOL Svenja Schlicht, FRG Kathrina Read, GBR Andrea Hayes, USA Nicole Livingstone, AUS Jolanda de Nover, HOL Svenja Schlicht, FRG Kathrina Read, GBR Aneta Patrasson, SWE Li Lin, CHN Satoko Morishita, JPN Michelle Smith, IRL Alieen Convey, IRL Lori Melien, CAN
1:21.58 200 BAC Champio 2 (09.294) 2 (09.294) 2 (10.61) 2 (10.21) 2 (11.23) 2 (11.23) 2 (11.23) 2 (11.23) 2 (11.54)	Carla Fernandes, ANG KSTROKE Isship Finals—Sapt. 25 o Krisztina Egerszegi, HUN Kathrin Zimmermann, GOR Cornelia Sirch, GDR Beih Barr, USA Nicole Livingstone, AUS Andrea Hayes, USA Jolanda de Rover, HOL Svenja Schlicht, FRG on Finals—Sapt. 25 Aneta Patrascolu. ROM Sharon Musson, NZL Li Lin, CHN Kathraine Read. GBR Lorenza Vigarani, ITA Karen Lord, AUS Satoko Morishila, JPN Johanna Larsson. SWE Johanna Larsson. SWE Li Lin, CHN Satoko Morishita, JPN Michelle Smith, IRL Alleen Convey, IRL Lori Melien, CAN Tomoko Onogi, JPN Sytiva Hume, NZL Heien Slatter. GBR
1:21.58 200 BAC Champio 2 2:09.29e 2:10.61 2:11.42 2:11.42 2:15.72 2:15.72 2:15.72 2:16.82 2:18.78 2:1	Carla Fernandes, ANG KSTRÜKE nship Finals—Sapt. 25 o Krisztina Egerszegi, HUN Kathrin Zimmermann, GDR Cornelia Sirch, GDR Beth Barr, USA Nicole Livingstone, AUS Andrea Hayes, USA Jolanda de Rover, HOL Svenja Schliett, FRG Ion Finals—Sapt. 25 Aneta Patrascolu, ROM Sharon Musson, NZL Li Lin, CHN Katharine Read, GBR Lorenza Vigarani, ITA Katherine Read, GBR Krisztina Egerszegi, HUN Katherine Erson. SWE Sotoko Morishita, JPN Johanna Larsson. SWE Sotoko Morishita, JNN Johanna Larsson. SWE Statko Morishita, JNN Johanna Larsson. SWE Stathrin Zimmermann, GDR Beth Barr, USA Andrea Hayes, USA Nicole Livingstone, AUS Nicole Livingstone, AUS Nicole Livingstone, AUS Johanna Larsson, SWE Lorenza Vigarani, ITA Sharon Musson, NZL Johanna Larsson, SWE Li Lin, CHN Satoko Morishita, JPN Satoko Morishita, JPN Michelle Smith, IRL Allene Convery, IRL Lori Melien, CAN Tomoko Onogi, JPN Sylvia Huma, NZL Helen Slatter, GBR Bolin Wang, CHN
1:21.58 200 BAC Champio 2 2:09.29e 2:10.61 2:11.42 2:11.42 2:15.75 2:15.75 2:16.06 2:15.75 2:16.06 2:18.78 2:18.78 2:18.78 2:18.78 2:10.61 2:11.21 2:16.82 2:16.82 2:11.21 2:16.82 2:16.82 2:17.25 2:16.83 2:16.82 2:17.25 2:16.83 2:16.82 2:17.25 2:16.83 2:16.83 2:16.83 2:16.84 2:17.25 2:16.83 2:16.84 2:17.25 2:16.84 2:17.25 2:16.84 2:17.25 2:16.84 2:17.25 2:16.84 2:17.25 2:16.84 2:17.25 2:16.84 2:17.25 2:16.84 2:17.25 2:16.84 2:17.25 2:16.84 2:17.25 2:16.84 2:17.25 2:16.84 2:17.25 2:16.84 2:17.25 2:16.84 2:12.12 2:18.74 2:1	Carla Fernandes, ANG KSTROKE Isship Finals—Sapt. 25 o Kristina Egerszegi. HUN Kathrin Zimmermann, GDR Gornelia Sirch, GDR Beih Barr, USA Nicole Livingstone, AUS Andrea Hayes, USA Jolanda de Rover, HOL Svenja Schlicht, FRG on Finals—Sapt. 25 Aneta Patrasolu. ROM Sharon Musson, NZL Li Lin, CHN Kathraine Read, GBR Lorenza Vigarani, ITA Karen Lord, AUS Satoko Morishita, JPN Kitahira Zimermann, GDR Beih Barr, USA Andrea Hayes, USA Nicole Livingstone, AUS Jolanda de Rover, HOL Svenja Schlicht, FRG Krisztina Egerszegi, HUN Kathrin Zimmermann, GDR Beih Barr, USA Andrea Hayes, USA Nicole Livingstone, AUS Jolanda de Rover, HOL Svenja Schlicht, FRG Karen Lord, AUS Katharine Read, GBR Andrea Hayes, USA Nicole Livingstone, AUS Jolanda de Rover, HOL Svenja Schlicht, FRG Karen Lord, AUS Katharine Read, GBR Aneta Patrasolu, RR Lori Meilen, CAN Tomoko Onogi, JPN Sylvia Hume, NZL Heien Siatter, GBR Bolin Wang, CHN
1:21.58 200 BAC Champio 2 2:09.29e 2:10.61 2:11.42 2:11.42 2:15.75 2:15.75 2:16.06 2:15.75 2:16.06 2:18.78 2:18.78 2:18.78 2:18.78 2:10.61 2:11.21 2:16.82 2:16.82 2:11.21 2:16.82 2:16.82 2:17.25 2:16.83 2:16.82 2:17.25 2:16.83 2:16.82 2:17.25 2:16.83 2:16.83 2:16.83 2:16.84 2:17.25 2:16.83 2:16.84 2:17.25 2:16.84 2:17.25 2:16.84 2:17.25 2:16.84 2:17.25 2:16.84 2:17.25 2:16.84 2:17.25 2:16.84 2:17.25 2:16.84 2:17.25 2:16.84 2:17.25 2:16.84 2:17.25 2:16.84 2:17.25 2:16.84 2:17.25 2:16.84 2:17.25 2:16.84 2:12.12 2:18.74 2:1	Carla Fernandes, ANG KSTROKE Isship Finals—Sapt. 25 o Krisztina Egerszegi, HUN Kathrin Zimmermann, GDR Cornelia Sirch, GDR Beth Barr, USA Nicole Livingstone, AUS Andrea Hayes, USA Jolanda de Rover, HOL Svenja Schlicht, FRG Infinat—Sapt. 25 Aneta Patrasolu, ROM Sharon Musson, NZL Li Lin, CHN Katharine Read, GBR Lorenza Vigarani, ITA Karen Lord, AUS Satoko Morishita, JPN Johanna Larsson, SWE Sotoko Morishita, JPN Johanna Larsson, SWE Statina Egerszegi, HUN Kathrin Zimmermann, GDR Krisztina Egerszegi, HUN Kathrin Zimmermann, GDR Krisztina Egerszegi, HUN Kathrin Zimmermann, GDR Andrea Hayes, USA Nicole Livingstone, AUS Jolanda de Rover, HOL Svenja Schlicht, FRG Katharine Read, GBR Andrea Hayes, ISA Nicole Livingstone, AUS Johanna Larsson, SWE Li Lin, CHN Satoko Morishita, JPN Michelle Smith, IRL Alleen Convery, IRL Lori Mellen, CAN Tomoko Onogi, JPN Stylvia Hume, NZL Helen Siatter, GBR Boin Wang, CHN Ritajaen Garay, PUR
1:21.58 200.8AC Champio 2:210.29 2:10.61 2:11.43 2:11.43 2:11.43 2:15.42 2:15.42 2:15.42 2:15.42 2:15.42 2:15.42 2:15.42 2:16.82 2:18.20 2:18.21 2:18.21 2:18.21 2:18.21 2:14.	Carla Fernandes, ANG KSTROKE Isship Finals—Sapt. 25 o Kristina Egerszegi. HUN Kathrin Zimmermann, GOR Cornelia Sirch, GDR Beih Barr, USA Nicole Livingstone, AUS Andrea Hayes, USA Jolanda de Rover, HOL Svenja Schlicht, FRG on Finals—Sapt. 25 Aneta Patrasolu, ROM Sharon Musson, NZL Li Lin, CHN Katharine Read, GBR Lorenza Vigarani, ITA Karen Lord, AUS Satoko Morishila. JPN Kitabina Egerszegi, HUN Kathrinz Timermann, GDR Beih Barr, USA Andrea Hayes, USA Nicole Livingstone, AUS Jolanda de Rover, HOL Svenja Schlicht, FRG Karen Lord, AUS Stahron Zimses, USA Nicole Livingstone, AUS Jolanda de Rover, HOL Svenja Schlicht, FRG Karen Lord, AUS Katharine Read, GBR Andrea Hayes, USA Nicole Livingstone, AUS Jolanda de Rover, HOL Svenja Schlicht, FRG Karen Lord, AUS Katharine Read, GBR Aneta Patrasolu, RDM Lorenza Vigarani, ITA Sharon Musson, NZL Helen Snitter, GBR Bolin Wang, CHN Ritajaen Garay, PUR Christine Magnier, FRA Ji-Hee Hong, KOR
1:21.58 200 BAC Champio 2 2:09.29e 2:10.61 2:11.42 2:11.42 2:15.75 2:15.75 2:16.06 2:15.75 2:16.06 2:18.78 2:18.78 2:18.78 2:18.78 2:10.61 2:11.21 2:16.82 2:16.82 2:17.72 2:16.81 2:17.72 2:16.81 2:17.72 2:16.81 2:17.72 2:16.81 2:17.72 2:16.81 2:17.72 2:16.81 2:17.72 2:16.81 2:17.72 2:16.82 2:17.72 2:16.82 2:17.72 2:18.71 2:18.71 2:18.71 2:18.71 2:18.71 2:18.72 2:1	Carla Fernandes, ANG KSTROKE Isship Finals—Sapt. 25 o Kristina Egerszegi. HUN Kathrin Zimmermann, GDR Gornelia Sirch, GDR Beih Barr, USA Nicole Livingstone, AUS Andrea Hayes, USA Jolanda de Rover, HOL Svenja Schlicht, FRG on Finals—Sapt. 25 Aneta Patrasolu. ROM Sharon Musson, NZL Li Lin, CHN Kathraine Read, GBR Lorenza Vigarani, ITA Karen Lord, AUS Satoko Morishita, JPN Kitahira Zimermann, GDR Beih Barr, USA Andrea Hayes, USA Nicole Livingstone, AUS Jolanda de Rover, HOL Svenja Schlicht, FRG Krisztina Egerszegi, HUN Kathrin Zimmermann, GDR Beih Barr, USA Andrea Hayes, USA Nicole Livingstone, AUS Jolanda de Rover, HOL Svenja Schlicht, FRG Karen Lord, AUS Katharine Read, GBR Andrea Hayes, USA Nicole Livingstone, AUS Jolanda de Rover, HOL Svenja Schlicht, FRG Karen Lord, AUS Katharine Read, GBR Aneta Patrasolu, RR Lori Meilen, CAN Tomoko Onogi, JPN Sylvia Hume, NZL Heien Siatter, GBR Bolin Wang, CHN

1:04.19 Marion Aizpors, FRG Consolation Finals—Sept. 22

The United States made a clean sweep of the men's relays, setting world records in all three. Biondi, Berkoff, Jacobs and Schroeder (above) won the meet's last event, the medley relay.

## 80 Swimming World/November 1988

2:32.13 Ana Joselina Fortin, HON 2:33.97 Tricia Duncan, ISV 2:36.60 Chi Wang, TPE 2:36.99 Sharon Pickering, FIJ **100 BREASTSTROKE** Championship Finals—Sept. 23 1:07.950 Tania Dangalakova, BUL 1:08.74 Antoaneta Frenkeva, BUL 1:08.83 Silke Horner, GDR 1:08.86c Alison Higson, CAN 1:09.24 Elena Volkova, URS 1:09.60 Tracey McFarlane, US 1:10.53 Xiaomin Huang, CHN 1:10.67 Annett Rex, GDR 1154 Consolation Finals-Sept. 23 Consolation Finals—Sept. 23 1:10.42 Svetlana Kuzmina, URS 1:10.58 Keltie Duggan, CAN 1:10.86 Ingrid Lempereur, BEL 1:10.95 Manuela Dalla Valle, ITA 1:11.08 Susan Johnson, USA 1:11.24 Excitedia Cence, HUM 1:11.24 Gabriella Csepe, HUN 1:11.26 Lara Hooiveld, AUS 1:11.95 Susannah Brownsdon, GBR Prelims—Sept. 23 1:08.35 Tania Dangalakova, BUL 1:08.35 Silke Horner, GDR 1:09.39 Allison Higson, CAN 1:09.86 Elena Volkova, URS 1:10.09 Antoaneta Frenkeva BIII 1:10.09 Antoaneta Frenkeva, BU 1:10.59 Tracey McFarlane, USA 1:10.61 Annett Rex, GDR 1:10.78 Xiaomin Huang, CHN 1:10.83 Svetlana Kuzmina, URS 1:10.55 Sveilaria Auzumina, UHS 1:10.95 Keitte Duggan, CAN 1:11.00 Ingrid Lempereur, BEL 1:11.09 Susau Johnson, USA 1:11.10 Gabriella Csepe, HUN 1:11.25 Manuela Dalla Valle, ITA 1:11.40 Lara Hoolveld, AUS 1:11.40 Lara Hoolveld, AUS 1:11:b5 Susannah Brownsoon, GE 1:11:84 Linda Moes, HOL 1:12:32 Sung-Won Park, KOR 1:12:38 Dorota Chylak, POL 1:12:67 Margaret Hohmann, GBR 1:12:90 Brigitte Becue, BEL 1:12:98 Brigitte Dahm, FRG 1:13:01 R. Runnolfsdottir, ISL 1:13.21 Pascaline Louvrier, FRA 13.21 Pascaine Louvrier, PK 13.36 Yoshie Nishioka, JPN 13.55 Virginie Bojaryn, FRA 13.65 Huiling Chen, CHN 14.03 Karen Horning, PER 1:14.99 Nancy Arendt, LUX

1:15.00 Patricia Bruelhart, SUI 1:15.41 Kornelia Stawicka, POL 1:15.47 Carwai Seto, TPE 1:15.67 Alicia Boscatto, ARG 1:15.07 Alicia Boscatto, ARG
 1:15.63 Hiroko Nagasaki, JPN
 1:16.65 Sigrid Niehaus, CRC
 1:18.42 Montserrat Hidalgo, CRC
 1:19.60 Valentina Aracil, ARG
 1:20.18 Dipika Chanmugam, SRI
 1:20.95 Y, F. Kimberly Chen, TPE
 1:20.95 Y, F. Kimberly Chen, TPE 1:22.95 Y.F. Kimberly Chen, T 1:22.62 Katerine Moreno, BOL 1:24.01 Ana Martins, ANG 1:24.46 Nadia Cruz, ANG 200 BREASTSTROKE 200 BHEASTSTRUKE Championship Finals—Sept. 21 2:26 71W Silke Horner, GDR 2:27.49 Xiaomin Huang, CHN 2:28.34 Antoaneta Frenkeva, BUL 2:28.43 Tania Dangalakova, BUL 2:28.44 Hila Panaghakova, BUL 2:26.43 Tahia bangalakova, But 2:28.54 Julia Bogacheva, URS 2:29.42 Ingrid Lempereur, BEL 2:29.60 Allison Higson, CAN 2:29.86 Manuela Dalla Valle, ITA Consolation Finals—Sept. 21 2:28.55 Sucanon Bernicke, GDB 2:28.55 Susanne Bornicke, GDR 2:30.03 Svetlana Kuzmina, URS 2:30.83 Linda Moes, HOL 2:30.83 Linda Moes, HOL 2:31.19 Annalisa Nisiro, ITA 2:32:90 Susan Rapp, USA 2:33.46 Tracey McFarlane, USA 2:33.55 Guylaine Cloutier, CAN 2:34.10 Brighte Becue, BEL Prelims-Sept. 20 Prelima-Sept. 20 2:27.63 Silke Horner, GDR 2:28.94 Julia Bogacheva, URS 2:29.57 Antoaneta Frenkeva, BUL 2:29.67 Allison Higson, CAN 2:29.91 Tania Cangalákova, BUL 2:30.03 Xiaomin Huang, CHN 2:30.02 Iorrid Lemonacer, PEL

2:30.03 Alaomin Huang, CHN 2:30.07 Ingrid Lempereur, BEL 2:30.60 Manuela Dalla Valle, ITA 2:30.71 Susanne Bornicke, GDR 2:30.93 Svetlana Kuzmina, URS 2:31.98 Linda, Mose, HOL 2:32.111 Tracey McFarlane, USA 2:32.77 Annalisa Nisiro, ITA

2:33.13 Brigitte Becue, BEL 2:34.21 Susan Rapp, USA 2:34.36 Guylaine Cloutier, CAN 2:35.06 Britta Dahm, FRG 2:35.57 Silvia Parera, ESP

2:36.86 Kornelia Stawicka, POL 2:30.40 Korreira Stawicka, PUJ
 2:37.38 Virginie Bojaryn, FRA
 2:37.44 Hiroko Nagasaki, JPN
 2:37.84 Karen Horning, PER
 2:38.75 Pascaline Louvirer, FR
 2:39.10 R. Runnolfsdottir, ISL
 2:39.38 Dorota Chylak, POL
 2:39.40 Kura Mac Back KOR FRA 2:39:38 Dorota Chylak, POL 2:39:40 Sung-Won Park, KOR 2:39:40 Sung-Won Park, KOR 2:39:97 Liara Hoolveid, AUS 2:40:78 Nancy Arendt, LUX 2:40:80 Anamarija Petricevic, YUG 2:41:12 Heilen Frank, GBR 2:41:34 Heike Esser, FRG 2:42:31 Cartwal Seto, TPC 2:42:82 Patricia Bruelhart, SUI 2:42:82 Patricia Bruelhart, SUI 2:45:80 Alicia Boscatto, ARG 2:51:60 Dijka Chanmugam, SRI 2:51.60 Dipika Chanmugam, SRI DQ Valentina Aracil, ARG 100 BUTTERFLY 
 100 BUTTERFLY

 Championship Finals—Sept. 23

 59.00eo
 Kristin Otto. GDR

 59.152
 Hong Qian, CHN

 59.53
 Hong Qian, CHN

 59.54
 Binter Weigang, GDR

 59.52
 Hong Qian, CHN

 100.48
 Janel Jorgensen, USA

 1:00.48
 Comy van Bentum, HOL

 1:01.15
 Xiadonop Wang, CHN

 Consolation Finals—Sept. 23
 CHN
 Consolation Finals—Sept. 23 1:01.48 Svetlana Koptchikova, URS 1:01.80 Kiyomi Takahashi, JPN 1:02.45 Jacquelino Belord, FRA 1:02.47 Neviana Miteva, BUL 1:02.51 Fiona Alessandri, AUS 1:02.51 Fiona Alessandri, AUS 1:02.53 Takayo Kitano, JPN 1:02.63 Gabi Rehaa, FRG 1:02.78 Ilaria Tocchini, ITA Prelims-Sept. 23 59.34 Catherine Plewinski, FRA 59.97 Birte Weigang, GDR 1:00.40 Kristin Otto, GDR 1:00.40 Kristin Utto, GUH 1:00.66 Hong Qian, CHN 1:00.94 Conny van Bentum, HOL 1:00.97 Janel Jorgensen, USA 1:01.16 Xiaohong Wang, CHN 1:01.48 Mary T. Meagher, USA 1:01.55 Swattawa Konchikiwa, USA 2:35:81 Yoshie Nishioka, JPN 2:36:81 Yoshie Nishioka, JPN 2:36:14 Susannah Brownsdon, GBR 1:01:90 Fiona Alessandri, AUS

1:02.01 Neviana Miteva, BUL 1:02.04 Kiyomi Takahashi, JPN 1:02.07 Ilaria Tocchini, ITA 1:02.24 Jacqueline Delord, FRA 1:02:24 Jacqueine Delord, FRA 1:02:27 Gabi Rehaa, FRG 1:02:35 Takayo Kitano, JPN 1:02:47 Maria L. Fernandez, ESP 1:02:76 Caroline Foot, GBR 1:02.85 Ina Beyermann, FRG 1:02.91 Jane Kerr, CAN 1:03.34 Annabelle Cripps, GBR 1:03.45 Agneta Eriksson, SWE 1:03.69 Andrea Nugent, CAN 1:03.91 Emanuela Viola, ITA 1:03-91 Emanuela viola, 11A 1:03-91 Estela Pura, ROM 1:04-36 Hong-Mi Lee, KOR 1:04-36 Sandra Neves, POR 1:05-02 B. Morales-Massella, GUA 1:05:37 Marlene Bruten, MEX 1:06:14 Soo-Jin Kim, KOR 1:06.94 Cee Kay Hung, HKG 1:06.94 Cee Kay Hung, HKG 1:07.36 Hui-Chien Chang, TPE 1:07.66 Marcela Cuesta, CRC 1:07.96 Oanh Nguyen Kieu, VIE 1:07.99 Ana Joselina Fortin, HON 1:08.35 Annemarie Munk, HKG 1:10.51 Sharon Pickering, FiJ 1:12.03 Cina Munch, FiJ :12.27 Elsa Freire, ANG 1:12.84 Barbara Gayle, GUM 200 BUTTERFLY 200 BUTTERFLY Championship Finals—Sept. 25 2:09 51 Kathleen Nord, GDR 2:10 51 Kathleen Nord, GDR 2:10.80 Mary T. Meagher, USA 2:11.55 Thna Racke, USA 2:11.55 Thna Racke, USA 2:11.54 Kiyomi Takahashi, JPN 2:12.34 Xiaohong Wang, CHN 2:13.17 Conny van Bentum, HOL Consolition Finals—Sent 95 Im, HOL Consolation Finals-Sept. 25 Consolation Finals—Sept. 25 2:12:66 Mojca Cater, CAN 2:13:74 Ina Beyermann, FRG 2:14:20 Gabi Rehaa, FRG 2:14:43 Svetlana Koptchikova, URS 2:14-43 Svettana Koptchikova, UP 2:15-60 Metta Jacobsen, DEN 2:15-11 Helen Bewley, GBR 2:18-66 Lynne Wilson, GBR Preima-Sept. 25 2:11.81 Kathleen Nord, GDR 2:11.97 Birte Weigang, GDR 2:12.35 Mary T. Meagher, USA

2:12.41 Conny van Bentum, HOL 2:12.41 Conny van Bentum, HOL 2:12.53 Stela Pura, ROM 2:12.68 Kiyomi Takahashi, JPN 2:12.93 Trina Radke, USA 2:13.05 Xiaohong Wang, CHN 2:13.09 Gabi Rehaa, FRG 2:13.21 Mojca Cater, CAN 2:13.26 En Bentemaen EPC 2:13.56 Ina Beyermann, FRG 2:13:30 ina beyermann, PHG 2:15:26 Svetlana Koptchikova, URS 2:15:21 Takayo Kitano, JPN 2:15:78 Mette Jacobsen, DEN 2:17:10 Helen Bewley, GBR 2:17:28 Lynne Wilson, GBR 2:18:20 Sender Neuros, DDD 2:16.17 Johna Procter, AUS 2:18.29 Sandra Neves, POR 2:18.44 Neviana Miteva, BUL 2:19.00 Soo-Jin Kim, KOR 2:19.26 B. Morales-Massella, GUA 2:19.56 Wanian Mo, CHN 2:19.68 Mariene Bruten, MEX 2:20 74 Lebella Acrowid BEI 2:20.74 Isabelle Arnould, BEL 2:21.65 Claire Supiot, FRA 2:25.50 Hui-Chien Chang, TPE 2:33.07 Oanh Nguyen Kieu, VIE DO Donna McGinnis, CAN 200 INDIVIDUAL MEDLEY 200 IRDIVIDUAL MEDLEY Championship Finais—Sept. 24 2:12:59c Daniela Hunger, GDR 2:13:31 Elena Dendeberova, URS 2:14:85 Noemi Lung, ROM 2:16:31 Jodie Clatworthy, AUS 2:16:40 Marianne Muis, HOL 2:15:270 Amerik Patracecki, PDM 2:10:70 Antanine Muis, HUL 2:16:70 Aneta Patrascoiu, ROM 2:17:42 Li Lin, CHN 2:17:99 Whitney Hedgepeth, USA **Consolation Finals** 2:17:73 Mildred Muis, HOL 2:17:85 Birgit Lobberg-Schulz, FRG 2:19:20 Jean Hill, GBR 2:19:25 Aneta Phillioson, SWF 2:19.35 Anette Philipsson, SWE 2:19.35 Anette Philipsson, SWE 2:19.53 Roberta Feitoti, ITA 2:19.53 Anamarija Petricevic, YUG 2:19.91 Julia Bogacheva, URS 2:20.43 Yoshie Nishioka, JPN **Prelims-Sept.** 25 2:15.30 Elena Dendeberova, URS 2:15.35 Noemi Lung, ROM 2:16.23 Daniela Hunger, GDR 2:16.23 Daniela Hunger, GDR 2:16.00 Marianne Muis, HOL 2:17.09 Julin, CHN 2:17.29 Jodie Clatworthy, AUS 2:17.39 Ante Patrasociu, ROM

Aneta Patrascoiu, ROM

2:17.45 Whitney Hedgepeth, USA

2:17.46 Birgit Schulz-Lohberg, FRG 2:17.57 Jean Hill, GBR 2:18.86 Anette Philipsson, SWE 2:19.07 Julia Bogacheva, URS 2:19.38 Anamarija Petricevic, YUG 2:19.46 Mildred Muis, HOL 2:19.54 Mildred Muis, HOL 2:19.54 Allison Higson, CAN 2:19.62 Roberta Felotti, ITA 2:20:20 Yoshie Nishioka, JPN 2:20:21 Svenja Schlicht, FRG 2:21:79 Donna Procter, AUS 2:21:83 Annette Poulsen, DEN 2:21.83 Annette Poulsen, DEN 2:22.20 Silvia Parera, ESP 2:22.59 Hiroyo Harada, J/N 2:22.64 Zara Long, GBR 2:22.65 Manuela Dalia Valie, ITA 2:25.53 Michelle Smith, HL 2:26.59 Marlene Bruten, MEX 2:77 C2 Carval Seto, TPE 2:29.61 Patricia Kohimann, MEX 2:31.53 Valientina Aracul, ARG 2:33.58 Dipika Chanmugam, SRI 2:34.32 Annemaire Munk, HKG 2:33.51 Y, F. Kimberty Chen, TPE 2:39 C0 Angela Birch, FJ 2:39 C0 Angela Birch, FJ 2:39.20 Angela Birch, F DQ Mary Wayte, USA 400 INDIVIDUAL MEDLEY Championship Finals-Sept. 19 4:37.76n Janet Evans, USA 4:39.46 Noemi Lung, ROM 4:39.76 Daniela Hunger, GDR 4:30.76 Dahlea Hunger, JUH 4:40.44 Elena Dendeberova, URS 4:41.64 Kathieen Nord, GDR 4:45.86 Jodie Clatworthy, AUS 4:47.05 Li Lin, CHN 4:47.51 Donna Procter, AUS Censolation Finals—Sept. 19 4:49:53 Roberta Felioti, ITA 4:50:54 Birgit Schulz-Lohberg, FRG 4:51:33 Erika Hansen, USA 4:52:33 A. Strumentieva, BUL 4:52:77 Anette Philipsson, SWE 4:53:29 Christine Magnie, FRA 4:54:40 Annette Poulsen, DEN 4:55:92 Ming Yan, CHN Prelims—Sept. 18 4:41:96 Noemi Lung, ROM 4:42:92 Kathieen Norc, GDR 4:43:04 Janet Evans, USA Consolation Finals-Sept. 19 4:44.26c Jodie Clatworthy, AUS

4:44.85 Daniela Hunger, GDR



# Exclusively by Competitor

Ready to assemble for your very own custom fit. Join the World Class swimmers who are wearing Speed Goggles by Competitor®

Double-banded for added security. Sleek lenses help reduce drag. Available in seven colors: Red • Blue • Clear • Amber • Smoke • Green • Orange. See your Competitor<sup>®</sup> dealer today.





Competitor<sup>®</sup> Swim Products Box 928, Medina, OH 44258-0928 (216) 725-4997

#### STATEMENT OF OWNERSHIP, MANAGEMENT & CIRCULATION (Required by 39 U.S.C. 3685)

- 1. A. Title of Publication: SWIMMING WORLD & JUNIOR SWIMMER B. Publication No.: 531000
- Date of Filing: October 1, 1988 Frequency of Issue: Monthly 3.
- A. No. of issues published annually: 12 B. Annual subscription price: \$16.00
- Complete mailing address of known office of publication: 116 W. Hazel, Inglewood, CA 4 90302
- Complete mailing address of the headquarters 5 of general business offices of the publishers: 116 W. Hazel, Inglewood, CA 90302.
- Full names and complete mailing address of publisher, editor, and managing editor: Pub-6. Wood, CA 90302; Editor, Robert Ingram, same; Managing Editor, none.
- Owner (If owned by a corporation, its name 7. and address must be stated and also immediately thereunder the names and addresses of stockholders owning or holding 1 percent or more of total amount of stock. If not owned by a corporation, the names and addresses of the individual owners must be given. If owned by a partnership or other unincorporated firm, its name and address, as well as that of each individual, must be given. If the publication is published by a non-profit organization, its name and address must be stated.): Sports Publications, Inc., Richard Deal, Gerald Deal, 116 W. Hazel, Inglewood, CA 90302.
- Known bondholders, mortgagees, and other 8. security holders owning or holding 1 percent or more of total amount of bonds, mortgages or other securities: none.
- For completion by nonprofit organizations au-thorized to mail at special rates (Section 9. 423.12 DMM only). The purpose, function and nonprofit status of this organization and the exempt status for Federal income tax pur poses: has not changed during preceding 12 months.
- Extent and nature of circulation: A. Total no. 10. copies (net press run). Average no. copies each issue during preceding 12 months:

31,842. Actual no. copies of single issue published nearest to filing date: 31,172. B. Paid and/or requested circulation: 1. Sales through dealers and carriers, street vendors and counter sales. Average no. copies each issue during preceding 12 months: 652. Actual no. copies of single issue published nearest to filing date: 609. 2. Mail subscription (paid and/or requested). Average no. copies each issue during preceding 12 months: 29,060. Actual no. copies of single issue published nearest to filing date: 28,760.

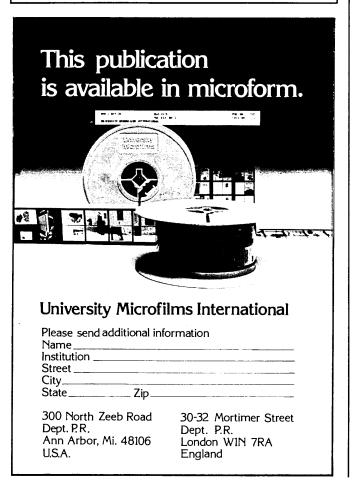
Total paid and/or requested circulation (sum of 10B1 and 10B2). Average no. copies each issue during preceding 12 months: 29,712. Actual no. copies of single issue published nearest to filing date: 29,369.

D. Free distribution by mail, carrier or other means. Samples, complimentary and other free copies. Average no. copies each issue during preceding 12 months: 1,433. Actual no. copies of single issue published nearest to filing date: 200.

E. Total distribution (sum of C and D). Average no. copies each issue during preceding 12 months: 31,145. Actual no. copies of single issue published nearest to filing date: 29,569. F. Copies not distributed. 1. Office use, left over, unaccounted, spoiled after printing. Average no. copies each issue during preceding 12 months: 697. Actual no. copies of single issue published nearest to filing date: 1,603. 2. Return from news agents. Average no. copies each issue during preceding 12 months: 0. Actual no. copies of single issue published nearest to filing date: 0.

G. Total (sum of E. F1 and 2-should equal net press run shown in A). Average no. copies each issue during preceding 12 months: 31,842. Actual no. copies of single issue published nearest to filing date: 31,172. I certify that the statements made by me above

are correct and complete: Signature and title of editor, publisher, business manager or owner. (signed) Richard Deal, Publisher.



11

## For the Record

4:46.63 Elena Dendeberova, URS 4:40.03 4:47.57 4:48.89 4:49.04 Donna Procter, AUS Li Lin, CHN Ming Yan, CHN Roberta Felotti, ITA 4:49.20 Roberta Felotti, ITA Erika Hansen, USA A. Strumenileva, BUL Christine Magnier, FRA Birgil Schulz-Lohberg, FRG Annette Polizison, DEN Anameta Polizison, DEN Anameta, Pulson, DEN Manamija Petricevic, YUG Susannah Brownsdon, GBR Yoshie Mishloka, JPM 4:50.03 4.51.58 51 91 4:54.01 4.54.17 4:54.66 4:55.31 Marianne Muis, HDL Mildred Muis, HOL 4:56.31 4:56.89 Milored Muls, HoL Irene Dalby, NOR Hiroyo Harada, JPN Tracey Atkin, GBR Michelle Smith, IRL Marlene Bruten, MEX Hui-Chien Chang, TPE Valentina Aracil, ARG 4:58.14 5:00.92 5:01.34 5:01.84 5:03.69 5:13.20 5:19.17 5:24 11 Annemarie Munk, HKG 5:28.15 Y.F. Kimberly Chen, TPE 400 MEDLEY REIAY Championship Finals—Sept. 24 4:03.740 GDR 4:07.90 United States 4:10.49c Canada 4:11.57 Australia 4:12.19 Holland 4:12.36 Bulgaria 4:12:30 Bulgaria 4:12:89 West Germany 4:13:85 Italy Prelims—Sept. 24 Prelims-Sept. 24 4:08.53 GDR 4:10.38 United States 4:11.82 Holland 4:13.19 West Germany 14 23 Canada 4:14.32 Australia 4:14.68 Italy 4:15.22 Bulgaria 4:16.18 Great Britain 4-16-21 France Sweden Japan Spain 4.17 72 4:17.72 Sweden 4:18.88 Japan 4:21.84 Spain 4:28.90 South Korea 4:31.75 Costa Rica 4:39.49 Taipei Denmark 400 FREESTYLE RELAY Championship Finals-Sept. 22 3:40.630 GDR 3:40.530 GDH 3:43.39 Holland 3:44.25 United States 3:44.59 China 3:44.99 Soviet Union 3:46.75c Canada 3:46 90 West Germany 3:49.25 Denmar Prelims—Sept. 22 3:43.13 GDR 3:44.12 Holland 3:45.10 United States 3:46.28 3:46.28 Soviet Union 3:46.36 China Unina West Germany Denmark Canada 3:48.03 3:48.83 3:49.20 3:50.50 Sweden 3:50.84 Great Britain Great Britair Brazil Costa Rica South Korea Hong Kong Taipei 3.56.29 3:59.67 4:03.18 4:08.58 4:09.84 MEN 50 FREESTYLE Championship Finals—Sept. 24 22.14w Matt Biondi, USA 22.36 Tom Jager, USA 22.371 Gennadi Prigoda, URS 22.83 Dano Halsall, SUI 22.84 Stefan Volery, SUI 22.84 Stefan Volery, SUI 22.84 Vladimir Tkacenko, URS 23.03 Frank Henter ERG Vladimir I Kačenko, UF Frank Henter, FRG Andrew Baildon, AUS Finals-Sept. 24 Goran Titus, SWE Per Johansson, SWE Peng Siong Ang, SIN Jiangiang Shen, CHN 23.03 23.15 Consola 23.28 23.37 23.39 23.40 23.45 Jianqiang Shen, CHN Christophe Kalfayan, FRA Stephan Guesgen, FRG Mark Andrews, CAN Hilton Woods, AHO Sept. 24 Matt Biondi, USA Central Bringto, UBS 23 54 Prelims 22.39 Matt Biondi, USA Gennadi Prigoda, URS Dano Halsall, SUI Tom Jager, USA Vladimir Tkacenko, URS Frank Henter, FRG Andrew Balidon, AUS Stefan Vdary, SUI 22.57 22 61 22.61 22.61 22.81 22.98 22.99 Andrew Baildon, AUS Stefan Volery, SUI Peng Siong Ang, SIN Per Johansson, SWE Stephan Caron, FRA Stephan Guesgen, FRG Tzvetan Golomeev, BUL Jianqiang Shen, CHN Mark Andrews, CAN 23.04 23.08 23.12 23.22 23.22 23.41 23.41 23.44

Goran Titus, SWE Hilton Woods, AHO Qiangbiao Feng, CHN Swim-off: 23.28 23.44 23.46 23.47 23.47 Christophe Kalfayan, FRA Swim-off: 23.37 23.50 23.50 23.51 23.53 23.61 23.67 Vagn Hogholm, DEN Hans Kroes, HOL Mark Foster, GBR Petr Kladiva, TCH Manuel Guzman, PUR Mike Fibbens, GBR 23.70 23.72 23.99 24.01 24.02 Peter Rohde, DEN Thomas Stachewicz, AUS Yves Clausse, LUX Rodrigo Gonzalez, MEX Paulo Trindade, POR 24.24 24.25 24.26 24.26 24.26 Sergio Esteves, POR Garvin Ferguson, BAH Jose Moreira, BRA Joseph Buhain, PHI 24.30 24.32 Klai Kam Li, HKG Markus Opatril, AUT Markus Opatril, AUT Jorge Fernandes, BRA Alexander Pilhatsch, AUT Michael Wright, HKG Magnus Olafsson, ISL Richard Bera, INA 24.32 24.40 24.42 24.47 24.50 24.63 Mohamed Elazoul, EGY 24.64 24.64 24.72 24.86 24.86 25.01 Murat Tahir, TUR Hans Foerster, ISV Urbano Zea, MEX Jin Gee Oon, SIN Bonald Pickard, ISV 25.11 25.22 25.24 25.29 25.38 25.40 25.55 25.63 25.64 25.79 25.97 26.00 26.27 26.46 26.60 Mohamed Hassan, EGY Paul Yelle, BAR Hakan Eskioglu, TUR Chi-Li Chiang, TPE Vaughan Smith, ZIM Graham Thompson, ZIM Kwang-Sun Song, KOR Wirmandi Sugriat, INA Bruno Ndiaye, SEN Warren Sorby, FIJ Pablo Barahona, HON Sergio Faftine, MOZ P. Castellanos, HON Hasan Alshammari, KUW Jason Chute, FIJ Michele Piva, SMR 26.60 Ahmad Faraj, UAE Trevor Ncala, SWZ 26.80 26.88 26.96 27.34 27.60 Filippo Piva, SMR Amine El-Domyati, LIB Mubarak Farajbilal, UAE Yul Mark Du Pont, SWZ 27.93 Pedro Lima, ANG Mouhamedou Diop, SEN DQ DQ 100 FREESTYLE Championship Finals—Sept. 22 48.630 Matt Biondi, USA 49 08 Chris Jacobs, USA 49.08 49.62 49.75 50.08 Stephan Caron, FRA Gennadi Prigoda, URS Yuri Bachkatov, URS Andrew Baildon, AUS 50.23 50.35 Per Johansson, SWE Tommy Werner, SWE Finals—Sept. 22 Thomas Stachewicz, AUS Sandy Goss, CAN Stefan Volery, SUI 50 54 Consola 50.71 50.73 50.74 51.00 Sven Lodziewski, GDF 51.05 51.12 51.16 51.25 Franz Mortensen, DFN Thomas Fahrner, FRG Tzvetan Golomeev, BUL Hilton Woods, AHD Prelims 49.04 49.20 Sept. 22 Matt Biondi, USA Chris Jacobs, USA Chris Jacobs, USA Stephan Caron, FRA Yuri Bachkatov, URS Gennadi Prigoda, URS Per Johansson, SWE Andrew Baildon, AUS Tommy Werner, SWE 49.37 49.37 50.08 50.13 50.22 50.34 50.45 50.73 Steffen Zesner, GDB 50.73 50.73 50.74 50.77 Hilton Woods, AHO Franz Mortensen, DEN Sven Lodziewski, GDR Thomas Fahrner, FRG Sandy Goss, CAN 50.78 50.81 Tzvetan Golomeev, BUL Thomas Stachewicz, AUS 50.82 50.90 50.96 51.02 51.05 51.12 51.25 51.18 51.20 51.21 51.25 51.38 51.30 51.40 51.65 51.79 52.01 52.28 52.28 52.28 52.24 52.24 52.52 52.52 Thomas Stachewicz, AUS Stefan Volery, SUI Roberto Gleria, ITA Torsten Wiegel, FRG Christophe Kalfayan, FRA Andy Jameson, GBR Roland Lee, GBR Dano Halsall, SUI Manuel Guzman, PUR Peter Rohde, DEN Petr Kladiva, TCH Petr Kladiva, TCH Jianqiang Shen, CHN Rodrigo Gonzalez, MEX Hans Kroes, HOL Patrick Dybiona, HOL Magnus Olafsson, ISL Shinao Quata, JBN Shigeo Ogata, JPN Jorge Fernandes, BRA Jean-Marie Arnould, BEL Yves Clausse, LUX Ross Anderson, NZL E. Nascimento, BRA Qiangbiao Feng, CHN Carlos Scanavino, URU

Peng Siong Ang, SIN

Markus Opatril, AUT M.-Richard Bodor, HUN Jin Gee Oon, SIN Murat Tahir, TUR 52.66 52.00 52.77 53.26 53.27 53.57 Mostafa Amer, EGY Vaughan Smith, ZIM 53.58 53.59 Vaugnan Smith, 2IM Richard Bera, INA Garvin Ferguson, BAH Michael Wright, HKG Khai Kam Li, HKG Rene Concepcion, PHI Hakan Eskioglu, TUR 53.62 53.64 53.70 53.84 53.95 54.24 54.29 54.34 54.56 54.63 Jonathan Sakovich, GUM Hans Foerster, ISV Sang-Won Kwon, KOR Ignacio Escamilla, MEX Kwang-Sun Song, KOR 54.72 Ronald Pickard, ISV Mouhamedou Diop, SEN Graham Thompson, ZIM Paul Yelle, BAR 54.93 55.20 55.35 55.53 Padro Lima, ANG Chi-Li Chiang, TPE P. Castellanos, HON Hasan Aishammari, KUW Warren Sorby, FLJ Sergio Fattine, MOZ Pablo Barahona, HON 55.87 56.11 56.44 56.44 56.66 57.10 57.97 57.99 Michele Piva, SMR Michele Piva, SMR Jason Chute, FIJ Filippo Piva, SMR M. Binabid, UAE Ahmad Faraj, UAE Trevor Ncala, SWZ 58.14 58.39 58.81 59.10 59.25 1:02.40 1:02.70 DQ Emile Lahoud, LIB Yul Mark Du Pont, SWZ Stefan Opatril, AUT 200 FREESTYLE ESTYLE nship Finals—Sept. 19 w Duncan Armstrong, AUS Anders Holmertz, SWE Matt Biondi, USA Artur Wojdat, POL Widbed Come, EDC 1 47 25 1:47.89 1:47.99 1:48.40 1:48.59 Michael Gross, FRG Steffen Zesner, GDR Troy Dalbey, USA Thomas Fahrner, FRG Finals—Sept. 19 Roberto Gleria, ITA 1:48.77 1:48.86 1:49.19 Consolatio 1:49.28 Thomas Flemming, GDR Thomas Stachewicz, AUS Alexei Kuznetsov, URS Franz Mortensen, DEN M. Podkoscielny, POL Chinas Conto, IMM 1:50.18 1.50.83 1:51.03 1:51.63 Shigeo Ogata, JPN Paul Howe, GBR 1:51.99 1:51.99 Prelims-1:48.02 1:48.39 1:48.55 1:48.86 1:48.86 Sept. 18 Artur Wojdat, POL Matt Biondi, USA Michael Gross, FRG Michael Gross, FRG Duncan Armstrong, AUS Troy Dalbey, USA Thomas Fahrner, FRG Steffen Zesser, GDR Anders Holmertz, SWE Boberto Glera, ITA Thomas Flemming, GDR Stephan Caron, FRA Giorgio Lamberti, ITA Alexei Kuznetsov, URS M. Bockosciency, POL Thomas Stachewicz, AUS 1:48.96 1.49.02 1:49.13 1:49.28 1:49.51 1:49.52 1:49.66 1:50.47 1:50.84 1:50.95 1:51.02 1:51.14 Shigeo Ogata, JPN Franz Mortensen, DEN 1.51.15 1:51.15 1:51.22 1:51.42 1:51.45 1:51.96 1:52.04 1:52.34 Pranz Mortensen, DEN Paul Howe, GBR Carlos Scanavino, URU Alberto Bottini, SUI Tommy Werner, SWE Yuri Bachkatov, URS Cristiano Michelena, BRA Patrick Dybiona, HOL Stefan Volery, SUI Rodrigo Gonzalez, MEX Michael Green, GBR Daniel Serra, ESP 1:52.67 1:52.67 1:52.94 1:52.99 1:53.03 1:53.05 1:53.05 1:53.16 1:53.61 Magnus Olafsson, ISL Julio Lopez, BRA Julio Lopez, BRA Jan Larsen, DEN Ignacio Escamilla, MEX Jean-Marie Arnould, BEL Zottan Szilagyi, HUN Ludovic Depickere, FRA Salvador Vassallo, PUR Norbert Agh, HUN Yves Clausse, LUX Jun Xie, CHN Rene Concepcion, PHI Alesander Placheta, AUT 1:53.63 1:53.73 1:53.75 1:53.81 1:53.82 1:54.72 1:54.90 1:55.04 1:55.58 1:56.11 Alesander Placheta, AUT Vaughan Smith, ZIM David Lim, SIN Joseph Buhain, PHI Sang-Won Kwon, KOR Jin Gee Oon, SIN 1:56 13 1.56 44 1:56.84 1:56.88 1:57.28 1:57.50 Mostafa Amer, EGY 1:57.60 Richard Bera, INA Jonathan Sakovich, GUM 1:57 72 Jonathan Sakovich, GUM Stephen Cullen, IRL Arthur Li, HKG Hakan Eskioglu, TUR Kuan Seng J. Ong, MAL Soon-Kun Kwon, KOR 1:57.90 1:58.10 1:58.45 1:58.62 1:58.95 Ming-Hsun Wu, TPE Yi Ming Tsang, HKG Richard Gheel, IRL Hans Foerster, ISV 2:00.43 2:00.43 2:01.02 2:01.73 2:01.94 Kristan Singleton, ISV 2:06.45 2:09.05 Jason Chute, FIJ M. Binabid, UAE 2:09.43

2:16.39	Ahmad Faraj, UAE Emile Lahoud, LIB
400 FREEST	YLE ip Finals—Sept. 23
3:46.95w	ip Finals—Sept. 23 Uwe Dassler, GDR Duncan Armstrong, AUS Artur Wojdat, POL Matt Cetlinski, USA M. Podkoscielny, POL Stefan Pleiffer, FRG Kevin Boyd, GBR Anders Holmentz, SWE
3:47.15c	Duncan Armstrong, AUS
3:47.34	Artur Wojdat, PUL Matt Cetlinski, USA
3:48.59	M. Podkoscielny, POL
3:49.96	Stefan Pfeiffer, FRG
3:50.16	Anders Holmertz, SWE
Consolation	Finals – Sept. 23 Jorg Hoffman, GDR Walter Kalaus, HUN
3:52.13	Jorg Hoffman, GDR Walter Kalaus, HUN
	Turiough U Hare, CAN
3:54.36	Carlos Scanavino, URU
3:55.34	lan Brown, AUS Dan Jorgensen, USA
3:55.39	Salvador Vassallo, PUR
3:56.00	Salvador Vassallo, PUR Zoltan Szilagyi, HUN pt. 23 M. Podkoscielny, POL Stefan Pfeiffer, FRG Artur Wojdat, POL Uwe Dassler, GDR
3:49.51	M. Podkoscielny, POL
3:49.52	Stefan Pfeiffer, FRG
3:49.68	Artur Wojdat, POL Uwe Dassler, GDR Kevin Boyd, GBR
3:50.01	Kevin Boyd, GBR
3:50.06 3:50.64	Anders Holmertz, SWE
3:50.82	Duncan Armstrong, AUS Matt Cetlinski, USA
3:50.82 3:51.09 3:51.50	lan Brown, AUS
3:51.50 3:52.64	Rainer Henkel, FRG Dan Jorgensen, USA
3.53.29	Giorgio Lamberti JTA
3:53.44	Walter Kalaus, HUN Jorg Hoffman, GDR
3:54.86 3:55.30 3:55.35	Salvador Vassallo, PUR Turlough O'Hare, CAN Zoltan Szilagyi, HUN Roberto Gleria, ITA Darjan Petric, YUG
3:55.35 3:56.29	Turlough O'Hare, CAN Zoltan Szilagyi, HUN
3:56.33	Roberto Gleria, ITA
3:56.94	Darjan Petric, YUG
3:57.41 3:57.46	Henrik Jangvall, SWE Daniel Serra, ESP
3:57.79	Cristiano Michelena, BRA
3:57.91	Tony Day, GBR Alberto Bottini, SUI
3:57.46 3:57.79 3:57.91 3:57.92 3:57.99	Gary Vandermeulen, CAN
3:58.74 3:58.90	Alexander Bazanov. URS Igor Majcen. YUG
3:59.91	Jean-Marie Arnould, BEL
4:00.04	Franck lacono, FRA
4:00.46 4:02.02	Claus Christensen, DEN Y. Mizumoto, JPN
4:02.48	Y. Mizumoto, JPN David Castro, BRA
4:03.16 4:04.02	Ignacio Escamilla, MEX Carlos Romo, MEX
4:04:57	Kuan Seng J. Ong, MAL
4:05:12 4:05:68 4:05:81	R. Gudomundsson, ISL Shigeo Ogata, JPN
4:05.81	Wook Yang, KOR Ming-Hsun Wu, TPE
4:06.66	Ming-Hsun Wu, TPE
4:06.89 4:08.02	Jonathan Sakovich, GUM Soon-Kun Kwon, KOR
4:08.70	Richard Bera, INA Desmond Koh, SIN
4:15.54 4:18.50	Arthur Li, HKG
4:18.88	Arthur Li, HKG Julian Bolling, SRI
4:39.36	Bassam Alansari, UAE Emile Lahoud, LIB
4:47.09 4:47.28	M. Binabid, UAE
1500 FREE	CTVI E
Champions	hip Finals—Sept. 25 Vladimir Salnikov, URS Stefan Pfeiffer, FRG
15:00.40	Vladimir Salnikov, URS Statan Plaitfor, ERG
15:06.15	Uwe Dassler, GDR
15:06:42	Matt Cetlinski, USA M. Podkoscielny, POL Rainer Henkel, FRG
15:14.76 15:18.19	Rainer Henkel, FRG
	Kevin Boyd, GBR
Prolims - Se	Kevin Boyd, GBR Darjan Petric, YUG apt. 24 Matt Cettinski, USA
15:07.41 15:07.83	
15:07.83 15:07.85	Vladimir Salnikov, URS Stefan Pfeiffer, FRG
15:08.91	Uwe Dassler, GDR
15:11.19 15:14.13	M. Podkoscielny, POL Joerg Hoffmann, GDR
15:14.13	Joerg Hoffmann, GDR Rainer Henkel, FRG
15:16.99	Rainer Henkel, FRG Darjan Petric, YUG Kevin Boyd, GBR
15:17.56 15:18.80	Kevin Boyd, GBR Luca Pellegrini, ITA
15:19.36	Michael McKenzie, AUS
15:22.19 15:22.66	C. Marchand, FRA
15:22.85	Franck lacono, FRA Jason Plummer, AUS Walter Kalaus, HUN
15:23.01 15:23.22	Walter Kalaus, HUN Chris Chalmers, CAN
15:24.33	Stefan Persson, SWE
15:29.16	lgor Majcen, YUG Harry Taylor, CAN Stefano Battistelli, ITA
15:30.31 15:36.54	narry raylor, CAN Stefano Battistelli, ITA
15:37.52	Artur Woidat, POL
15:38.75 15:39.51	Tony Day, GBR Lars Jorgensen, USA
15:45.96	Dali Wang, CHN
15:47.35 15:50.50	Masashi Kato, JPN
15:52.06	Y. Mizumoto, JPN
15:52.80	Y. Mizumoto, JPN Norbert Agh, HUN Kuan Seng J. Ong, MAL Artur Costa, POR
15:53.67 15:56.13	Kuan Seng J. Ung. MAL Artur Costa, POR
15:57.54	R. Gudomundsson, ISL
15:57.89 15:59.74	David Castro, BRA Ming-Hsun Wu, TPE
16:21.10 16:26.77	Wook Yang, KOR
16:26.77	Jonathan Sakovich, GUM

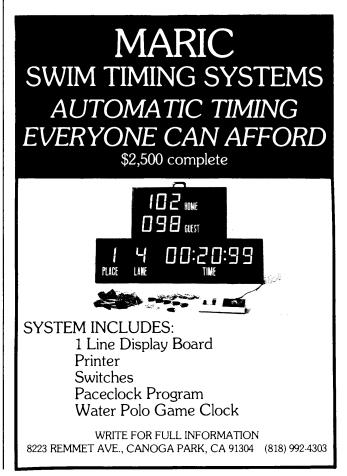
100 BACKS Championsh	ip Finais—Sept. 24
55.05 55.18	Daichi Suzuki, JPN David Berkoff, USA
55.20	loor Polianski LIBS
55.37 56.09	Mark Tewksbury, CAN
56.10 56.19 56.32	Sergei Zabolotnov, URS Mark Tewksbury, CAN Frank Baltrusch, GDR Frank Hoffmeister, FRG
56.32 Consolation	Sean Murphy, CAN Finals-Sept. 24 Dirk Richter, GDR
56.66	Dirk Richter, GDR
56.98 57.06	Franck Schott, FRA Jay Mortenson, USA
57.13 57.17	S. Maruyama, JPN Gueorgui Mikhalev, BUL
57.06 57.13 57.17 57.72 57.95	David Lim, SIN Manuel Guzman, PUR
58.20	Edvard Edvardsson, ISL
Prelims—Se 54.51w	David Berkoff, USA
55.04 55.90	Igor Polianski. URS Daichi Suzuki, JPN Sergei Zabolotnov, URS Frank Hoffmeister, FRG
56.13 56.19 56.20	Sergei Zabolotnov, URS Frank Hoffmeister FRG
56.20	Sean Murphy, CAN
56.20 56.45	Mark Tewksbury, CAN Frank Baltrusch, GDR
56.52 56.76	Dirk Richter, GDR Franck Schott, FRA
57.06 57.08	Gueorgui Mikhalev. BUL Jens-Peter Berndt, FRG
57.19 57.34	Jay Mortenson, USA
57.54 57.62	David Lim, SIN S. Maruyama, JPN
57.62 57.70	Manuel Guzman, PUR Edvard Edvardsson, ISL
57.70 57.74 57.80 57.91	Laijiu Lin, CHN Paul Kingsman, NZL
57.91	Rogerio Romero, BRA
58.01 58.02	Lars Sorensen, DEN Neil Harper, GBR
58.06 58.17	M. Lopez-Zubero, ESP Patrick Ferland, SUI
58.25 58.37	Neil Cochran, GBR Alejandro Alvizuri, PER
58.40 58.65	Carl Wilson, AUS
58.82	Tamas Deutsch, HUN Stephen Cullen, IRL Pavel Vokoun, TCH
58.88 58.90	Pavel Vokoun, TCH Renaud Boucher, FRA
59.06 59.19	Simon Upton, AUS Ernesto Vela, MEX
59.19 59.24 59.36	Helias Malamas, GRE
59.37	Guoxiong Huang, CHN Richard Gheel, IRL
59.48 59.76	Valerio Giambalvo, ITA Wladimir Ribeiro, BRA
1.00.76 1.01.25	Amin Amer, EGY Dong-Pil Park, KOR
1:01.86	Patrick Sagisi, GUM Horst Niehaus, CRC
1:01.91 1:01.91	Hor Man Yip, HKG Brett Halford, ZIM
1:02.95 1:03.11	Brett Halford, Z1M Eric Greenwood, CRC
1:03.90 1:05.06	Eric Greenwood, CRC Pablo Barahona, HON Bruno Ndiaye, SEN
1:07.63 1:08.91	Filippo Piva, SMR Mohamed Abdulla, UAE
1:09.35	Rami Kantari, LIB M. Binabid, UAE
1:10.01 1:12.50	Yul Mark Du Pont, SWZ
200 BACKS	TROKE
1:59.37	hip Finals—Sept. 22 Igor Polianski, URS
1:59.60 2:00.48	Frank Baltrusch, GDR Paul Kingsman, NZL
2:00.52 2:01.67	Sergei Zabolotnov, URS Dirk Richter, GDR
2:01.84	Jens-Peter Berndt. FRG
2:02.26 2:02.28	Dan Veatch, USA Rogerio Romero, BRA
Consolation 2:01.65	Frank Hoffmeister, FRG
2:02:95 2:03:70	Steve Bigelow, USA M. Lopez-Zubero, ESP
2:03.79 2:04.24	M. Lopez-Zubero, ESP Mark Tewksbury, CAN Gueorgui Mikhalev, BUL
2:04.42	Tamas Deutsch, HUN
2:04.67 2:04.90	Daichi Suzuki, JPN Gary Binfield, GBR
2:01.27	ept. 22 Sergei Zabolotnov, URS
2:01.49	Frank Baltrusch, GDR
2:01.54 2:01.70 2:01.73	Dirk Richter, GDR igor Polianski, URS Dan Veatch, USA
2:01.77	Jens-Peter Berndt, FRG
2:02.20 2:02.26	Paul Kingsman, NZL Rogerio Romero, BRA
2:02.71 2:03.17 2:03.33	Gueorgui Mikhalev, BUL Tamas Deutsch, HUN
2:03.33 2:03.34	M. Lopez-Zubero, ESP Frank Hoffmeister, FRG
2:03.36 2:03.63	Daichi Suzuki, JPN Stefano Battistelli, ITA
2:03.64	Steve Bigelow, USA
2:03.79 2:03.81	Gary Binfield, GBR Sean Murphy, CAN
2:04:02 2:04:29	Mark Tewksbury, CAN Alejandro Alvizuri, PER
2 04 70 2 04 83	John Davey, GBR David Holderbach, FRA
2:05.08	Simon Upton, AUS Ernesto Vela, MEX
2:05.08 2:05.61	Edvard Edvardsson, ISL
2:05.71 2:05.73	Richard Gheel, IRL Lars Sorensen, DEN

2.06.98	Stephen Cullen, IRL
	Pavel Vokoun, TCH
	Patrick Ferland, SUI Laijiu Lin, CHN
2:08.65	David Lin, SIN
2:09.16	S. Maruyama, JPN
2:11.48 2:12.83	Vladimir Ribeiro, BRA Horst Niehaus, CRC
2:15.42	Eric Greenwood, CRC
2.15.82	Patrick Sagisi, GUM Brett Halford, ZIM
2 17 84 2 21 61	Brett Halford, ZIM Pablo Barahona, HON
2 29.64	Mohamed Abdulla, UAE
2:36.21	M. Binabid, UAE
2:40.29 DO	Rami Kantari, LIB C. Papanikolaou, GRE
DQ	Tamas Oarnyi, HUN
DQ	Dong-Pil Park, KOR
100 BREAS	
Championsh 1:02:04	ip Finals—Sept. 19 Adrian Moorhouse GBB
1:02:05	Adrian Moorhouse, GBR Karoly Guttler, HUN Dmitri Voikov, URS
1:02.20	Dmitri Volkov, URS
1:02.38 1:02.50	Victor Davis. CAN Tamas Debnar. HUN
1:02.55	Richard Schroeder, USA
1:02.93 1:03.43	Gianni Minervini, ITA Christian Poswiat, GDR Finals—Sept. 19 Alexei Matveev, URS Ronald Dekker, HOL Mark Warnecke, FRG
Consolation	Finals-Sept. 19
1:03.01	Alexei Matveev, URS
1:03.22	Mark Warnecke, FRG
1:03.85	Alexander Mayer, FRG
1:03.89	Hironobu Nagahata, JPN
1:04.04	Petri Suominen, FIN Daniel Watters, USA
1:04.17 1:04.72	Jianhong Chen. CHN
Prelims — Se 1:02.19	pt. 18 Adrian Moorhouse. GBR
1:02.48	Victor Davis, CAN
1:02.49	Dmitri Volkov, URS
1:02.80 1:02.86	Karoly Guttler, HUN Gianni Minervini, ITA
1:02.99	Christian Poswiat, GDR Richard Schroeder, USA
1:03.05	Richard Schroeder, USA
1.03.06	Ronald Dekker, HOL Swim-off: 1:02.63
1:03.08	Tamas Debnar, HUN
1:03.25	Swim-off: 1:03.68 Alexei Mateev, URS
1:03:54	Alexander Mayer, FRG
1:03.56	Mark Warnecke, FRG
1:03.58 1:04.02	Petri Suominen, FIN Hironobu Nagahata, JPN
1:04.04	Daniel Watters. USA
1:04.09 1:04.23	Jianhong Chen, CHN
1:04.35	James Parrack, GBR Kenji Watanabe, JPN Pablo Restrepo, COL
1:04.43	Pablo Restrepo, COL
1:04.46 1:04.53	Raik Hannemann, GDR Pierre-Yves Eberle, SUI
1:04.56	lan McAdam, AUS
1:04.56	David Leblanc, FRA Hsin-Yen Tsai, TPE
1:04.58 1:04.61	Radek Beinhauer, TCH
1:04.68	Radek Beinhauer, TCH Joo-II Yoon, KOR
1:04.71 1:04.95	Etienne Dagon, SUI Alexander Marcek, TCH
1:04.96	Thomas Boehm, AUT
1:05.02	Fu Jin. CHN Cameron Grant. CAN
1:05:10 1:05:19 1:05:21	Joanuin Fernandez ESP
1:05.21 1:05.34	Sidney Appelboom, BEL Gary O'Toole, IRL
1:05:34	Javier Careaca, MEX
1:05.46	Cedric Penicaud. FRA Cicero Torteli. BRA
1:05.50 1:05.54	Cicero Torteli, BHA Jan Erick Olsen, NOR
1:05.65	Anthony Poke N71
1:05.66 1:05.87	Alexandre Yokochi, POR
1:05.92	Alexandre Yokochi. POR Yue Meng Ng. SIN Eyal Shtigman. ISR
1:06.08	Sergio Lopez, ESP Wirmandi Sugriat, INA
1:06.22	Luc van de Vondel. BEL
1:06.27	Richard Lockhart, NZL
1:06.30 1:06.48	Nikolaos Fokianos, GRE Lars Sorensen, DEN
1:06.73	Manuel Gutierrez, PAN
1:06.74 1:07.93	Lee Concepcion, PHI Arnthor Ragnarsson, ISL
1:08.03	Kam Sing Watt, HKG
1:09.49 1:10.90	Victor Ruderry, BER Man Quach Hoai, VIE
1:11.68	Kraig Singleton, ISV
1:13.94	Michele Piva, SMR
1:14.40 1:14.97	Amine El-Domyati. LIB B. M.B. Rahman. BAN
1:16.18	B. M.B. Rahman, BAN Gaspar Fragata, ANG
1:17.01 1:17.98	Obaid Alrumaithi, UAE Vivaldo Fernandes, ANG
200 BREAS	
Champions	hip Finals—Sept. 23
2:13.52e	Joszef Szabo, HUN Nick Gillingham, GBR
2:14.12 2:15.21	Sergio Lopez, ESP
2.15.45	Mike Barrowman, USA
2:16.16 2:16.70	Valeri Lozik, URS Vadim Alexeev, URS
2:16.16 2:16.70 2:17.10 2:17.12	Jon Cleveland, CAN
2:17.12 Consolution	Peter Szabo, HUN Finals-Sept. 23
2:18.01	Alexandre Yokochi, POR
2:18.03	S. Takahashi, JPN
2:18.03 2:18.08 2:18.13 2:18.17	Radek Beinhauer, TCH
2:18.17	Etienne Dagon, SUI
2.40.00	Comeron Crost CAN
2:18.36	Cameron Grant, CAN

	An and Marriel Total
2:18.51 2:18.95	Alexander Marcek, TCH Cedric Penicaud, FRA
	-Sept. 23
2:14.58	Nick Gillingham, GBR
2:14.97	Jozset Szabo, HUN
2:15.85	Mike Barrowman, USA
2:16.31	Valeri Lozik, URS
2:16.87	Jon Cleveland, CAN
2:17.06	Sergio Lopez. ESP
2:17.10	Peter Szabo, HUN
2:17.15	Vadim Alexeev, URS
2:17.62	Cameron Grant, CAN
2:17.69	S. Takahashi, JPN
2:17.87	Alexandre Yokochi, POR
2:18.02	Sidney Appleboom, BEL
2:18.02	Radek Beinhauer, TCH
2:18.44	Alexander Marcek, TCH
2:18.51	Adrian Moorhouse, GBR
2:18.68	Etienne Dagon, SUI
2:18.72	Cedric Penicaud, FRA
2:18.93	Gary O'Toole, IRL
2:19.47	Kirk Stackle, USA
2:19.58	Pablo Restrepo, COL
2:19.68	lan McAdam, AUS Joo-II Yoon, KOR
2.19.94	Javier Careaga, MEX
2.20.34	Joaquin Fernandez, ESP
2.20.65	Pierre-Yves Eberle, SUI
2:20.84	Ronald Dekker, HOL
2:20.99	Christian Poswiat, GDR
2:21.50	Luc van de Vondel, BEL
2:22.01	Petri Suominen, FIN
2:22.23	Hiromobu Nagahata, JPN
2:22.55	Mark Varnecke, FRG
2:22.55	Hartmut Wedekind, FRG
2:23.80	Hsin-Yen Tsai, TPE
2:24.15	Thomas Boehm, AUT
2:24.45	Qing Chang, CHN
2:24.52	Richard Lockhart, NZL
2:25.18	Eyal Shtigman, ISR
2:26.05	Fu Jin, CHN
2:26.17	Wirmandi Sugriat. INA
2:26.57	Manuel Gutierrez, PAN
2:26.70	Jan Erick Olsen, NOR
2:27.26	Anthony Beks, NZL
2 27 93	A. Ragnarsson, ISL
2:28.82	Cicero Torteli, BRA
2:28.91	Nikolaos Fokianos, GRE
2.29.62	Lee Concepcion, PHI
2:30.74	Yue Meng Ng, SIN
2:30.78	Kam Sing Watt, HKG
2:36.45 2:39.69	Kraig Singleton, ISV Nam Quach Hoai, VIE
2.09.09	Main Quacii RUdi, VIE

2:44.34	Amine El-Domyati, LIB
2:50.49	Obaid Airumaithi, UAE
DQ	Christian Toft, DEN
DO	David Leblanc, FRA
100 BUTTE	
Champions	hip Finals—Sept. 21
	Anthony Nesty, SUR
53.01	Matt Biondi, USA
53.30c	Andy Jameson, GBR
53.33	Jon Sieben, AUS
53.44	Michael Gross, FRG
54.07	Jay Mortenson, USA
54.09	Tom Ponting, CAN
54.60	Vadim Yaroshuk. URS Finals—Sept. 21
54.52 54.63	Jiangiang Shen. CHN Anthony Mosse. NZL
54.03	Benny Nielsen, DEN
54.79	Vlastimil Cerny, CAN
54.80	Rafal Szukala, POL
54.98	Hiroshi Miura, JPN
55.05	Jian Zheng, CHN
55.22	Neil Cochran, GBR
Prelims-S	
53.34	Andy Jameson, GBR
53.46	Matt Biondi, USA
53.50	Anthony Nesty, SUR
53.78	Michael Gross, FRG
53.85	Jon Sieben, AUS
54.17	Vadim Yaroshuk, URS
54.31	Tom Ponting, CAN
54.44	Jay Mortenson, USA
54.52	Benny Nielsen, DEN
54.63	Anthony Mosse, NZL
54.66 54.69	Vlastimil Cerny, CAN Jian Zheng,CHN
54.09	Neil Cochran, GBR
54.82	Hiroshi Miura, JPN
54.83	Rafai Szukala, POL
54.86	Jiangiang Shen, CHN
55.20	Martin Herrmann, FRG
55.27	Jose Luis Ballester, ESP
55.38	Frank Drost, HOL
55.54	David Wilson, AUS
55.73	Robert Wolf, TCH
55.83	Leonardo Michelotti, ITA
55.84	Konstantine Petrov, URS
56.19	Yukinori Tanaka, JPN
56.31	Ross Anderson, NZL
56.37	Eduardo Poli, BRA
56.47	Ludovic Depickere, FRA
56.57	Valerio Giambalvo. ITA

56 72 56 77 57 17 57 25 57 30 57 31 57 36 57 31 57 56 57 62 57 74 57 89 58 04 59 21 100 13 100 97 101 10 101 15 102 69 106 25 106 85	Reinhold Leitner, AUT Theophile David, SUI Joseph Buhan, PHI Vladimir Arbeiro BRA M. Albuquerque, POR Paul Yelle, BAR Paulo Camacho, POR Paulo Sing, SIN Torimazakas, GRE Paulo Camacho, POR Young-Chul Park, KOR Yung-Chul Park, KOR Yang-Chul Park,
200 BUTTE	
	hip Finals—Sept. 24
1:56.940	Michael Gross. FRG
1:58.24	Benny Nielsen, DEN
1:58.28	Anthony Mosse, NZL
1:58.91	Tom Ponting, CAN
1:59.19	Melvin Stewart. USA
1:59.20	David Wilson, AUS
1:59.48	Jon Kelly. CAN
2.00.80	Anthony Nesty, SUR
Consolation	
2:00.26	Mark Dean, USA
2:00.32	Tim Jones, GBR Vadim Yaroshuk, URS
2:00.34	Nick Hodgson, GBR
2:01:09	Christophe Bordeau. FRA
2:01:46	Frank Drost, HOL
2:02:18	Satoshi Takeda, JPN
2:02:18	Martin Roberts, AUS
Prelims - Si	
1:58.09	Michael Gross, FRG
1:58.71	Anthony Mosse. NZL
1.59.02	David Wilson, AUS
1:59.26	Benny Nielson, DEN
1:59.40	Jon Kelly, CAN
1:59.78	Melvin Stewart. USA
2:00.08	Tom Ponting, CAN
2:00.17	Anthony Nesty, SUR
2:00.32	Martin Roberts. AUS 🕨



DAKTRONICS, INC.	
Swim Timing Systems	
Special	
Post-Olympic	
<b>Offer</b> Get FREE Meet Manager Software	
from HYTEK with the purchase of	
a Daktronics Swim Timing System <b>A \$500 Value absolutely free!</b>	
Call toll-free for details	
<b>1-800-843-9879</b> Call (605) 692-6145 in AK, HI & SD	
Put Daktronics 'Olympic backet of work for you.Featuring: OmniSport® 1000 Timing Console More Standard Multi-Sport Features User-Friendly Meet Software CompatibleData Time® Touchpads Data Time® Touchpads Stainless Steel Construction Most ReliableDate Complete Line in America Full Matrix Capability 	
DAKTRONICS, INC.	
331 32nd Avenue, P.O. Box 128 Brookings, SD USA 57006-0128 Phone: (605) 692-6145 Toll-Free: (800) 843-9879	

1 |

2:00.86 2:00.99 2:01.01 2:01.05 Mark Dean, USA Frank Drost, HOL Tim Jones, GBR Vadim Yaroshuk, URS Consolation Finals-Sept. 21 2:01.42 Satoshi Takeda, JPN 2.01 44 Nick Hodgson, GBB 2:01.44 2:01.70 2:01.91 2:02.18 Christophe Bordeau, FRA Rafai Szukala, POL Reinhold Leitner, AUT Hiroshi Miura, JPN Ross Anderson, NZL 2:02.30 2:02.40 2.02.61 Martin Herrmann, FRG Ondrej Bures, TCH Jan Larsen, DEN Jose Luis Ballester, ESP 2:02.93 2:03.01 2:03.32 Jean-Marie Arnould. BEL 2:03.76 Diogo Madeira. POR Christer Mallin. SWE Khazansingh Tokas. IND Joao Santos. POR Jiang Zhan, CHN 2:03.79 2:03.79 2:03.95 2:04.74 2:05.22 2:05.28 2:05.32 Ahmed Abdalla, EGY Ahmed Abdalla, EGY Joseph Buhain, PHI Theophile David, SUI Eduardo Poli, BRA Young-Chul Park, KOR E. Nascimento, BRA 2:05.58 2:06.15 2:08.57 2:09.40 2:10.86 Desmond Koh, SIN 2:12.89 2:13.19 2:19.68 Sultan Alotaibi, KUW William Cleveland, ISV Kristan Singleton, ISV 200 INDIVIDUAL MEDLEY Championship Finals—Sept. 25 200.17w Tamas Darnyi. HUN 2:01.61 Patrick Kuhl. GOR 2:02.40 Vadim Yaroshuk. URS 2:02.92 Mikhail Zubkov. URS 2:02.92 2:03.81 Peter Bermel, FRG 2:04.34 Robert Bruce, AUS 2:04:82 Raik Hannemann, GDR 2:06:35 Gary Anderson, CAN Consolation Finals—Sept. 25 2:03:05 David Wharton, USA DQ DQ 2:03.05 2:04.17 John Davey, GBR 2:05 44 Neil Cochran, GBR Neil Cochran, GBR Christophe Bordeau, FRA Luca Sacchi, ITA C. Papanikolaou, GRE Jens-Peter Berndt, FRG Bill Stapleton, USA 2:05.44 2:05.51 2:05.68 2:06.61 2:06.76 2:06.82 
 2:06.82
 Bill Stapleton. USA

 Prelims-Sept. 25
 Score 1

 2:02.15
 Tamas Darnyi. HUN

 2:03.77
 Patrick Kuhl. GDR

 2:03.79
 Mikhail Zubkov. URS

 2:04.03
 Raik Hannemann. GDR

 2:04.18
 Peter Bernell. FRG

 2:04.31
 Robert Bruce. AUS

 2:04.46
 David Wharton. USA

 2:04.40
 Jens-Peter Berndt, FRG

 2:04.50
 Christophe Brüceau, FRA

 2:04.52
 Bill Stapleton, USA

 2:04.53
 Luce Sacchi, ITA
 bill Stapletoli, USA Luca Sacchi, ITA C. Papanikolaou, GRE John Davey, GBR Neil Cochran, GBR Rob Woodhouse, AUS 2:05.45 2:05.53 2:05.55 2:05.56 2:05.87 2.05.88 Boberto Cassio, ITA Roberto Cassio, ITA Takahiro Fujimoto, JPN Gary O'Toole, IRL Darren Ward, CAN Satoshi Takeda, JPN Jozsef Szabo, HUN 2:07.23 2:07.77 2:07.84 2:08.11 2:09.08 2:09.38 Javier Careaga. MEX Rodrigo Gonzalez, MEX Rodrigo Gonzalez, MEX Julio Lopez, BRA Edvard Edvardsson, ISL Diogo Madeira, POR Renato Ramalho, BRA 2:09.52 2:09.62 2:10.18 2:10.21 2:10.32 2:10.37 Rene Concepcion, PHI 2.10.52 Jun Xie CHN Jun Xie, CHN M. Lopez-Zubero, ESP Sidney Appleboom, BEL Oavid Lim, SIN 2:10.52 2:10.55 2:11.57 Jae-Soo Lee, KOR Sergio Lopez, ESP 2:11.88 2:13.48 2:13.90 2:13.93 2:14.32 2:14.65 Sergio Lopez, ESP Richard Bera, INA Wirmandi Sugriat, INA Hakan Eskioglu, TUR Hor Man Yip, HKG Desmond Koh, SIN 2:14.77 2:15.63 Sultan Alotaibi, KUW Sultan Alotaibi, KUW Eric Greenwood, CRC Horst Niehaus, CRC Jonathan Sakovich, GUM Kraig Singleton, ISV Graham Thomspon, ZIM 2.15.64 2:15.04 2:16.16 2:16.70 2:16.93 2:17.06 2:17.10 2:17.95 Arthur Li, HKG Hsin-Yen Tsai, TPE Vaughan Smith, ZIM Vaughan Smith, ZIM Chi-Li Chiang, TPE Mouhamedou Diop, SEN M. Binabid, UAE Bruno Ndiaye, SEN 2.18.07 2:18.76 2:20.74 2:29.08 2:29.18 2:31 44 Mohamed Abdulla, UAE 2:34.53 Rami Kantari, LIB 400 INDIVIDUAL MEDLEY Championship Finals—Sept. 21 4:14.75w Tamas Darnyi. HUN 4:17.36 David Wharton. USA 4:18.01 Stefano Battistelli, 1TA Jozsef Szabo, HUN Patrick Kuhl, GDR Jens-Peter Berndt, FRG 4:18.15 4:21.71 Luca Sacchi, ITA Peter Bermel, FRG

Finals—Sept. 21 Jeff Kostoff, USA Christophe Bordeau, FRA Robert Bruce, AUS Jon Kelly, CAN Mikhail Zubkov, URS 4.22.95 4:22.95 4:23.39 4:24.33 4:25.02 4:25.44 4:26.14 4:26.77 4:27.95 Prelims Rob Woodhouse, AUS Paul Brew, GBR C. Papanikolaou, GRE Sept. 20 Tamas Darnyi, HUN 4:16.55 4:18.60 Tamas Darnyi, HUN Patrick Kuhl, GDR Stefano Batistelli, ITA David Wharton. USA Jozsef Szabo. HUN Jens-Peter Berndt, FRG 4:20.43 4:20.84 4:20.85 4:20.93 4:22.78 4:23.37 Peter Bermel, FRG Luca Sacchi, ITA 4:23.46 4:24.10 4:24.62 4:25.15 Christophe Bordeau, FRA Jeff Kostoff, USA Jon Kelly, CAN Robert Bruce, AUS Nobert Bruce, AUS Mikhail Zubkov, URS Rob Woodhouse, AUS C. Papanikolaou, GRE Paul Brew, GBR Yoshiyuki Mizumoto, JPN Laurent Journet, FRA Ondrej Bures, TCH Salvadnr Vascalle, BUP 4:25.30 4:25.60 4:25.60 4:26.72 4:27.22 4:28.11 4:29.03 4:29.62 4:30.37 4:30.71 4:30.79 4:31.74 Salvador Vassallo PUR Javier Careaga, MEX Rui Borges, POR Michael Meldrum, CAN Michael Melorum, CAN Renato Ramalho, BRA Takahiro Fujimoto, JPN Diogo Madeira. POR M. Lopez-Zubero, ESP Jae-Soo Lee, KOR Jonathan Sakovich, GUM 4:31.95 4:33.03 4:33.03 4:35.00 4:35.68 4:40.46 4:44.78 4:48.00 4:50.16 Rene Concepcion, PH Sultan Aletaibi, KUW Julian Bolling, SRI John Davey, GBR Desmond Koh, SIN 4:53.61 400 MEDLEY RELAY 400 MEDLEY RELAY Championship Finats—Sept. 25 3:36.93w United States 3:39.96e Soviet Union 3:42.98 West Germany 3:44.36 Japan 3:45.85 Australia 3:46.55 DQ Prelims-Holland Great Britain Great States United States 3:43.00 3:44.44 Great Britain 3:44.44 3:44.56 3:44.72 3:45.29 3:45.65 3:46.88 3:47.40 3:48.09 Canada West Germany Soviet Union Holland Japan Australia Switzerland 3:48.64 3:48.93 3:49.47 3:49.90 3:51.97 France New Zealand Spain Czechoslovakia Denmark 3:51.97 3:52.06 3:52.24 3:52.86 3:53.21 3:54.18 3:54.21 3:56.94 Denmark Italy Hungary Singapore Brazil China Maxima Mexico Korea Hong Kong Greece Israel United Arab Emirates 4:05.28 4:07.71 4:15.03 4:28.55 400 FREESTYLE RELAY Championship Finals—Sept. 23 3:16.53w United States 3:18.33e Soviet Union 3:19.82 GOR 3:20.02 3:21.07 France Sweden 3:21.65 3:21.71 3:22.93 West Germany Great Britain Italy Sept. 23 United States Prelims -3:19.52 3:19.89 Soviet Union 3:20.47 GOR 3.21.77 France 3:23.09 3:23.19 3:23.35 3:23.71 3:23.85 Sweden West Germany ltaly Great Britain Canada 3:25.15 3:25.26 3:28.17 Denmark Helland Brazil Mexico 3:29.72 3:33.31 Portugal Singapore Hong Kong Korea 3:34.54 3:34.78 3:34.78 3:38.05 3:43.23 3:58.92 Israel United Arab Emirates Austria China Egyp 800 FREESTYLE RELAY Championship Finals-Sept. 21 7:12.51w United States

DQ DQ

DQ

4.23.23 4:24.02

7:13.68	GDR
7:14.35	West Germany
7:15.23	Australia
7:16.00	Italy
7:19.10	Sweden
7:24.69	France
7:24.91	Canada
Prelims—S	lept. 20
7:16.61	GDR
7:18.76	United States
7:19.38	West Germany
7:21.46	Australia
7:21.85	Italy
7:23.03	France
7:23.82	Sweden
7:26.28	Canada
7:29.77	Great Britain
7:32.11	Brazil
7:33.31	Denmark
7:52.93	Korea
8:15.51	israel
9:01.03	United Arab Emirates
DQ	Mexico
DQ	Soviet Union
SYN	CHRO

XXIV OLYMPICS Synchronized Swimming Seoul, South Korea Sept. 26-Oct. 1, 1988

FIGURES	
101.150	Carolyn Waldo, CAN
98.633	Tracie Ruiz-Conforto, USA
90.000	Sarah Josephson, USA Karen Josephson, USA
96.683	Michelle Cameron, CAN
94.250	Mikako Kotani, JPN
93.500	Muriel Hermine, FRA
92.250	Karin Larsen, CAN
90.600	Karin Singer, SUI Tatiana Titova, URS
89.333	Karine Schuler, FRA
88 733	Nicola Shearn, GBR
88.733 88.517	Megumi Ito, JPN
88 133	Anne Capron FRA
88.000	Mariia Tscherniaeva, URS
87.300	Edith Boss, SUI Khristina Falassinidi, URS
87.050	Khristina Falassinidi, URS
85.583	Gerlind Scheller, FRG Marie Jacobsson, SWE
84 733	Erika McDavid, BRA
84.733 84.733	Sonia Cardenas MEX
84.533	Lourdes Candini, MEX Claudia Peczinka, SUI
84.067	Claudia Peczinka, SUI
83.817	Lian Goodwin, GBR Maria Giusty, VEN Mijinsu Kim, KOR
83.733	Maria Giusty, VEN
83.650 83.600	Mijinsu Kim, KOR Min Tan, CHN
83.067	Susana Candini, MEX
82.517	Susana Candini, MEX Paula Carvalho, BRA
82.117	Eva Riera, BRA
82.000	Heike Friedrich, FRG
81.883	Xi Luo, CHN
81.150	Ying Zhang, CHN
80.750	Soo-Kyung Ha, KOR Lisa Lieschke, AUS
80.433	Doris Eisenhofer, FRG
79.150	Jung-Yoon Choi, KOR
78.983	Eva Lopez, ESP
78.850	Semon Rohloff, AUS
78.750	Patricia Serneels, BEL
74 266	Nuria Ayala, ESP
74.200	Nuria Ayala, ESP Yvette Thuis, ARU Marta Amoros, ESP
70.483	Roswitha Lopez, ARU
SDLD	
Final Sta	ndings
200.150	Carolyn Waldo, CAN Tracie Ruiz-Conforto, USA Mikako Kotani, JPN
191.850	Mikako Kotani JPN
185.600	
181 033	Karin Singer, SUI
101.333	Karin Singer, SUI Nicola Shearn, GBR
180.650	Karin Singer, SUI Nicola Shearn, GBR Khristina Falassinidi, URS
175.983	Gerlind Scheller, FRG
175.983 Final Rou	Gerlind Scheller, FRG tine Tracie Buiz-Conforte, USA
175.983 Final Rou	Gerlind Scheller, FRG tine Tracie Buiz-Conforte, USA
175.983 Final Rou 99.000 99.000 97.600	Gerlind Schelier, FRG tine Tracie Ruiz-Conforto, USA Carolyn Waldo, CAN Mikako Kotani, JPN
175.983 Final Rou 99.000 99.000 97.600 96.600	Gerlind Scheller, FRG tine Tracie Ruiz-Conforto, USA Carolyn Waldo, CAN Mikako Kotani, JPN Muriel Hermine, FRA
175.983 Final Rou 99.000 99.000 97.600 96.600	Gerlind Scheller, FRG tine Tracie Ruiz-Conforto, USA Carolyn Waldo, CAN Mikako Kotani, JPN Muriel Hermine, FRA
175.983 Final Rou 99.000 97.600 96.600 95.000 93.600	Gerlind Scheller, FHG tine Tracie Ruiz-Conforto, USA Carolyn Waldo, CAN Mikako Kotani, JPN Muriel Hermine, FRA Karin Singer, SUI Khristina Falassinidi, URS
175.983 Final Rou 99.000 97.600 96.600 95.000 93.600 93.200	Gerlind Scheller, FRG tine Tracie Ruiz-Conforto, USA Carolyn Waldo, CAN Mikako Kotani, JPN Muriel Hermine, FRA Karin Singer, SUI Khristina Falassinidi, URS Nicola Shearn, GBR
175.983 Final Rou 99.000 99.000 97.600 96.600 95.000 93.600 93.600 93.200 90.400	Gerlind Scheller, FRG tine Tracie Ruiz-Conforto, USA Carolyn Waldo, CAN Mikako Kotani, JPN Muriel Hermine, FRA Karin Singer, SUI Khristina Falassinidi, URS Nicola Shearn, GBR Gerlind Scheller, FRG
175.983 Final Rou 99.000 97.600 95.000 95.000 93.600 93.200 90.400 Prelim St 199.350	Gerlind Scheler, FHG time Tracie Ruiz-Conforto. USA Carolyn Waldo, CAN Mikako Kotani, JPN Murale Hermine, FRA Karin Singer, SUI Khristina Falassinidi, URS Nicola Shearn, GBR Gerlind Scheller, FRG andings Carolyn Waldo, CAN
175.983 Final Rou 99.000 97.600 95.000 95.000 93.600 93.200 90.400 Prelim St 199.350	Gerlind Scheler, FHG time Tracie Ruiz-Conforto. USA Carolyn Waldo, CAN Mikako Kotani, JPN Murale Hermine, FRA Karin Singer, SUI Khristina Falassinidi, URS Nicola Shearn, GBR Gerlind Scheller, FRG andings Carolyn Waldo, CAN
175.983 Final Rou 99.000 97.600 96.600 93.600 93.200 93.200 90.400 Prelim St 199.350 197.033 191.250	Gerlind Scheler, FHG time Tracie Ruiz-Conforto, USA Carolyn Waldo, CAN Muriel Hermine, FRA Karin Singer, SUI Khristina Falassinidi, URS Nicola Shearr, GBR Gerlind Scheller, FRG anding Carolyn Waldo, CAN Tracie Ruiz-Conforto, USA Mikako Kotani, JPN
175.983 Final Rou 99.000 97.600 96.600 93.600 93.200 90.400 Prelim St 199.350 197.033 191.250 189.100	Gerlind Scheller, FHG tine Tracie Ruiz-Conforto, USA Carolyn Waldo, CAN Mikako Kotani, JPN Muriel Hermine, FRA Karin Singer, SUI Khristina Falassindi, URS Nicola Shearn, GBR Gerlind Scheller, FRG andings Carolyn Waldo, CAN Tracie Ruiz-Conforto, USA Mikako Kotani, JPN Muriel Hermine, FRA
175.983 Final Rou 99.000 99.000 97.600 96.600 93.600 93.600 90.400 Prelim St 199.350 197.033 191.250 189.100 185.000	Gerlind Scheller, FHG tite Tracie Ruiz-Conforto, USA Carolyn Waldo, CAN Murale Hermine, FRA Karin Singer, SUI Khristina Falassindi, URS Nicola Scheller, FRG andings Carolyn Waldo, CAN Tracie Ruiz-Conforto, USA Mirkako Kotani, JPN Murale Hermine, FRA Karin Singer, SUI
175,983 Final Rou 99,000 99,000 97,600 95,000 93,600 93,600 93,200 90,400 Prelim St 199,350 197,033 191,250 189,100 185,000 181,333	Gerlind Scheller, FHG tine Tracie Ruiz-Conforto, USA Carolyn Waldo, CAN Mikako Kotani, JPN Muriel Hermine, FRA Karin Singer, SUI Krnistina Falassinidi, URS Nicola Shearn, GBR Gerlind Scheller, FRG andings Carolyn Waldo, CAN Tracie Ruiz-Conforto, USA Mikako Kotani, JPN Muriel Hermine, FRA Karin Singer, SUI Nicola Shearn, GBR
175.983 Final Rou 99.000 99.000 97.600 93.600 93.600 93.200 90.400 Prelim St 199.350 197.033 191.250 189.100 185.000 181.333 180.650 174.183	Gerlind Scheller, FHG tine Tracie Ruiz-Conforto, USA Carolyn Waldo, CAN Mikako Kotani, JPN Muriel Hermine, FRA Karin Singer, SUI Khristina Falassinidi, URS Gerlind Scheller, FRG <b>andings</b> Carolyn Waldo, CAN Tracie Ruiz-Conforto, USA Mikako Kotani, JPN Muriel Hermine, FRA Karin Singer, SUI Nicola Shearn, GBR Khristina Falassinidi, URS Gerlind Scheller, FRG
175.983 Final Rou 99.000 99.000 97.600 93.600 93.200 93.200 93.200 93.200 93.200 93.200 93.200 94.00 Prelim St 199.350 197.033 191.250 189.100 185.000 185.000 185.000 185.000 174.183 172.800	Gerlind Scheller, FHG tine Tracie Ruiz-Conforto, USA Carolyn Waldo, CAN Mikako Kotani, JPN Muriel Hermine, FRA Karin Singer, SUI Khristina Falassinidi, URS Gerlind Scheller, FRG <b>andings</b> Carolyn Waldo, CAN Tracie Ruiz-Conforto, USA Mikako Kotani, JPN Muriel Hermine, FRA Karin Singer, SUI Nicola Shearn, GBR Khristina Falassinidi, URS Gerlind Scheller, FRG
175.983 Final Rou 99.000 99.000 97.600 93.600 93.200 93.200 93.200 93.200 93.200 93.200 93.200 94.00 Prelim St 199.350 197.033 191.250 189.100 185.000 185.000 185.000 185.000 174.183 172.800	Gerlind Scheller, FHG tine Tracie Ruiz-Conforto, USA Carolyn Waldo, CAN Mikako Kotani, JPN Muriel Hermine, FRA Karin Singer, SUI Khristina Falassinidi, URS Gerlind Scheller, FRG andings Carolyn Waldo, CAN Tracie Ruiz-Conforto, USA Mikako Kotani, JPN Muriel Hermine, FRA Karin Singer, SUI Nicola Shearn, GBR Khristina Falassinidi, URS Gerlind Scheller, FRG Marie Jacobsson, SWE Lources Candini, MEX
175.983 Final Rou 99.000 99.000 97.600 95.000 93.600 93.600 90.400 Prelim St 199.350 197.033 197.033 191.250 189.100 185.000 181.333 180.650 174.183 172.533 172.533	Gerlind Scheller, FHG tine Tracie Ruiz-Conforto, USA Carolyn Waldo, CAN Mikako Kotani, JPN Muriel Hermine, FRA Karin Singer, SUI Khristina Falassindii, URS Nicola Snearn, GBR Gerlind Scheller, FRG <b>andings</b> Carolyn Waldo, CAN Mikako Kotani, JPN Muriel Hermine, FRA Karin Singer, SUI Nicola Snearn, GBR Khristina Falassinidi, URS Gerlind Scheller, FRG Marie Jacobson, SWE Lources Candini, MEX Ying Zhang, CHN
175.983 Final Rou 99.000 97.600 95.000 93.600 93.200 90.400 Prelim St 199.350 189.100 185.000 185.000 184.033 180.650 174.183 172.800 172.533 170.750 169.950	Gerlind Scheller, FHG tine Tracie Ruiz-Conforto, USA Carolyn Waldo, CAN Mikako Kotani, JPN Muriel Hermine, FRA Karin Singer, SUI Khristina Falassindii, URS Nicola Snearn, GBR Gerlind Scheller, FRG <b>andings</b> Carolyn Waldo, CAN Mikako Kotani, JPN Muriel Hermine, FRA Karin Singer, SUI Nicola Snearn, GBR Khristina Falassinidi, URS Gerlind Scheller, FRG Marie Jacobson, SWE Lources Candini, MEX Ying Zhang, CHN Soo-Kyung Ha, KOR Mara Guisty, VEN
175.983 Final Raw 99.000 99.000 97.600 96.600 93.600 93.200 90.400 Prelim St 199.350 197.033 191.250 185.000 181.333 180.650 174.183 172.800 174.253 170.750 169.950 169.333	Gerlind Scheller, FHG tine Tracie Ruiz-Conforto, USA Carolyn Waldo, CAN Mikako Kotani, JPN Muriel Hermine, FRA Karin Singer, SUI Khristina Falassindii, URS Nicola Snearn, GBR Gerlind Scheller, FRG <b>andings</b> Carolyn Waldo, CAN Mikako Kotani, JPN Muriel Hermine, FRA Karin Singer, SUI Nicola Snearn, GBR Khristina Falassinidi, URS Gerlind Scheller, FRG Marie Jacobson, SWE Lources Candini, MEX Ying Zhang, CHN Soo-Kyung Ha, KOR Mara Guisty, VEN
175.983 Final Raw 99.000 99.000 97.600 96.600 93.600 93.200 90.400 Prelim St 199.350 197.033 191.250 185.000 181.333 180.650 174.183 172.800 174.253 170.750 169.950 169.333	Gerlind Scheller, FHG tine Tracie Ruiz-Conforto, USA Carolyn Waldo, CAN Mikako Kotani, JPN Muriel Hermine, FRA Karin Singer, SUI Khristina Falassindii, URS Nicola Snearn, GBR Gerlind Scheller, FRG <b>andings</b> Carolyn Waldo, CAN Mikako Kotani, JPN Muriel Hermine, FRA Karin Singer, SUI Nicola Snearn, GBR Khristina Falassinidi, URS Gerlind Scheller, FRG Marie Jacobson, SWE Lources Candini, MEX Ying Zhang, CHN Soo-Kyung Ha, KOR Mara Guisty, VEN
175.983 Final Rau 99.000 99.000 97.600 96.600 93.600 93.200 90.400 Prelim St 199.350 197.033 191.250 189.100 185.000 181.333 172.503 172.503 172.503 172.503 170.750 169.950	Gerlind Scheller, FHG tine Tracie Ruiz-Conforto, USA Carolyn Waldo, CAN Mikako Kotani, JPN Muriel Hermine, FRA Karin Singer, SUI Khristina Falassinidi, URS Gerlind Scheller, FRG endings Gradyn Waldo, CAN Tracie Ruiz-Conforto, USA Mikako Kotani, JPN Muriel Hermine, FRA Karin Singer, SUI Nicola Shearn, GBR Khristina Falassinidi, URS Gerlind Scheller, FRG Marie Jacobsson, SWE Lourdes Candini, MEX Ying Zhang, CHN Soo-Kyung Ha, KOR

164,550 Patricia Serneels, BEL 164.550 Patricia Serneels, BEL 150.683 Roswitha Lopez, ARU Prelim Routine 98.400 Tracie Ruiz-Conforto, USA 98.200 Carolyn Waldo, CAN 97.000 Mikako Kotani, JPN 95.600 Muriel Hermine, FRA 94.400 Karin Singer, SUI 93.600 Khristina Falassinidi, URS 92.600 Nicola Shearn, GBR 89.600 Ying Zhang, CHN 89.600 Ying Zhang, CHN 89.200 Soo-Kyung Ha, KOR 88.600 Gerlind Scheiler, FRG 88.400 Eva Lopez, ESP 88.000 Marie Jacobsson, SWE 88.000 Lourdes Candini, MEX 85.800 Patricia Serneels, BEL 55.600 Maria Guntu, VEN 85.600 Maria Giusty, VEN 85 200 Lisa Lieschke AUS 83.800 Paula Carvalho, BRA 80.200 Roswitha Lopez, ARU DUET Final Standings 197.717 Michelle Cameron & 197.717 Michelle Lameron & Carolyn Waldo, CAN 197.284 Sarah Josephson & Karen Josephson, USA 190.159 Miyako Tanaka & Mikako Kotani, JPN 184.792 Karine Schuler & Anne Capron, FRA Anne Capron, FRA 183.950 Edith Boss & Karin Singer, SUI 182.667 Mariia Tscherniaeva & Tatiana Titova, URS 179.075 Nicola Shearn & 179.075 Nicola Shearn & Lian Goodwin, GBR 176.833 Lourdes Candini & Sonia Cardenas, MEX Final Routine 99.600 Josephsons, USA 98.800 Cameron & Waldo, CAN 27.400 Topola & Marcia Pro-99.600 Josephsons, USA 98.800 Cameron & Waldo, CAN 97.400 Tanaka & Kotani, JPN 96.200 Schuler & Capron, FRA 95.000 Boss & Singer, SUI 94.000 Tschermiaeva & Titova, URS 92.800 Shearn & Goodwin, GBR 92.200 Candini & Gardenas, MEX Prelim Standings 197.317 Cameron & Waldo, CAN 196.284 Josephsons, USA 183.792 Schuler & Capron, FRA 183.792 Schuler & Capron, FRA 183.792 Scherniaeva & Titova, URS 177.605 Susana Candini, GBR 175.000 Susana Candini, GBR 175.000 Susana Candini, MEX 173.742 Tan Min & Lui Xi, CHN 172.592 Hick Friedrich & 172.592 Heike Friedrich & Gerlind Scheller, FRG 171.800 Mijinsu Kim & Soo-Kyung Ha, KOR 171.025 Erika McDavid & Eva Riera, BRA 166.042 Lisa Lieschke & Semon Rohloff, AUS 163.675 Eva Lopez & Nuria Ayala, ESP 151.975 Yvette Thuis & Roswitha Lopez, ARU Roswitha Lopez, ARU Prelim Routine 98.600 Josephsons, USA 98.600 Cameron & Waldo, CAN 96.800 Tanaka & Kotani, JPN 95.200 Schuler & Capron, FRA 94.200 Boss & Staper, SUI 93.600 Tscherniaeva & Titova, URS 91.600 Shearn & Goodwin, GBR 91.200 Candinis, MEX 91.200 Candinis. MFX 91.200 Candinis, MEX 91.000 Tan & Luo, CHN 89.600 Kim & Ha, KOR 88.800 Friedrich & Scheller, FRG 87.600 McDavid & Riera, BRA 86.400 Lieschke & Rohloff, AUS 66.200 Lipez & Ayala, ESP 79.600 Thuis & Lopez, ARU WATER

# POLO

XXIV OLYMPICS WATER POLO Seoul, South Korea Sept. 21-Oct. 1, 1988

#### PRELIMINARY ROUNDS

Sept. 21 12-10 Hungary-Greece 7-6 USA-Yugoslavia 13-6 Spain-China 9-9 13-2 Italy-Soviet Union France-Korea 13-2 France-Korea 13-11 West Germany-Australia Sept. 22 14-7 Greece-China 9-7 Spain-USA 10-9 Yugoslavia-Hungary 11 International Korea Italy-Korea West Germany-France Soviet Union-Australia 11-1

Sept. 23
14-7 USA-China
17-7 Yugoslavia-Greece
6-6 Spain-Hungary
18-2 West Germany-Korea
7-5 Italy-Australia
18-4 Soviet Union-France
Sept. 26
10-7 West Germany-Italy
17-4 Soviet Union-Korea
7-6 Australia-France
18-9 USA-Greece
14-7 Hungary-China
10-8 Yugoslavia-Spain
Sept. 27
14-8 Italy-France
11-1 Australia-Korea
9-8 West Germany-Soviet Union
12-9 Spain-Greece
10-9 USA-Hungary
17-7 Yugoslavia-China
SEMI-FINALS—Sept. 30 11-4 France-China
17-7 Greece-Korea
9-9 Italy-Hungary
8-7 Australia-Spain
14-10 Yugoslavia-West Germany
8-7 USA-Soviet Union
FINALS-Oct. 1
14-7 China-Korea
10-7 Greece-France
13-5 Hungary-Australia
11-9 Spain-Italy
Bronze medal game
14-13 Soviet Union-West Germany
Gold medal game
9-7 Yugoslavia-USA
FINAL STANDINGS
Yugoslavia
United States
Soviet Union
West Germany
Hungary
Spain -
Italy Australia
Greece
France
China
Korea
TOURNAMENT HIGH SCORER
Manuel Estiarte, ESP, 27

## DIVING

XXIV OLYMPIC GAMES **Diving Events** Seoul, South Korea Sept. 18-27, 1988

 
 WOMEN

 SPRINGBOARD

 Finals-Sept. 25

 580.23
 Gao Min, CHN

 531.31
 Li Oing, CHN

 531.91
 Kelly McCormick, USA

 526.65
 Irina Lachko, URS

 506.43
 Marina Babkova, URS

 498.81
 Wendy Lucero, USA

 479.19
 Brita Baldus, GDR

 465.45
 Daphne Jongejans, HOL
 498.81 479.19 465.45 Daphne Jongejans, HOL Debbie Fuller, CAN 450.30 432.81 Jennifer Donnet AUS Jenniter Donnet, AU Barbara Bush, CAN Tracy Cox, ZIM -Sept. 24 Gao Min, CHN Li Qing, CHN Irina Lachko, URS 432.81 429.18 417.42 Prelims – 539.67 501.39 488.43 Irina Lachko, URS Wendy Lucero, USA Kelly McCormick, USA Brita Baldus, GDR Daphne Jongejans, HOL Marina Babkova, URS Debbie Fuller, CAN Barbara Bush, CAN Jennifer Donnet, AUS 477 99 473.73 464.01 461.85 456.42 453.48 434.34 433 17 Tracy Cox, ZIM Anita Rossing, SWE Veronica Ribot, ARG Yuki Motobuchi, JPN 430.86 414.63 405.87 404.76 400.32 Beatrice Buerki, SUI Anke Muehlbauer, FRG 400 26 399.87 396.51 Carolyn Roscoe, GBR Angela Ribeiro, BRA Maria Alcala, MEX 392.16 380.94 378.27 Masako Asada, JPN Katalin Haasz, HUN Elke Heinrichs, FRG Eun-Hee Kim, KOR Agnes Gerlach, HUN Naomi Bishop, GBR Lori Roberts, BAH 374.46 357.96 355.14 349.44 292.95 PLATFORM

PLATFORM Finals - Sept. 18 445.20 Xu Yanmei, CHN 436.95 Michele Mitchell, USA 400.44 Wendy Lian Williams, USA 386.22 Angela Stassulevitch, URS 384.15 Xiaodan Chen, CHN 384.02 Einea Mirachien, URS 381.93 Elena Miroshina, URS Kamilla Gamme, NOR 366 45 350.61 Silke Abicht, GDR

349.41 Maria Alcala, MEX Debbie Fuller, CAN Ildiko Kelemen, HUN Veronica Ribot, ARG Sept. 17 340.89 322.59 297.18 Prelims-456.45 Xiaodan Chen, CHN 426.45 Michele Mitchell, USA Xu Yanmei, CHN Wendy Lian Williams, USA Angela Stassulevitch, URS Elena Miroshina, URS 426 27 420.27 402.54 401.04 399.27 393 99 Silke Abicht, GDB Silke Abicht, GDR Veronica Ribot, ARG Debbie Fuller, CAN Maria Alcala, MEX Kamilla Gamme, NOR Ildiko Kelemen, HUN Wendy Fuller, CAN 377 70 366 42 359.64 356.73 355.17 347.73 
 347.73
 Wendy Fuller, CAN

 339.96
 Julie Kent, AUS

 335.88
 Monika Kuehn, FRG

 333.45
 Yuki Motobuchi, JPN

 327.93
 Masako Asada, JPN

 322.35
 Carolyn Rosce, GBR

 310.53
 Doris Pecher, FRG

 284.25
 Eun-Hee Kim, KOR

## MEN SPRINGBOARD

SPRINGBOARD Finals-Sept. 20 730.80 Greg Louganis, USA 704.88 Tan Liangde, CHN 665.28 Li Deliang, CHN 661.47 Aibin Killat, FRG 642.99 Mark Bradshaw, USA 642.99 616.02 598.77 Mark Bradshaw, USA Jorge Mondragon, MEX Jesus Mena, MEX Edwin Jongejans, HOL Niki Stajkovic, AUT Alexandre Portnov, URS Keita Kaneto, JPN 588 33 570.60 563.37 562.05 554.16 Vateri Gontcharov, URS -Sept. 19 Tan Liangde, CHN Albin Killat, FRG Greg Louganis, USA Li Deliang, CHN Jorge Mondragon, MEX Edwin Jongejans, HOL Mark Bradshaw, USA Jesus Mena, MEX Niki Stajkovic, AUT Keita Kaneto, JPN Valeri Gontcharov, URS Prelims-682.65 642.60 629.67 607.77 594 36 591.45 588.15 581.01 579.63 577.50 Keita Kaneto, JPN Valeri Gontcharov, URS Alexandre Portnov, URS Massimo Castellani, ITA Joakim Andersson, SWE 570 63 561.81 553.74 549.99 549.09 Tom Lemaire, BEL Piero Italiani, ITA 542.67 Larry Flewwelling, CAN Isao Yamagishi, JPN Erich Pils, AUT David Bedard, CAN Willi Meyer, FRG 541.14 540.72 532.92 532.62 511.98 Juha Ovaskainen, FIN 500.76 Graeme Banks, AUS Jerome Nalliod, FRA Jose Miguel Gil, ESP Graham Morris, GBR Tomasz Rossa, POL 499 41 496 17 496.17 483.12 478.74 475.44 470.19 Russell Butler, AUS 
 470.19
 Russell Butler, AUS

 457.65
 Robert Morgan, GBR

 446.82
 Abraham Suarez, ECU

 387.60
 Majed Altaqi, KUW

 362.58
 Sun-Gee Lee, KOR

 347.22
 Christopher Honey, BAR

 298.08
 Kei Shan Tang, HKG

 263.16
 Kin Chung Wong, HKG

#### PLATFORM

PLATFORM Finals-Sept. 27 638.61 Greg Louganis, USA 637.47 Xiong Ni, CHN 549.39 Jesus Mena, MEX 546.96 G. Tchogovadze, URS 547.7 Jan Hempel, CDR 543.81 Li Kongzheng, CHN 541.02 Steffen Haage, GDR 543.69 Viadimir Timochinine, UT 511.89 Jorge Mondragon, MEX 507.70 Isab Qramagishi, JPN 499.53 David Bedard, CAN 493.54 Patrick Jeffrey, USA URS 483 54 Patrick Jeffrey, USA 483.54 Prelims -617.67 601.50 -Sept. 26 Greg Louganis, USA Xiong Ni, CHN Li Kongzheng, CHN Vladimir Timochinine, URS 578.31 LI Kongzieng, Chin Viadimir Timochine, Uf Jan Hempel, CDR Patrick Jeffrey, USA G. Tchogovadze, URS Steffen Haage, GOR David Bedard, CAN Jesus Mena, MKX Jorge Mondragon, MEX Isao Yamagishi, JPN Abin Killat, FRG Keita Kaneto, JPN Abin Killat, FRG Motert Morgan, GBR Domenico Rinadi, ITA Craig Rogerson, AUS Graeme Banks, AUS Jeffrey Hirst, CAN Jeffrey Arbon, GBR Will Meyer, FRG Frederic Pierre, FRA 570.75 558 03 553.89 553.89 540.90 529.68 524.10 523.50 518.52 517.80 517.23 497.04 489.27 476.01 471.24 469 47 469.47 462.87 453.99 450.18 449.07 437.01 433.68 Tom Lemaire, BEL 425 73 Emilio Ratia ESE 420.45 Sun-Gee Lee, KOR



watertight construction, three year warranty, three year battery life. Call us for quantity discounts!!





-

## 790 XM/12 Memory Dual Split, One button Rapid Split Action.

Recalls last 12 Cum OR last 12 Lap OR last 6 Dual Splits with Anytime Review. Cum Splits to 10 hrs., Lap Splits to 1 hr. Split Counter to 99.

#### 760 XM/6 Memory

Dual Split, One button Rapid Split Action. Recalls last 6 Dual Splits with Anytime Review. Cum Splits to 10 hrs. Lap Splits to 1 hr. Split Counter to 99.





#### 725 Magnum/Dual Split

Extra large Sprint Display for easy viewing. Dual Split, One button Rapid Split Action. Lap Splits to 10 min., Cum Solits to 24 hrs.

#### 705 Magnum/Event Extra large Sprint display to 10 min. Total time up to 10 hours. Time In/ Time Out Timina.



## ADOLPH KIEFER & ASSOCIATES

1750 Harding Road. Northfield, IL 60093 IL 1-312-446-8866, Outside IL 1-800-323-4071

# SwimMart\_\_\_\_\_

# 

# START YOUR HOLIDAY SHOPPING HERE!

This is our special MAIL-ORDER section designed for the advertiser with a product that can be used by swimmers, coaches and/or parents. Here are the details:

AD SIZE: 2-3/32" wide x 2-1/4" deep

DEADLINE: 30 days prior to cover date of next issue.

RATE: \$150.00 U.S. check or money order MUST ACCOMPANY AD!

Let us put your ad together for you.

Call: TONI BLAKE—(213) 674-2120 or write: SWIMMING WORLD/ SWIMMART, 116 W. Hazel Street, Inglewood, California 90302



#5707 #5706 **1988 SEOUL SUMMER GAMES** Free Color Catalog #5701 - USA Olympic Rings (not shown) \$5.00 #5706 - Seoul Logo \$5.00 #5707 - Seoul Swim Mascot \$5.00 Calif. residents 6% tax Postage & handling \$1.00 Total Designs by Margarita WRITE TO: 19382 Woodlands Lane Huntington Beach, CA 92648 (714) 964-5010

6

Ho Ho & Craft International is the official licensee of the U.S. Olympic Committee, Seoul Olympic Organizing Committee, the XV Olympic Games Organizing Committee for the products. Designs by Margarita is a Sales Representative on a non-exclusive basis.





<pre>sive your favorite swimmers and divers something they really want Gift subscriptions to Swimming World Sto for each one-year subscription To for each one-year subscription Sto for each of the following: Sto for e</pre>		This C	hristmas	
something they really want         Gift subscriptions to Swimming World         \$16 for each one-year subscription         start         start <th></th> <th></th> <th></th> <th></th>				
Gift subscriptions to Swimming World         \$16 for each one-year subscription         Staff for each of the following:         Stafff	•••			
	somet	hing they	really want	
Send to: Exp. Date	<b>Gift subsc</b>	criptions t	o Swimming World	
Send to: Exp. Date	SUS SPECIA IE SUL DAVE II SWITTEN SWITTEN SWITTEN			
Send to: Exp. Date			1938 The post in the second se	
P.O. Box 45497 Total Enclosed \$   Los Angeles, CA 90045 Add \$5.00 for subscriptions outside USA   Your Name				
Your Name   Address   City/State/Zip   Please send a Swimming World gift   subscription to each of the following:   1st gift   Address   Address   Address	P.O. Box 45497	*	,	
Address   City/State/Zip   Please send a Swimming World gift   subscription to each of the following:   1st gift   Address   Address   Address   Address	Los Angeles, CA 90045	Add \$5.00 for subscript	ions outside USA	
City/State/Zip 2nd gift   Please send a Swimming World gift Address   subscription to each of the following: Address   1st gift 3rd gift   Address Address	Your Name			
Please send a Swimming World gift       Address         subscription to each of the following:       Address         1st gift       3rd gift         Address       Address				
Please send a Swimming World gift       City/State/Zip         subscription to each of the following:       3rd gift         1st gift       Address         Address       Address	City/State/Zip		2nd gift	
Address Address				
Address Address	1st gift		3rd gift	
	-		5	
			City/State/Zip	

We will send everyone on your list a gift card if we hear from you by Dec. 1. Otherwise, all cards will be sent directly to you.

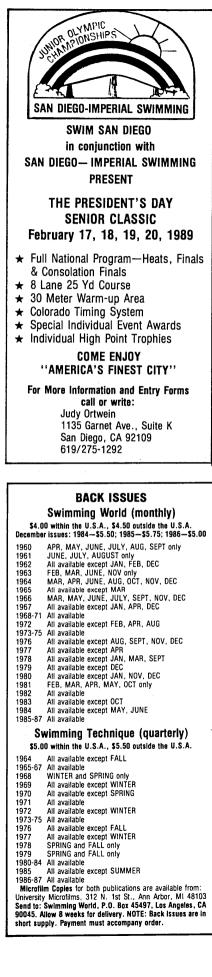
# **SwimMart**





# **Classified Ads**

		ng World		CLASSIFIED ADVERTISING Rates & Regulations	SCHOLARSHIPS WANTED
	SSIFIED	ADVERTIS		Prices will be based upon: each column inch (1'') \$40.00 each additional inch \$35.00 Minimum charge one inch. These prices for all classified ads.	Two rapidly improving female swimmers (16 yrs. and 17 yrs.) seek full scholarships to U.S. universities as from Sept. 1989. One going 1:05.32 100m fly, 2:20.63 200m fly, 4:27.20 400m
\$4	O.OO olumn inch	1 column in 1 inch dee ONLY \$40. one time in	p cost .00 for	Payment must accompany order (see order form below). No agency discount. <b>DEADLINE:</b> 1st day of the month preceding date of issue. Artwork and logos not accepted.	free and 9:06.22 800m free; the other going 2:25.74 200m IM and 5:06.85 400m IM. Both aca- demically competent. If inter- ested please contact Coach Ian Armiger, Bingley Pool, Myrtle Place, Bingley, West Yorkshire, BD16 2LF, England. Tel: 44
	Phone in copy ( (213) 67 ad copy to:	orld Magazine Street	<u>ch!</u>	Box numbers furnished on re- quest for \$6.00 monthly, <b>PREPAID.</b> All advertising is accepted and edited at the discretion of the magazine. Advertising offering products for sale will not be accepted.	Back issues of Swimming World: All issues from 1968 to 1987—Except Jan. 1968, Sept. & Dec. 1970 and May & Dec.
	OPY IN SPACE BELO	W—USE EXAMPLE SIZ		HELP WANTED San Jose Aquatics, San Jose, Calif., is seeking an exceptional candidate to direct its program, coach senior swimmers, and oversee assistants for a USS team with 200+swimmers ranging from pre-competitive to Olympic qualifiers. Ex- cellent facilities include year around 50 meter and 25 yard pools, weight training facilities, of- fice, and Colorado timing equipment. A strong, interested parents organization and board desires a motivator who can bring a balance of swimming excellence, character development, and enjoyment to swimmers of all ages. Send personal and professional resume with emphasis on accomplishments and coaching philosophy plus salary history and references to: Bill Hardy. Search Committee Chairman, 951 Summerleaf Dr., San Jose, CA 95120. SWIM INSTRUCTOR 6 weeks—Middle East—May 1989. Send Resumes to: P.0. Box 70306 Marietta, GA 30007-0306 (404) 998-1943	1982. Best offer. Edwin Kaplan, 3 Whitlock St., Plainview, NY 11803. <b>MISCELLANEOUS</b> <b>ARE YOU A REALTOR WITH A RECREA- TIONAL PROPERTY FOR SALE?</b> Advertise it in our classified section and pick up customers at the same time. <b>CAMP DIRECTORS:</b> Start advertising for qualified camp counselors in our December issue. Prices for these classified ads are the same as for all other classified— \$40.00 per column inch \$35.00 for each additional inch. For the camp directors looking for the best experienced people, December is the month to begin your search. Send the ad copy, using the provided blank along with your check or MO, to: Toni Blake Camp Classified
	I deadline for copy	(MENT IS RECEIVED is 5th of each mont NSERTIONS		SWIM COACH AND FACILITIES DIRECTOR Linfield College seeks a person to manage its new physical education, recreation and athletics complex (including an aquatics center), teach some aquatics activities courses, and coach the combined men's and women's swim teams. Full-time pro- fessional position with part-time (non- tenure track) faculty status. Bachelor's degree required, master's degree desir- able. Experience required with aquatics facilities and coaching. Starting date no later than 1 July 1989, with January or February preferred. Screening will begin 1 Nov. 1988. Send for job description and application procedures to Kenneth P. Goodrich, Dean of Faculty, Linfield Col- lege, McMinnville, OR 97128. AA/EOE.	Swimming World Magazine 116 W. Hazel Street Inglewood, CA 90302 MAGAZINES SWIMMING TIMES Europe's top swimming magazine! A com- plete guide to news items and reports of meets throughout Europe and Common- wealth countries. Surface mail subscrip- tions for one year, \$14. Airmail, \$22. Write to Swimming World, P.O. Box 45497, Los Angeles, CA 90045. Remit- tance must accompany subscription order.



# Calendar\_\_\_

#### NOVEMBER

- 11-13 Saskatoon, Canada: Saskatoon Goldfins SC Annual Invit., scm—306-242-5971 11-13 New York, NY: Columbia Univ.-
- 212-316-6330 11-13 Stony Brook, NY: Marist Swim Club-
- 914-471-3240 ext. 321 11-13 Cincinnati, OH: CPM November Invit.,
- under Ohio AA-513-761-3320 11-13 Memphis, TN: Memphis State AB AG/Open, sc
- Paso Robles, CA: Paso Robles SC ABC 12 Hubbard, OH: Hubbard B Meet, sc-12 216-534-8389
- Greendale, WI: Southwest Aquatics 12 Open-414-423-0355
- 12-13 Arlington, IL: Preppy Bowl-312-698-2544
- 12-13 Olympia, IL: 11th OCS Meet, ABC, SR-309-963-5553
- 12-13 St. Clair Shores, MI: Swim Own Age-313-293-0071
- 12-13 Cleveland, OH: CCS Meet, sc-216-438-2738
- North Shore, NY: North Shore AA-13 516-473-7679
- Menomonee Falls, WI: Menomonee Falls 13 ABC Open, sc-414-255-4481 Flushing, NY: Flushing Y Big Apple-
- 18-20 718-961-3820
- 18-20 Poughkeepsie, NY: Marist Swim Club-914-471-3240, ext. 321
- Fairborn, OH: WPFF Fall Invit.-18-20 513-878-3700
- 19
- Cerritos, CA: Cerritos AC ABC Mission Viejo, CA: Turkey Classic AB Riverside, CA: Riverside AA ABC 19
- 19 10
- Santa Barbara, CA: Santa Barbara SC ABC 19-20 Fig Garden, CA: Fig Garden ABC, sc-209-226-8173
- De Kalb, IL: Huskie Sprint Classic-19-20 815-758-3553
- 19-20 Hinsdale, IL: Hinsdale Swim Club Novelty Meet-312-325-2313
- Eagle, MI: GLSC/WPSC BC-517-626-2343 19-20
- 19-20 Rochester Hills, MI: OLY BC-313-652-4452
- Connetquot, NY: Connetquot Swim 19-20 Club-516-361-6014
- Cleveland, OH: 13th Viking A Fall 19-20 Classic, sc—216-464-9648 North Shore, WI: North Shore A-BC
- 19-20 Open, sc-414-351-3968
- Newburgh, NY: Newburgh Sharks-20 914-561-6229
- 25-27 Windsor, Ontario, Canada: WAC AB-519-948-2068
- Arvada, CO: North Jeffco Thanksgiving 25-27 ABC Meet-303-423-1141
- 25-27 New Canaan, CT: Thanksgiving Invit., AG/SR AB-203-966-4528/203-866-9846
- Boca Raton, FL: AG Meet-305-488-2001 25-27 Barrington, IL: 9th Mustang Holiday Classic, AB-312-382-6248 25-27
- Las Vegas, NV: Las Vegas Sandpipers ABC Columbus, OH: Golden Bear Thanksgiving 25-27 25-27
- Invit.—614-488-3416 25-27 Toledo, OH: GTAC Turkey Meet-
- 614-855-1875 25-27 El Paso, TX: Border Elite Swim Team
- Thanksgiving Invit.-915-595-0777 Madison, WI: Badger Dolphins A-BC 25-27
- Open, sc-608-274-0135
- Rostock, GDR: Int'l. Meet Lake Erie LSC, OH: Turkey Day Meet, 26-27 26-27
- sc-216-452-9831/216-452-9058 27
- Staten Island, NY: Staten Island Aquatics-718-667-4121

#### DECEMBER

- Claremont, CA: Mt. Baldy Aquatics ABC Culver City, CA: Culver City ST ABC
- 3 Lompoc, CA: Lompoc Pentathlon 3
- Santa Ana, CA: SoCal Aquatics ►

## Arvada, CO 50M Pool • 25Y Course • 8 lanes Touch pad system Continuous warmup allowed in shallow end Age Groups-8&U, 9-10, 11-12, 13-14, Open Entry Deadline-Nov. 19th **Meet Director Bev Sunie** 6723 Reed Arvada, Co. 80003 (303) 423-1141 NORTH BALTIMORE AQUATIC CLUB **14TH ANNUAL CHRISTMAS** MEET 88 LOCATION: University of Maryland **Baltimore County** FACILITY: 8-lane 25 yard Separate warm-up Automatic timing Spectator seating AWARDS: Medals 10&U and 11-12

- Travel money 13 thru Open Travel money top 3 teams
- WHEN: December 9, 10, 11, 1988
  - **CONTACT:** Meet Director Jim Wisner 10575 Graeloch Road

Laurel, MD 20707 301-725-2223

## 6th DRAGON CLASSIC "A" Invitational 13-15 JANUARY 1989

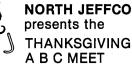
sponsored by HAMDEN-NORTH HAVEN Y SWIMMING

Hamden High School Pool Dixwell Avenue Hamden, CT

- 25 vd, 6 lane pool
- Electronic Timing System • COTs:
- "A" Minimum, 13 & Over, Trials & Finals "B" Minimum, 9-12, Timed Finals
- Medals: Individual, 1st thru 6th place Relays, 1st thru 3rd place

For further information contact: Katherine McManus 89 Leonard Road Hamden, CT O6514





Nov. 25, 26, 27

Mark your calendar now for some of the most important swimming dates in 1989

# July 13, 14, 15 and 16

# The Los Angeles Invitational Sponsored by Swimming World Magazine and

The University of Southern California

at

The McDonald's Olympic Pool Site of the 1989 Phillips 66/ U.S. Swimming Long Course National Championships

For further information contact:

Darrell Fick University of Southern California Department of Athletics Los Angeles, CA 90089-0602 Telephone: 213-743-2754

## CINCINNATI PEPSI MARLINS

## SHORT COURSE SCHEDULE 1988-1989

## 1988

Dec. "AA" 13-14 & Senior, 9-11 "B" or better 11-12, 9-10,

## 1989

8&U

- Jan. "A" and under, Senior,
  13-15 8&U through 13-14 age groups
  Feb. "AA" 13-14 & Senior,
- 17-19 "B" or better 11-12, 9-10,
  - 8&U

#### Information

Cincinnati Pepsi Marlins 616 W. North Bend Rd. Cincinnati, Ohio 45224 (513) 761-3320



## Age Group and Open Swim Meet Sponsored By LAKE ERIE SILVER DOLPHINS

**USS Sanctioned, Timed Finals** 

MOST AGE GROUP EVENTS OFFERED INCLUDING DISTANCE EVENTS

> December 2, 3, 4, 1988 Ocasek Natatorium University of Akron

EXCITING new state-of-art FAST pool

8 Iane, 50 meter pool Electronic Timing Medals: 1-3 Ribbons: 4-8 Trophies: High Point & Runner-up Team Trophies: 1-3

Contact: Renee Snow 2683 Ashley Road Shaker Heights, OH 44122 216-371-2552

## Calendar

- 3 Coral Springs, FL: BC County-305-752-0697
- 3 Ft. Lauderdale, FL: Santa Claus Meet-305-492-4173
- 3 Lake Lytal, FL: BC County-305-686-6611
- 3 Miami, FL: BC County-305-596-1789
- Deer Park, NY: Deer Park Aquatics
   West Carrollton, OH: Moraine Mini Meet,
- 3 West Carrollton, OH: Moraine Min 10&U—513-859-8740
- 3 Hartland, WI: Lake Country Phoenix ABC Open, sc—414-367-5727
- 3-4 Plantation, FL: SR lc—305-797-2768
  3-4 Deerfield, IL: Coho Classic, BC—
- 312-945-1727 3-4 Southfield, MI: SSC Mini C Meet—
- 3-4 Southfield, MI: SSC Mini C Meet 313-569-3607 3-4 Cleveland OH: LESD Meet 216-3
- 3-4 Cleveland, OH: LESD Meet—216-371-2552
   4 Rock Island, IL: Rock Island Y Pentathlon—319-359-5623
- East Lansing, MI: SR Meet—517-372-7712
  Hempstead, NY: Trots Finmen—
- 516-795-3387 4 Worthington OH
- Mukego, WI: Marlin Aquatics ABC Open, sc—414-679-3338/679-0277
   Pewaukee, WI: North Shore Badgerland
- Conf. ABC Invit., sc—414-351-3968 8-11 Long Beach, CA: SCS SR Winter Invit.
- 9-11 St. Charles, IL: Great Lakes Winter Champs.—312-420-6270
- 9-11 Elkhart, IN: 4th Elkhart Y Rudolph Romp Invit., swim own age-219-262-2894
- 9-11 Catonsville, MD: NBAC Christmas Meet-301-725-2223
- 9-11 Okemos, MI: OSAC A, limited B with 1000-517-349-3404
- 9-11 St. Louis, MO: Sugar Creek Winter Invit.—314-458-2322/842-5586
- 9-11 Cincinnati, OH: CPM December Invit.— 513-761-3320
- 9-12 White Plains, NY: White Plains YWCA-914-946-8548
- Oxnard, CA: Hueneme SC ABC
   Milwaukee, WI: Greater Ozaukee Metro Conf. ABC Invit., sc—414-377-5028
- Waterloo, WI: Waterloo ABC Open, sc-414-478-3437
- 10-11 Palatine, IL: Palatine Splash—312-634-9299
  10-11 Wheaton, IL: Winter Splash, BC—
- 312-653-4714 10-11 Bowling Green, OH: Bowling Green
- Holiday Invit.—419-353-1654 10-11 Perry, OH: Perry Swim Club Meet, scm—
- 216-837-6713 10-11 Wisconsin: SW Aquatics ABC Open, sc-414-423-0355
- 16-18 Ft. Lauderdale, FL: "A" Trophy Meet-305-764-4822
- 16-18 Fordham, NY: Gotham Aquatics Assoc.— 212-477-4995
- 16-18 Poughkeepsie, NY: Marist Swim Club-914-471-3240 ext. 321
- 16-18 Columbus, OH: GCST Holiday Invit.— 614-855-1875
- 16-18 Pittsburgh, PA: 27th Allegheny Mountain Christmas Swim Meet—412-963-9496
  17 Anaheim, CA: AAA AB Meet
- Anaheim, CA: AAA AB Meet
   Bellflower, CA: Bellflower AC IR/SR
- Glendora, CA: Glendora SC ABC
- 17-18 El Paso, TX: Sunbowl Classic, AB, AG/SR—915-751-2062
- 17-18 Beloit, WI: Beloit ABC Open –608-364-4269
  18 Kankakee, IL: Phillips 66 Winter Classic 815-939-4835
- 18-20 Indianapolis, CA: USS Open- 719-578-4578
- 18-20 Ewing, NJ: New Jersey Swimming Holiday Classic, AG/Open-609-771-1467
- 28-30 Maastricht/Kerkrade, HOL: International Friendship Swim Meet III—203-967-9800

JANUARY 1989

6-8 Boca Raton, FL: New Year's Classic— 407-488-2001 ►



## Jack Nelson Swim Camp International Swimming Hall of Fame

Fort Lauderdale, Florida

- For any swimming group of 4 or more.
- Masters groups, USS or school teams.
- Live and eat at the Day's Inn Lauderdale Surf Hotel directly across from the pool.
- Two training sessions per day.
- Use of the weight and strength training room.

A perfect opportunity for your group to plan a team trip, develop unity among swimmers and staff, build team "esprit de corps", and have a chance to get that much needed training away from the distractions of home.

For information write or call:

#### Jack Nelson Swim Camp 503 Seabreeze Blvd. Fort Lauderdale, FL 33316 (305) 764-4822

Special airfares available through Aquarius Travel 1-800-441-2044.

# The Shirt Shop





Swimming World Color T-Shirt. Highest quality preshrunk 100% cotton Haines T-shirt with colorful fish design on front or back of shirt (please specify front or back when ordering). Available in small, medium, large, X-large. \$9.95 each. (Orders outside USA, add \$2.00 ea.)

Body & Seoul. In honor of the 1988 Summer Games, this attractive design is available in Sweatshirt (\$24.95), T-shirt or Tank (\$13.95). Specify small, medium, large, X-large. (Orders outside USA, add \$2.00 ea.)

Swimming World T-Shirt. No wardrobe is complete without this great looking T-shirt with the Swimming World logo. Pre-shrunk. Available in youth large and adult small only. \$7.50 ea. (Orders outside USA, add \$2.00 ea.)

I Made It In Swimming World T-Shirt. Show your friend's you've been in a national publication. Pre-shrunk. Available in youth large, small, medium, large, X-large. \$10.00 ea. (Orders outside USA, add \$2.00 ea.)

SALE !! Long-sleeved Swimming World T-Shirt. Large 4-color modern design on quality. 100% cotton shirt. Now only \$8.95 (reg. \$13.50). Available in youth large and adult large only. (Orders outside USA, add \$2.50 ea.)





outside

total

cost per

# Swimming World Magazine

P.O. Box 45497	quantity	item (price includes posta	item	USA add	cost	
Los Angeles, CA 90045						
Please send my Swimming World						
Specials to:						
Name						
Address						
City					SUBTOTAL	
			California Residents add $6 ^{1\!\!/_2}$ % sales tax			
State, Zip			Total amount enclosed			
(Allow 4 weeks for delivery.)						

## Calendar

- 6-8 Decatur, IL: Staley Aquatic Club ABC/ SR AB—217-429-2728
- 6-8 Palos Hills, IL: 5th Hickory Willow ABC/ SR—312-598-6199
- 6-8 St. Louis, MO: Parkway-Bussmann Winter Invit.—314-391-6139
- 6-8 Lebanon, OH: Countryside Y Torpedoes Polar Bear Invit.—513-932-1424
- 6-8 Madison, WI: Badger Dolphins A-BC Open, sc—608-274-0135
- 7 Hauppauge, NY: Hauppauge Aquatics Assoc.—516-467-2454
- 7 Germantown, WI: Germantown Seahawks A-BC Open, sc—414-251-1766
- 7-8 Kalamazoo, MI: PAC BC—616-349-7108
- 7-8 Port Huron, MI: BWSC BC-313-982-9385
- 7-8 Worthington, OH: New Year's Invit.— 614-846-6140
- Flushing, NY: Flushing Y—718-961-3820
   Long Beach, NY: Long Beach Aquatics— 516-432-0304
- 8 Solon, OH: Solon Invit., sc—216-562-6476 13-15 Livonia, MI: BAC A, limited B with
- 1650—313-464-2025 13-15 Fordham, NY: Gotham Aquatics Assoc.— 212-477-4995
- 212-477-4995 13-15 Newburgh, NY: Newburgh Sharks— 914-561-6229
- 13-15 Stony Brook, NY: North Shore Aquatics Assoc.—516-473-7679
- 13-15 Cincinnati, OH: January Invit., under Ohio A-513-761-3320
- 13-15 Toledo, OH: South Toledo Y Holiday Invit.—419-865-7704
- 14-15 Shabbona, IL: Shabbona 1650 Swim Meet—312-637-1240
- 14-15 Westmont, IL: Westmont Swim Club Mid-America BC Classic—312-920-1173
- 14-15 Indianapolis, IN: Midstates Quadrangular14-15 Columbus, OH: Twin Winner Invit., Ohio
- B and A-614-488-3416
- 14-15 Midpark, OH: BC AG/Open, sc-216-433-2404/243-7321
- 14-15 Shorewood, WI: Shorewood A-BC Open, sc—414-964-5876
- 14-16 Plantation, FL: AB 14&U—305-797-2768
   15 Greendale, WI: Greendale ABC Open, sc— 414-423-0612
- 20-22 Glen Ellyn, IL: Distance Classic— 312-357-3506
- 20-22 Ayersville, OH: Ayersville Mid-Winter Invit.—419-782-0103
- 20-22 Kettering, OH: Kettering Invit.-513-434-5555
- 20-22 Madison, WI: Madison Aquatics Trophy Meet, sc—608-249-0725
- 21 Columbus, OH: GCST B-614-855-1875 21-22 Arlington, IL: The Gator Bowl ABC-
- 312-438-0774 21-22 Holt, MI: HSC Mini Meet, 10&U—
- 517-694-1296 21-22 Garden City, NY: Long Island Express—
- 516-485-8324
- Fairview, OH: Fairview Parents AG Meet, sc—216-349-7366/734-5224
   Rock Island, IL: Rock Island Y Polar Bear
- BC—319-359-5623 Elmbrook, WI: Elmbrook ABC Open, sc—
- 414-781-3817 27-29 Geneva, Switzerland: 23rd International
- 27-29 Geneva, Switzerland: 23rd International Championships of Geneva 1989— 022.42.19.72
- 27-29 Covington, KY: Kenton County Mid-Winter Classic—606-356-6646
- 27-29 West Islip, NY: West Islip Swim Club-516-427-4678
- 27-29 Bartlesville, OK: Phillips 66 Meet of Champions—918-661-5062
- 27-29 Memphis, TN: Holiday Inn Trophy Meet, AG/Open, sc
- 28 Fort Lauderdale, FL: Broward County ABC—305-492-4173
- 28 Miami, FL: Dade County ABC— 305-596-1789

# **Looking Ahead**



## NEXT MONTH

Swimming World readers will be treated to a souvenir issue—our eighth Annual—which will bring the aquatics year of 1988 back to life with color photos, yearly awards and statistical analyses. A special bonus is the National Age Group Top 16 long course times—a compilation of the top performers in each age group, men and women, for the 1988 summer season.

## JANUARY 1989

Beginning with the new year, three-time Olympian Mary T. Meagher will share her Olympic diary with *Swimming World's* readers. In a two-part series, the *grand dame* of U.S. swimming will

recount her thoughts and emotions before and during the U.S. Olympic Trials at Austin. In the February issue, readers will be able to re-live Mary T.'s Olympic experiences.

Coupled with coverage of the NCAA water polo championships, U.S. Open, world rankings and college forecasts in upcoming issues, plus our special camp issues in February and March, you should subscribe or renew to Swimming World now.



Mary T. Meagher's Olympic diary begins in January.

## For Subscription Information Call Toll Free 1.800.538.9787 (in California, call 1.800.345.SWIM) See page 4 of this magazine for details

# Retail Stores and **SUIMMING WORLD** A Winning Combination!

More and more retail stores throughout the country have begun to discover that teaming up with Swimming World makes for good business. The following is a partial listing of stores currently selling Swimming World. If you don't see your favorite swim shop listedwhy not pass the word and tell them to start supplying Swimming World each month. It's simple to join the team. Just contact Circulation Director, Swimming World, P.O. Box 45497, Los Angeles, CA 90045: 213-674-2120.

**Ualies** Unlimited 1617 E. Highland Phoenix AZ 85016 (602) 264-7774

**Ualies Unlimited** 6121 E. Broadway Tucson AZ 85711 (602) 747-9006

T.J. Swim & Trophy 1440 S. State College Blvd Suite A Anaheim, CA 92806 (714) 772-3901

Dates 1339 Orange #11B Coronado, CA 92118 (619) 435-1757

Newsheat Mansion Square 132 F St. #2-G Davis, CA 95616 (916) 756-MAGS

Stef-Gen Corp. 1652 Cahuenga Blvd. Hollywood, CA 90028 (213) 465-4352

Sports Chalet 920 Foothill Blvd La Canada. CA 91011 (213) 684-0545

Solash Swimwear 7445 Redwood Blvd. Novato, CA 94945

**Delauer News** 1310 Broadway Oakland, CA 94612 (415) 451-6157

Pacific Swim & Sport 2310 J Street Sacramento, CA 95816 (916) 442-7946

**Tower Books** 2550 Del Monte St W. Sacramento, CA 95691

Rafael Book & News 1114 Fourth St. San Rafael, CA 94901 (415) 454-5553

Scubahaus 2501 Wilshire Blvd Santa Monica, CA 90403 (213) 828-2916

Sawyer's News Inc. 733 4th St. Santa Rosa, CA 95404 (707) 542-1311

Sherman Oaks Newsstand 14500 Ventura Blvd Sherman Oaks CA 91403 (818) 995-0632

Fleet Feet Triathlete 161 South Highway 101 Solana Beach, CA 92075

Swim & Things 5494 E. Evans Denver, CO 80222 (303) 757-8866

High Point Swim & Sport 1535 S. Kipling Pkwy. #1 Lakewood, CO 80226 (303) 989-2724

Swimskin 418 Whalley Avenue New Haven, CT 06518 (203) 777-9122

Newark Newsstand 70 Fast Main Street Newark, DE 19711

Swat Swim Shop Gravlyn Shopping Center 1720A Marsh Road Wilmington, DE 19803 (302) 478-0992

The Starting Block 4023 Sawyer Rd. #206 Sarasota, FL 33438 (800) FLA-SWIM (in Fla.) (800) 451-SWIM

Swim Zone 918 4th Street N St. Petersburg, FL 33701 (813) 822-SWIM

The Wet Set 3646 S. Westshore Blvd. Tampa, FL 33629 (813) 839-7637

Verteis 1818 N. Wells Chicago, IL 60614 (312) 664-4903

Swimmers Edge 7532 Janes A Woodridge, IL 60517

> Kast-A-Way Swimwear 1730 E. 86th St. Indianapolis, IN 46240 (317) 848-5263

Kelleher Swim Supply 1908 E. 62 St Indianapolis, IN 46220

(317) 253-4200 Swim Quick 7920 Santa Fe Overland Park, KS 66204 (913) 649-8456

Aquatic World 28 Kenton Land Rd. Erlanger, KY 41018 (606) 341-6692

Master Sports 11724 Main Middletown KY 40243

(502) 245-9811

Out of Town News 47 Battle Street Cambridge, MA 02138 (617) 492-5551

Swimskin 675 Forest Avenue Portland, ME 04103

Swim T's 322 F. Lincoln Royal Oak, MI 48067

**Different Strokes** 19195 Merriman Livonia, MI 48152

5731 Old Canton Rd. #101 Jackson, MS 39211 (601) 977-0444

Metro Swim Shop 1221 Valley Road Stirling, NJ 07890

P & G Swim Shop 35 Alden St. Cranford, NJ 07016 (201) 276-8260

TJ's Swim & Trophy 236 S. Salem Street Dover, NJ 07801 (201) 989-8775

Page One 11200 Montgomery NE Albuquerque, NM 87111 (505) 294-3054

**Bio Grande Swim Shop** 3104 Central South East Albuquerque, NM 87106 (505) 262-0787

Village Green Bookstore 1089 Niagara Falls Blvd. Amherst, NY 14226

**High Peaks Cyclery** 18 Saranac Avenue Lake Placid, NY 12946 (518) 523-3764

The Finals 149 Mercer St. New York, NY 10012 (212) 431-1414

Bochester Books Inc. 1954 W. Ridge Road Rochester, NY 14626

Village Green Bookstore 766 Monroe Ave. Rochester, NY 14607 (716) 461-5380

World Wide News 100 St. Paul St. Rochester, NY 14604 (716) 546-7140

Kast-A-Way Swimwear 9356 Cinci-Col. Rd Cincinnati, OH 45241 (513) 777-7967

World Wide Aquatics 4814 Business Center Way Cincinnati, OH 45246 (513) 874-0180

Little Professor Book Center 1657 W. Lane Ave Columbus, OH 43221 (614) 486-5238

Little Professor Book Center 6490 Sawmill Road Columbus, OH 43235

Little Professor Book Center 72 Worthington Square Worthington, OH 43085

The Sportnit 25 Briarcrest So Hershey, PA 17033 (717) 533-4900 Fit Kat

5303F Simpson Ferry Rd. Mechanicsburg, PA 17055 (717) 766-8050

Swimmers Flite 335 W. State St Media, PA 19063 (215) 565-7175

Davis-Kidd Booksellers 4007 Hillsboro Road Nashville, TN 37215 (615) 385-2645

Swimmers Complete Trawood Plaza 2050 Trawood Drive El Paso, TX 79935 (915) 595-2077

Swim Shops of the SW 5010 Louetta-M Spring, TX 77379 (713) 376-4460

Pool 'N' Patio Supply 2174 East 3300 Sout Salt Lake City, UT 84109

Aardvark Swim & Sport 4425 Brookfield Corp. Dr. Suite 600 Chantilly, VA 22021 (703) 378-1020

Wharf Swim Shop 147 Lake Ave. Fontana, WI 53125 (414) 275-6561

#### Aduatic Aerohics

Sportswear 3120 S. 27th St Milwaukee, WI 53215 (414) 383-8119

**Advertisers** Index

(

I

F

Ŧ

I

1

1 (

1 1 1

I

I

1

9

9

9

1

Anti-Wave	
Arena, USA, Inc	
Camp and Clinic Ads Jack Nelson Swim Camp93	
Creative Data Concepts, Inc	
Daktronics	
Bob Evans Designs	
Finals, The IFC	
Fitness Systems, Inc	
Hind Performance Sportswear	
Hodges Badge Company, Inc	
Kast-A-Way Swimwear	
Adolph Kiefer & Associates	
Kiefer Sports Timing Systems	
Greg Louganis	
Mack's Earplugs14	
Maric	
Maxwell Marketing Associates	
Cincinnati Pepsi Marlins	
Goodwill Games	
Hamden-North Haven Y	
L.A. Invitational	
North Baltimore	
North Jeffco	
San Diego Imperial Swimming 91	
NBC Videos	
Nike	
Phoenician Resort Swim Club	
PK Morgan Instruments, Inc	
Pool Technology, Inc	
Somax	
SwimMart	
Athletic Link International	
BTU Sports	
James H. Burrill & Associates	
Crown Trophy Delphis Swim Products	
Designs by Margarita	
Easy Meet	
Empire Products Co.	
H2O Enterprises, Inc.	
H2O Enterprises, Inc. Wm. B. Hugg, Inc. Swim Accessories	
H2O Enterprises, Inc. Wm. B. Hugg, Inc. Swim Accessories HY-TEK J.D. Pence Aquatic Supply	
H2O Enterprises, Inc. Wm. B. Hugg, Inc. Swim Accessories HY-TEK J.D. Pence Aquatic Supply KB Specialties	
H2O Enterprises, Inc. Wm. B. Hugg, Inc. Swim Accessories HY-TEK J.D. Pence Aquatic Supply KB Specialties Kam Awards	
H2O Enterprises, Inc. Wm. B. Hugg, Inc. Swim Accessories HY-TEK J.D. Pence Aquatic Supply KB Specialties Kam Awards Lane Gainer	
H2O Enterprises, Inc. Wm. B. Hugg, Inc. Swim Accessories HY-TEK J.D. Pence Aquatic Supply KB Specialties Kam Awards Lane Gainer Master Sports Aquatics NZ Mfg., Inc.	
H2O Enterprises, Inc. Wm. B. Hugg, Inc. Swim Accessories HY-TEK J.D. Pence Aquatic Supply KB Specialties Kam Awards Lane Gainer Master Sports Aquatics NZ Mfg., Inc. Offspring, Inc.	
H2O Enterprises, Inc. Wm. B. Hugg, Inc. Swim Accessories HY-TEK J.D. Pence Aquatic Supply KB Specialties Kam Awards Lane Gainer Master Sports Aquatics NZ Mfg., Inc. Offspring, Inc. Optica	
H2O Enterprises, Inc. Wm. B. Hugg, Inc. Swim Accessories HY-TEK J.D. Pence Aquatic Supply KB Specialties Kam Awards Lane Gainer Master Sports Aquatics NZ Mfg., Inc. Offspring, Inc.	
H2O Enterprises, Inc. Wm. B. Hugg, Inc. Swim Accessories HY-TEK J.D. Pence Aquatic Supply KB Specialties Kam Awards Lane Gainer Master Sports Aquatics NZ Mfg., Inc. Offspring, Inc. Offspring, Inc. Optica P&G Swim Shop Pacer Products Slotch Watch	
H2O Enterprises, Inc. Wm. B. Hugg, Inc. Swim Accessories HY-TEK J.D. Pence Aquatic Supply KB Specialties Kam Awards Lane Gainer Master Sports Aquatics NZ Mfg., Inc. Offspring, Inc. Optica P&G Swim Shop Pacer Products Slotch Watch Sportyme, Inc.	
H2O Enterprises, Inc. Wm. B. Hugg, Inc. Swim Accessories HY-TEK J.D. Pence Aquatic Supply KB Specialties Kam Awards Lane Gainer Master Sports Aquatics NZ Mfg., Inc. Offspring, Inc. Optica P&G Swim Shop Pacer Products Slotch Watch Sportyme, Inc. SupEARior Earplugs, Inc.	
H2O Enterprises, Inc. Wm. B. Hugg, Inc. Swim Accessories HY-TEK J.D. Pence Aquatic Supply KB Specialties Kam Awards Lane Gainer Master Sports Aquatics NZ Mfg., Inc. Offspring, Inc. Offspring, Inc. Optica P&G Swim Shop Pacer Products Slotch Watch Sportyme, Inc. SupEARior Earplugs, Inc. SWAT Swim Shop	
H2O Enterprises, Inc. Wm. B. Hugg, Inc. Swim Accessories HY-TEK J.D. Pence Aquatic Supply KB Specialties Kam Awards Lane Gainer Master Sports Aquatics NZ Mfg., Inc. Offspring, Inc. Optica P&G Swim Shop Pacer Products Slotch Watch Sportyme, Inc. SupEARior Earplugs, Inc. SWAT Swim Shop Swim & Run Shop Swim & Run Shop Swim Men Scomplete	
H2O Enterprises, Inc. Wm. B. Hugg, Inc. Swim Accessories HY-TEK J.D. Pence Aquatic Supply KB Specialties Kam Awards Lane Gainer Master Sports Aquatics NZ Mfg., Inc. Offspring, Inc. Optica P&G Swim Shop Pacer Products Slotch Watch Sportyme, Inc. SupEARior Earplugs, Inc. SWAT Swim Shop Swim & Run Shop Swim & Run Shop Swimmers Complete Swimmers Edge	
H2O Enterprises, Inc. Wm. B. Hugg, Inc. Swim Accessories HY-TEK J.D. Pence Aquatic Supply KB Specialties Kam Awards Lane Gainer Master Sports Aquatics NZ Mfg., Inc. Offspring, Inc. Offspring, Inc. Optica P&G Swim Shop Pacer Products Slotch Watch Sportyme, Inc. SupEARior Earplugs, Inc. SWAT Swim Shop Swim & Run Shop Swimmers Complete Swimmers Edge Swim Research	
H2O Enterprises, Inc. Wm. B. Hugg, Inc. Swim Accessories HY-TEK J.D. Pence Aquatic Supply KB Specialties Kam Awards Lane Gainer Master Sports Aquatics NZ Mfg., Inc. Offspring, Inc. Optica P&G Swim Shop Pacer Products Slotch Watch Sportyme, Inc. SupEARior Earplugs, Inc. SWAT Swim Shop Swim & Run Shop Swim & Run Shop Swim Mesearch Swim T's (T-shirt — Stroke)	
H2O Enterprises, Inc. Wm. B. Hugg, Inc. Swim Accessories HY-TEK J.D. Pence Aquatic Supply KB Specialties Kam Awards Lane Gainer Master Sports Aquatics NZ Mfg., Inc. Offspring, Inc. Optica P&G Swim Shop Pacer Products Slotch Watch Sportyme, Inc. SupEARior Earplugs, Inc. SWAT Swim Shop Swim & Run Shop Swim & Run Shop Swim Mesearch Swim T's (T-shirt — Stroke) Swim T's (T-shirt — Summer Games)	
H2O Enterprises, Inc. Wm. B. Hugg, Inc. Swim Accessories HY-TEK J.D. Pence Aquatic Supply KB Specialties Kam Awards Lane Gainer Master Sports Aquatics NZ Mfg., Inc. Offspring, Inc. Offspring, Inc. Offspring, Inc. Optica P&G Swim Shop Pacer Products Slotch Watch Sportyme, Inc. SWAT Swim Shop Swim & Run Shop Swim & Run Shop Swim & Run Shop Swim mess Edge Swim T's (T-shirt — Stroke) Swim T's (T-shirt — Stroke) Swim T's (T-shirt — Sumer Games) Universal Chemical	
H2O Enterprises, Inc. Wm. B. Hugg, Inc. Swim Accessories HY-TEK J.D. Pence Aquatic Supply KB Specialties Kam Awards Lane Gainer Master Sports Aquatics NZ Mfg., Inc. Offspring, Inc. Offspring, Inc. Optica P&G Swim Shop Pacer Products Slotch Watch Sportyme, Inc. SupEARior Earplugs, Inc. SWAT Swim Shop Swim & Run Shop Swim & Run Shop Swimmers Complete Swimmers Edge Swim Research Swim T's (Fund-raiser) Swim T's (T-shirt — Stroke) Swim T's (T-shirt — Stoke) Swim T's (T-shirt — Summer Games) Universal Chemical Waterwear	
H2O Enterprises, Inc. Wm. B. Hugg, Inc. Swim Accessories HY-TEK J.D. Pence Aquatic Supply KB Specialties Kam Awards Lane Gainer Master Sports Aquatics NZ Mfg., Inc. Offspring, Inc. Offspring, Inc. Optica P&G Swim Shop Pacer Products Slotch Watch Sportyme, Inc. SupEARior Earplugs, Inc. SWAT Swim Shop Swim & Run Shop Swimmers Complete Swimm T's (T-shirt — Stroke) Swim T's (T-shirt — Summer Games) Universal Chemical Waterwear Swimming World:	
H2O Enterprises, Inc. Wm. B. Hugg, Inc. Swim Accessories HY-TEK J.D. Pence Aquatic Supply KB Specialties Kam Awards Lane Gainer Master Sports Aquatics NZ Mfg., Inc. Offspring, Inc. Offspring, Inc. Optica P&G Swim Shop Pacer Products Slotch Watch Sportyme, Inc. SupEARior Earplugs, Inc. SWAT Swim Shop Swim & Run Shop Swim & Run Shop Swimmers Complete Swimmers Edge Swim Research Swim T's (Fund-raiser) Swim T's (T-shirt — Stroke) Swim T's (T-shirt — Stoke) Swim T's (T-shirt — Summer Games) Universal Chemical Waterwear	
H2O Enterprises, Inc. Wm. B. Hugg, Inc. Swim Accessories HY-TEK J.D. Pence Aquatic Supply KB Specialties Kam Awards Lane Gainer Master Sports Aquatics NZ Mfg., Inc. Offspring, Inc. Offspring, Inc. Optica P&G Swim Shop Pacer Products Slotch Watch Sportyme, Inc. SupEARior Earplugs, Inc. SWAT Swim Shop Swim & Run Shop Swim & Run Shop Swim & Run Shop Swim Research Swim T's (Fund-raiser) Swim T's (T-shirt — Stroke) Swim T's (T-shirt — Stroke) Swim T's (T-shirt — Summer Games) Universal Chemical Waterwear Swimming World: Books/Tapes	
H2O Enterprises, Inc. Wm. B. Hugg, Inc. Swim Accessories HY-TEK J.D. Pence Aquatic Supply KB Specialties Kam Awards Lane Gainer Master Sports Aquatics NZ Mfg., Inc. Offspring, Inc. Offspring, Inc. Optica P&G Swim Shop Pacer Products Slotch Watch Sportyme, Inc. SupEARior Earplugs, Inc. SWAT Swim Shop Swim & Run Shop Swim Research Swim T's (T-shirt — Stroke) Swim T's (T-shirt — Stroke) Swim T's (T-shirt — Summer Games) Universal Chemical Waterwear Swimming World: Books/Tapes	
H2O Enterprises, Inc.         Wm, B. Hugg, Inc. Swim Accessories         HY-TEK         J.D. Pence Aquatic Supply         KB Specialties         Kam Awards         Lane Gainer         Master Sports Aquatics         NZ Mfg., Inc.         Offspring, Inc.         Offspring, Inc.         Optica         P&G Swim Shop         Pacer Products         Slotch Watch         Sportyme, Inc.         SWAT Swim Shop         Swim & Run Shop         Swim Research         Swim T's (T-shirt — Stroke)         Swim T's (T-shirt — Summer Games)         Universal Chemical         Waterwear         Swimming World:         Books/Tapes         Southal Dynamics Cassettes         Swim Shop         Swimshop         Swimshop         Swimshop         Swimshop         Swimshop         Swimshop         Books/Tapes         Swimshop         Swimshop         Swimshop         Solos         Symmet Complete         Swim Shop         Swim Shop         Swim Shop	
H2O Enterprises, Inc.         Wm. B. Hugg, Inc. Swim Accessories         HY-TEK         J.D. Pence Aquatic Supply         KB Specialties         Kam Awards         Lane Gainer         Master Sports Aquatics         NZ Mfg., Inc.         Offspring, Inc.         Offspring, Inc.         Optica         P&G Swim Shop         Pacer Products         Slotch Watch         Sportyme, Inc.         SupEARior Earplugs, Inc.         SWAT Swim Shop         Swim & Run Shop         Swim & Run Shop         Swim & Run Shop         Swim Kesearch         Swim T's (Fund-raiser)         Swim T's (T-shirt — Stroke)         Swim T's (T-shirt — Stroke)         Swim T's (T-shirt — Summer Games)         Universal Chemical         Waterwear         Swimming World:         Books/Tapes       63         T-shirts       94         Videos       96         Swim Shop       62         Ty's Swim & Trophy       16	
H2O Enterprises, Inc.         Wm. B. Hugg, Inc. Swim Accessories         HY-TEK         J.D. Pence Aquatic Supply         KB Specialties         Kam Awards         Lane Gainer         Master Sports Aquatics         NZ Mfg., Inc.         Offspring, Inc.         Optica         P&G Swim Shop         Pacer Products         Slotch Watch         Sportyme, Inc.         SWAT Swim Shop         Swim & Run Shop         Swim & Run Shop         Swim & Run Shop         Swim Research         Swim T's (Fund-raiser)         Swim T's (T-shirt — Stroke)         Swim T's (T-shirt — Stroke)         Swim T's (T-shirt — Stroke)         Swim T's (T-shirt — Summer Games)         Universal Chemical         Waterwear         Swimming World:         Books/Tapes       63         T-shirts       94         Videos       96         Swim & Trophy       62	

(800) 341-0246/234-SWIM (313) 541-8060

(313) 477-0521 Candace's Swim Shop

# The

Challenge: To design a competition suit that provides support without sacrificing comfort. The answer: The FLEXBACK™. The key to the FLEXBACK™ is a strategically engineered

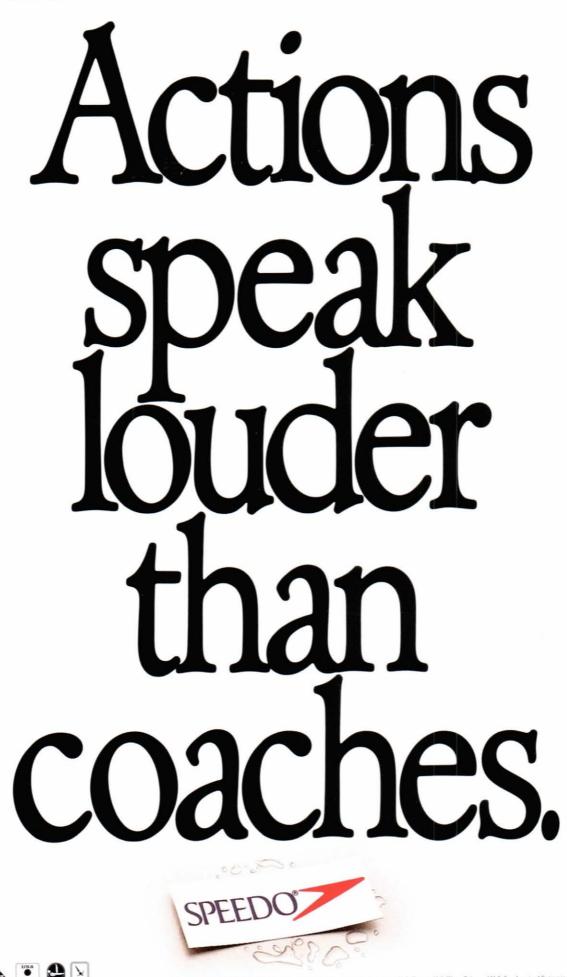
FLEXJOINT which allows adjustment to varying body types while maintaining control.



The result is unparalleled freedom of motion, reduced drag, and fantastic fit. TYR Sport is proud to introduce the next generation of performance swimwear, the FLEXBACK™.



To receive 1989 catalog send \$2.00 to **TYR Sport, Inc.** 1399 East Burnett • Long Beach, CA 90806 • (213) 424-2030 CANADA: 7926 Provencher, Montreal, Quebec H1R2Y5 (514) 727-3604



ANTRON/LXCRA Exclusive supplier of deck apparel to the U.S. National Swim Teams (1985-92). Supplier to U.S. Diving, U.S. Water Polo, and U.S. Synchronized Swimming. Speedo America, A Warnaco Co., Van Nuvs, CA. Call (1800-547 8770). Speedo is a registered trademark of the Speedo International Group of Companies.