# United States <br> Masters 

JUL-AUG 1990

REFLECTIONS OF AN "OLD LADY" IN THE<br>LAND OF THE YOUNG - By Susi Chandler

A few weeks ago, I found myself doing something I had promised myself that I'd NEVER do - that is, swimming in a USS meet with children 20-30 years younger than I am. I know that sounds like a lot of years, and actually, it is! That's right around a quarter of a century in age difference, come to think of it! After a week's vacation at the beach, and putting in my token 20 minutes of "working out" in an outdoor pool in the upper 60's. I thought this would be a good workout. I must now say, in reflection, that this was a very worthwhile experience for me, and that being accepted as a team member among a bunch of kids made me feel like I was a part of a fun group, and also that I cound communicate and share things with the younger generation. This was a lesson in reality-all kids these days are not rebellious and abusing drugs; there are quite a few nice ones out there! I hope this will help me when my two children now ages 4 and8, reach "that difficult age".

I'd like to share with you some of my experiences, and some of the priceless comments made in my presence. First of all, I did not realize that at USS meets, as in USMS meets, each competitor's ageis listed for every event. The "senior" division (15 andover) at this meet consisted of mostly 15 and16 year old swimmers, It was quite embarrassing to see an entire column of 15 's and 16 's, and a rather obvious " 39 ". Several of the parents reported hearing comments about the "typo" on the heat sheet. Then there was a 12 yearold girl who said, "You don't look 39 when you put your cap on." (Perhaps I should shave my head?) I swam on two winning relays, with an 11,12 and 16 year old, and was very nervous about being the obvious "weak link". The secondplace team, luckily for me, seemed to have their slowest matched up against me, and I came out smelling like arose, thank goodness!

I was only slightly embarrassed when my 22 year old workout partner, and the team's head coach, informed me that for short course meters, swimmers were to stand at the back of the block until the "take your mark" command was given-I only messed up on the first try!

Often, I think, we underestimate the wisdom of our younger generation, but in this meet they impressed me. That is, there were very few crazies entered in the 200 fly and 400 IM, and consequently I ended up with first places in those two events. The 200 fly was a "memorable" experience for me. The senior men and women were combined, and I had to swim next to a 16 year old boy I work out with during the high school season. Needless to say, I drowned in his waves, and wanted to get the race over with so I wouldn't look like a real fool. Upon finishing, he told me, 'Nicerace! You 'dusted' my teammate"! I had come in a couple seconds ahead of a 15 year old boy on the other side of him,-oh dear! I also placed second in the 200 IM and 400 free, much to the surprise of the winner, who heard the teasingprior to the race, about my age. I can'ttell you how uplifting it was to have alarge cheering section in front of my lane yelling, "GO GRANNY!" (I consider that a term of endearment, not an aspersion on my age.)

Finally, in one afternoon, in a 5 hour period, I did get a good workout-200 fly, 200 IM, 100 free on a relay, 400 IM , and 400 free. I must truthfully say that I very much enjoyed these young folks. Even theparents approved, as they said it gave "credibility" to people our age! I do not plan to make a habit of this, but an occasional new adventure never hurts, and just might give the aging spirit a boost!

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SWIMMER


Mary Lee Watson, Kevin Kelly, Dorothy Donnelly and Susi Chandler

Criss-crossing the 25 -yard pool, his fluid stroke is like the well-oiled works of a clock. He calls the task at hand: "Two-minute, repeat 100s." For these, Haartz will swim four laps in little more than a minute, rest until the remainder of the two-minute interval is up, then repeat the routine. He spends the better part of a half-hour swimming these intervals. And he does it all with his feet tied.
"Guy's incredible," Brian Hobbs, a swimming coach at Lincoln Sudbury, said during a rest in the adjacent lane. "My goal is to some day be a Ted Haartz."

Haartz has an intense gaze. His eyes, set deep beneath bushy eyebrows, are about the only feature that suggests his 61 years. After his workout he sits in the pool lounge and considers his many acquaintances of similar age who to him seem chronically lame, complaining of this ache or that.
"They just can't feel as good about themselves," Haartz says.

Does he enjoy being 61?
"Beats the alternative," Haartz replies. "You can't fight age. The lungs have less capacity, the heart muscle shrinks, but I swim not to prove I can match a time of 10 years ago, I swim for maintenance."

In swimming, Haartz also finds an insulated medium where he can meditate and release a physical and emotional energy he can't vent elsewhere. The paradox is that the more energy he expends, the more he finds he takes with him daily to the Haartz Corporation, an Acton-based family business where Haartz is vice president.

Haartz was never fat, but he did go through what he calls "a 10 -year hiatus" during his 30 s when he basically never exercised at all. Turning 40 in 1970, he started swimming one day a week during a "businessman's special" the Waltham Boys Club was offering. Haartz had done enough swimming in college to pay attention to the pool clock and note that his times were slowly getting better.

It was also the first year of the National Masters Championships, held in Amarillo, Tex. Haartz noted the winning times.
"Hey," he recalled saying, "we're swimming close to these times." After consulting with college coaches, he and three friends worked through a conditioning program for the next several months to turn the businessmen's special into a mini-

Olympic training camp. The following May, the men drove almost nonstop to Amarillo, arriving with just enough time to get wet before the races started.

For the medley (butterfly, breaststroke, backstroke and freestyle) in a pool with 10 lanes, Haartz had been assigned lane one. Not until he touched the wall after finishing the backstroke, with just the freestyle to go, did he have a chance to glimpse across the entire pool. The competition was all behind him. He had never won an athletic event before in his life.

Haartz would not have been competitive against a top college swimmer, but he hadn't come to Amarillo to reverse the human clock and chase youth. He had set a personal goal, trained, then crossed the country in a Volkswagen bus to achieve it. And the moment he victoriously hoisted himself from the water onto the pool deck 19 years ago, Ted Haartz decided to spend the rest of his life striving for achievable athletic goals.
"If I had more company," he said, "my guess is we'd have a healthier human race."


Ted Haartz gets ready to do his laps in the pool.

COMPARISON TIMES FOR WOMEN - SC NATIONALS - LOS ANGELES, CA MAY 18-21, 1990 - (first place and 10th or 1ast place)

|  | 25-29 | 30-34 | 35-39 | 40-44 | 45-49 | 50-54 | 55-59 | 60-64 | 65-69 | 70-74 | 75-79 | 80-84 | 85-89 | 90-94 | 95+ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 50 YD FREE | $\begin{aligned} & 23.93 \\ & 25.60 \end{aligned}$ | $\begin{aligned} & 23.79 \\ & 26.67 \end{aligned}$ | $\begin{aligned} & 24.91 \\ & 28.01 \end{aligned}$ | $\begin{aligned} & 25.63 \\ & 31.46 \end{aligned}$ | $\begin{aligned} & 26.80 \\ & 34.82 \end{aligned}$ | $\begin{aligned} & 29.35 \\ & 36.78 \end{aligned}$ | $\begin{aligned} & 33.05 \\ & 58.11 \end{aligned}$ | $\begin{aligned} & 32.82 \\ & 42.31 \end{aligned}$ | $\begin{aligned} & 33.04 \\ & 41.00 \end{aligned}$ | $\begin{array}{r} 43.38 \\ 1: 02.01 \end{array}$ | $\begin{aligned} & 39.77 \\ & 56.53 \end{aligned}$ | $\begin{aligned} & 1: 17.22 \\ & 1: 43.78 \end{aligned}$ |  |  |  |
| 100 YD FREE | $\begin{aligned} & 52.30 \\ & 55.49 \end{aligned}$ | $\begin{aligned} & 52.00 \\ & 57.77 \end{aligned}$ | $\begin{array}{r} 55.43 \\ 1: 00.77 \end{array}$ | $\begin{array}{r} 55.92 \\ 1: 08.39 \end{array}$ | $\begin{array}{r} 57.96 \\ 1: 14.69 \end{array}$ | $\begin{aligned} & 1: 04.61 \\ & 1: 15.40 \end{aligned}$ | $\begin{aligned} & 1: 15.90 \\ & 1: 46.94 \end{aligned}$ | $\begin{aligned} & 1: 12.93 \\ & 1: 50.21 \end{aligned}$ | $\begin{aligned} & 1: 12.96 \\ & 2: 02.33 \end{aligned}$ | $\begin{aligned} & 1: 30.32 \\ & 2: 09.36 \end{aligned}$ | $\begin{aligned} & 1: 27.81 \\ & 2: 09.29 \end{aligned}$ |  |  | 4:29.12 |  |
| 200 YD FREE | $\begin{aligned} & 1: 54.37 \\ & 2: 02.76 \end{aligned}$ | $\begin{aligned} & 1: 52.97 \\ & 2: 07.00 \end{aligned}$ | $\begin{aligned} & 2: 05.71 \\ & 2: 18.56 \end{aligned}$ | $\begin{aligned} & 2: 05.81 \\ & 2: 37.32 \end{aligned}$ | $\begin{aligned} & 2: 15.60 \\ & 3: 19.06 \end{aligned}$ | $\begin{aligned} & 2: 22.96 \\ & 3: 00.54 \end{aligned}$ | $\begin{aligned} & 2: 49.28 \\ & 3: 29.49 \end{aligned}$ | $\begin{aligned} & 2: 41.53 \\ & 3: 59.93 \end{aligned}$ | $\begin{aligned} & 2: 43.72 \\ & 3: 35.52 \end{aligned}$ | $\begin{aligned} & 3: 39.71 \\ & 3: 42.67 \end{aligned}$ | $\begin{aligned} & 3: 22.62 \\ & 4: 48.45 \end{aligned}$ |  |  |  |  |
| 500 YD FREE | $\begin{aligned} & 5: 01.93 \\ & 5: 23.01 \end{aligned}$ | $\begin{aligned} & 5: 05.60 \\ & 5: 37.55 \end{aligned}$ | $\begin{aligned} & 5: 34.49 \\ & 6: 18.03 \end{aligned}$ | $\begin{aligned} & 5: 35.86 \\ & 6: 33.62 \end{aligned}$ | $\begin{aligned} & 6: 05.24 \\ & 7: 40.34 \end{aligned}$ | $\begin{aligned} & 6: 36.55 \\ & 8: 43.18 \\ & \hline \end{aligned}$ | $\begin{array}{r} 7: 32.50 \\ 10: 36.09 \\ \hline \end{array}$ | $\begin{array}{\|r\|} \hline 7: 38.02 \\ 10: 23.88 \\ \hline \end{array}$ | $\begin{array}{r} 7: 54.68 \\ 12: 11.33 \\ \hline \end{array}$ | $\begin{aligned} & \hline 8: 15.27 \\ & 9: 49.16 \end{aligned}$ | $\begin{array}{\|r\|} \hline 9: 23.94 \\ 12: 50.92 \\ \hline \end{array}$ |  |  |  |  |
| 1000 YD FREE | $\begin{aligned} & 10: 34.30 \\ & 12: 10.96 \end{aligned}$ | $\begin{aligned} & 10: 33.34 \\ & 13: 31.09 \\ & \hline \end{aligned}$ | $\begin{aligned} & 11: 38.31 \\ & 13: 24.59 \end{aligned}$ | $\begin{aligned} & 11: 28.31 \\ & 19: 43.61 \end{aligned}$ | $\begin{array}{\|l\|} \hline 12: 46.36 \\ 19: 32.01 \\ \hline \end{array}$ | $\begin{array}{\|l\|} \hline 13: 22.93 \\ \hline 21: 21.38 \\ \hline \end{array}$ | $\begin{array}{\|l\|} \hline 16: 08.83 \\ 22: 04.17 \\ \hline \end{array}$ | $\begin{aligned} & 16: 14.86 \\ & 16: 22.75 \\ & \hline \end{aligned}$ | $\begin{aligned} & 17: 36.39 \\ & 25: 59.61 \end{aligned}$ | $\begin{aligned} & 18: 51.94 \\ & 23: 35.56 \end{aligned}$ | 26:28.18 |  |  |  |  |
| 1650 YD FREE | $\begin{aligned} & 17: 09.27 \\ & 22: 32.25 \end{aligned}$ | $\begin{aligned} & 18: 21.70 \\ & 21.35 .38 \\ & \hline \end{aligned}$ | $\begin{aligned} & 19: 24.58 \\ & 25: 25.09 \\ & \hline \end{aligned}$ | $\begin{array}{\|l\|} \hline 21: 41.90 \\ 34: 11.32 \\ \hline \end{array}$ | $\begin{array}{\|l\|} \hline 22: 14.52 \\ 28: 13.89 \\ \hline \end{array}$ | $\begin{array}{\|l\|} \hline 22: 40.67 \\ 27: 25.05 \\ \hline \end{array}$ | $\begin{aligned} & 24: 51.95 \\ & 32: 58.61 \\ & \hline \end{aligned}$ | $\begin{aligned} & 24: 53.08 \\ & 35: 03.62 \end{aligned}$ | $\begin{aligned} & 25: 29.51 \\ & 35: 14.43 \\ & \hline \end{aligned}$ | 28:28.46 |  |  |  |  |  |
| 50 YD BACK | $\begin{aligned} & 27.39 \\ & 29.77 \end{aligned}$ | $\begin{aligned} & 28,53 \\ & 35.99 \end{aligned}$ | $\begin{aligned} & 28.43 \\ & 36.02 \end{aligned}$ | $\begin{aligned} & 31.54 \\ & 56.03 \end{aligned}$ | $\begin{aligned} & 33.57 \\ & 55.81 \end{aligned}$ | $\begin{aligned} & 32.72 \\ & 44.91 \end{aligned}$ | $\begin{aligned} & 40.35 \\ & 53.23 \end{aligned}$ | $\begin{array}{r} 40.03 \\ 1: 02.94 \\ \hline \end{array}$ | $\begin{aligned} & 37.05 \\ & 53.19 \end{aligned}$ | $\begin{array}{r} 51.32 \\ 1: 12.00 \end{array}$ | $\begin{aligned} & 1: 02.05 \\ & 1: 08.35 \end{aligned}$ | 1:34.80 |  | 1:53.36 |  |
| 100 YD BACK | $\begin{array}{r} 57.70 \\ 1: 09.37 \end{array}$ | $\begin{aligned} & 1: 03.31 \\ & 1: 13.24 \end{aligned}$ | $\begin{aligned} & 1: 02.07 \\ & 1: 19.13 \end{aligned}$ | $\begin{aligned} & 1: 08.19 \\ & 1: 30.71 \end{aligned}$ | $\begin{aligned} & 1: 13.66 \\ & 1: 59.13 \end{aligned}$ | $\begin{aligned} & 1: 11.96 \\ & 1: 34.12 \end{aligned}$ | $\begin{aligned} & 1: 28.62 \\ & 1: 43.45 \end{aligned}$ | $\begin{aligned} & 1: 28.91 \\ & 2:) 9.26 \end{aligned}$ | $\begin{aligned} & 1: 22.50 \\ & 2: 54.35 \end{aligned}$ | $\begin{aligned} & 1: 47.33 \\ & 2: 07.17 \end{aligned}$ | $\begin{aligned} & 2: 11.73 \\ & 2: 35.16 \end{aligned}$ |  |  |  |  |
| 200 YD BACK | $\begin{aligned} & 2: 03.38 \\ & 2: 34.82 \end{aligned}$ | $\begin{aligned} & 2: 20.58 \\ & 3: 13.12 \end{aligned}$ | $\begin{aligned} & 2: 20.00 \\ & 3: 02.58 \end{aligned}$ | $\begin{aligned} & 2: 30.42 \\ & 3: 21.80 \end{aligned}$ | $\begin{aligned} & 2: 31.43 \\ & 3: 10.70 \end{aligned}$ | $\begin{aligned} & 2: 40.33 \\ & 3: 27.88 \end{aligned}$ | $\begin{aligned} & 3: 17.55 \\ & 3: 25.28 \end{aligned}$ | $\begin{aligned} & 3: 11.08 \\ & 4: 41.89 \end{aligned}$ | $\begin{aligned} & 2: 59.56 \\ & 7: 06.91 \end{aligned}$ | $\begin{aligned} & 4: 10.43 \\ & 4: 26.96 \end{aligned}$ | $\begin{aligned} & 4: 42.41 \\ & 5: 25.79 \end{aligned}$ |  |  |  |  |
| 50 YD BREAST | $\begin{aligned} & 31.24 \\ & 33.92 \end{aligned}$ | $\begin{aligned} & 31.23 \\ & 34.72 \end{aligned}$ | $\begin{aligned} & 30.92 \\ & 36.29 \end{aligned}$ | $\begin{aligned} & 34.44 \\ & 38.41 \end{aligned}$ | $\begin{aligned} & 34.69 \\ & 58.16 \end{aligned}$ | $\begin{aligned} & 35.92 \\ & 54.91 \end{aligned}$ | $\begin{array}{r} 38.73 \\ 1: 05.35 \\ \hline \end{array}$ | $\begin{aligned} & 40.33 \\ & 52.62 \end{aligned}$ | $\begin{array}{r} 43.11 \\ 1: 38.78 \end{array}$ | $\begin{aligned} & 45.75 \\ & 58.15 \end{aligned}$ | $\begin{array}{r} 54.01 \\ 1: 14.40 \\ \hline \end{array}$ | $\begin{aligned} & 1: 46.83 \\ & 1: 55.50 \end{aligned}$ |  |  |  |
| 100 YD BREAST | $\begin{aligned} & 1: 07.58 \\ & 1: 12.84 \end{aligned}$ | $\begin{aligned} & 1: 08.96 \\ & 1: 18.72 \end{aligned}$ | $\begin{aligned} & 1: 08.23 \\ & 1: 18.88 \end{aligned}$ | $\begin{aligned} & 1: 14.78 \\ & 1: 27.68 \end{aligned}$ | $\begin{aligned} & 1: 16.12 \\ & 2: 09.02 \end{aligned}$ | $\begin{aligned} & 1: 18.53 \\ & 2: 07.35 \end{aligned}$ | $\begin{aligned} & 1: 26.26 \\ & 2: 44.15 \end{aligned}$ | $\begin{aligned} & 1: 37.14 \\ & 1: 57.01 \end{aligned}$ | $\begin{aligned} & 1: 38.73 \\ & 2: 33.85 \end{aligned}$ | $\begin{aligned} & 1: 46.51 \\ & 2: 15.12 \end{aligned}$ | $\begin{aligned} & 2 ; 04.47 \\ & 2: 23.18 \end{aligned}$ |  |  |  |  |
| 200 YD BREAST | $\begin{aligned} & 2: 26.42 \\ & 2: 46.83 \end{aligned}$ | $\begin{aligned} & 2: 29.75 \\ & 2: 51.31 \end{aligned}$ | $\begin{aligned} & 2: 30.97 \\ & 3: 19.29 \end{aligned}$ | $\begin{aligned} & 2: 43.64 \\ & 3: 35.41 \end{aligned}$ | $\begin{aligned} & 2: 47.05 \\ & 8: 55.68 \end{aligned}$ | $\begin{aligned} & 2: 52.91 \\ & 3: 58.12 \end{aligned}$ | $\begin{aligned} & 3: 06.39 \\ & 4: 04.84 \end{aligned}$ | $\begin{aligned} & 3: 17.93 \\ & 4: 11.13 \end{aligned}$ | $\begin{aligned} & 3: 35.54 \\ & 7: 17.89 \end{aligned}$ | $\begin{aligned} & 3: 49.93 \\ & 4: 41.03 \end{aligned}$ | $\begin{aligned} & 4: 40.41 \\ & 5: 21.31 \end{aligned}$ | 6:33.32 |  |  |  |
| 50 YD FLY | $\begin{aligned} & 26.64 \\ & 28.66 \end{aligned}$ | $\begin{aligned} & 27.18 \\ & 29.92 \end{aligned}$ | $\begin{aligned} & 26.70 \\ & 30.52 \end{aligned}$ | $\begin{aligned} & 28.24 \\ & 33.36 \end{aligned}$ | $\begin{aligned} & 29.54 \\ & 41.07 \\ & \hline \end{aligned}$ | $\begin{aligned} & 33.01 \\ & 51.10 \end{aligned}$ | $\begin{aligned} & 38.04 \\ & 59.88 \end{aligned}$ | $\begin{aligned} & 35.32 \\ & 57.83 \end{aligned}$ | $\begin{aligned} & 42.77 \\ & 54.19 \end{aligned}$ | $\begin{array}{r} 46.66 \\ 1: 00.56 \end{array}$ | $\begin{array}{r} 49.97 \\ 1: 13.26 \end{array}$ | 1:36.97 |  |  |  |
| 100 YD FLY | $\begin{array}{r} 58.34 \\ 1: 05.26 \\ \hline \end{array}$ | $\begin{array}{r} 59.41 \\ 1: 05.36 \end{array}$ | $\begin{array}{r} 59.45 \\ 1: 15.59 \end{array}$ | $\begin{aligned} & 1: 02.90 \\ & 1: 27.02 \end{aligned}$ | $\begin{aligned} & 1: 13.97 \\ & 1: 50.96 \end{aligned}$ | $\begin{aligned} & 1: 14.81 \\ & 1: 37.91 \\ & \hline \end{aligned}$ | $\begin{aligned} & 1: 31.06 \\ & 1: 42.18 \end{aligned}$ | $\begin{aligned} & 1: 28.67 \\ & 1: 51.20 \end{aligned}$ | $\begin{aligned} & 1: 36.38 \\ & 1: 59.12 \\ & \hline \end{aligned}$ | 2:04.00 | $\begin{aligned} & 2: 03.28 \\ & 3: 23.62 \end{aligned}$ | $\begin{aligned} & 3: 03.79 \\ & 4: 04.03 \end{aligned}$ |  |  |  |
| 200 YD FLY | $\begin{aligned} & 2: 07.89 \\ & 2: 37.86 \end{aligned}$ | $\begin{aligned} & 2: 12.33 \\ & 2: 34.74 \\ & \hline \end{aligned}$ | $\begin{aligned} & 2: 23.63 \\ & 3: 24.44 \end{aligned}$ | $\begin{aligned} & 2: 16.60 \\ & 3: 04.33 \end{aligned}$ | $\begin{aligned} & 2: 46.72 \\ & 3: 52.68 \end{aligned}$ | $\begin{aligned} & 2: 53.77 \\ & 4: 59.62 \end{aligned}$ | $\begin{aligned} & 3: 04.43 \\ & 3: 39.06 \end{aligned}$ | $\begin{aligned} & 3: 16.90 \\ & 4: 46.84 \end{aligned}$ | $\begin{aligned} & 4: 10.48 \\ & 6:) 1.87 \end{aligned}$ |  | 5:43.07 | 6:43.35 |  |  |  |
| 100 YD IM | $\begin{aligned} & 1: 00.05 \\ & 1: 04.35 \end{aligned}$ | $\begin{aligned} & 1: 00.14 \\ & 1: 09.03 \end{aligned}$ | $\begin{aligned} & 1: 04.82 \\ & 1: 12.36 \end{aligned}$ | $\begin{aligned} & 1: 05.21 \\ & 1: 21.95 \end{aligned}$ | $\begin{aligned} & 1: 07.38 \\ & 3: 52.68 \end{aligned}$ | $\begin{aligned} & 1: 15.40 \\ & 1: 39.07 \end{aligned}$ | $\begin{aligned} & 1: 27.59 \\ & 2: 06.33 \end{aligned}$ | $\begin{aligned} & 1: 19.76 \\ & 1: 38.01 \end{aligned}$ | $\begin{aligned} & 1: 29.66 \\ & 3: 03.40 \end{aligned}$ | $\begin{aligned} & 1: 44.16 \\ & 1: 59.55 \end{aligned}$ | $\begin{aligned} & 1: 53.75 \\ & 2: 49.71 \end{aligned}$ |  |  |  |  |
| 200 YD IM | $\begin{aligned} & 2: 07.60 \\ & 2: 21.74 \end{aligned}$ | $2: 16.26$ $2: 24.66$ | $\begin{aligned} & 2: 22.04 \\ & 2: 52.40 \end{aligned}$ | $2: 29.86$ $4: 13.57$ | $\begin{aligned} & 2: 31.15 \\ & 8: 17.21 \end{aligned}$ | $2: 45.07$ $3: 31.34$ | $\begin{aligned} & 3: 09.79 \\ & 4: 47.32 \end{aligned}$ | $\begin{aligned} & 2: 58.11 \\ & 3: 35.99 \end{aligned}$ | $\begin{aligned} & 3: 22.09 \\ & 5: 34.14 \end{aligned}$ | $\begin{aligned} & 3: 36.46 \\ & 4: 54.70 \end{aligned}$ | $\begin{aligned} & 5: 45.71 \\ & 5: 50.85 \end{aligned}$ |  |  |  |  |
| 400 YD IM | $\begin{aligned} & 4: 36.98 \\ & 5: 08.82 \end{aligned}$ | $\begin{aligned} & 4: 46.80 \\ & 5: 38.71 \end{aligned}$ | $\begin{aligned} & 5: 02.99 \\ & 5: 42.18 \end{aligned}$ | $\begin{aligned} & 5: 07.63 \\ & 7: 09.50 \end{aligned}$ | $\begin{aligned} & 5: 51.54 \\ & 7: 34.52 \end{aligned}$ | $\begin{aligned} & 5: 56.55 \\ & 7: 05.94 \end{aligned}$ | $\begin{aligned} & 6: 18.73 \\ & 7: 54.59 \\ & \hline \end{aligned}$ | $\begin{aligned} & 6: 18.36 \\ & 7: 26.70 \end{aligned}$ | $\begin{aligned} & 7: 47.23 \\ & 8: 04.50 \\ & \hline \end{aligned}$ | 8:25.22 |  | 13:11.28 |  |  |  |
| 200 YD FR | $\begin{aligned} & 1: 39.11 \\ & 1: 48.63 \end{aligned}$ |  | $\begin{aligned} & 1: 48.98 \\ & 2: 52.66 \end{aligned}$ |  | $\begin{aligned} & 1: 56.20 \\ & 2: 32.49 \end{aligned}$ |  | $\begin{aligned} & 2: 19.00 \\ & 2: 30.07 \\ & \hline \end{aligned}$ |  | $\begin{aligned} & 2: 56.67 \\ & 3: 26.83 \end{aligned}$ |  |  |  |  |  |  |
| 200 YD MR | $\begin{aligned} & 1: 51.56 \\ & 2: 00.50 \end{aligned}$ |  | $\begin{aligned} & 2: 01.79 \\ & 2: 53.46 \end{aligned}$ |  | $\begin{aligned} & 2: 15.35 \\ & 2: 55.95 \end{aligned}$ |  | $\begin{aligned} & 2: 42.17 \\ & 3: 14.78 \end{aligned}$ |  | $\begin{aligned} & 3: 19.78 \\ & 4: 20.80 \end{aligned}$ |  |  |  |  |  |  |
| 200 YD MFR | $\begin{aligned} & 1: 29.40 \\ & 1: 35.08 \end{aligned}$ |  | $\begin{aligned} & 1: 38.30 \\ & 1: 47.15 \end{aligned}$ |  | $1: 41.83$ $2: 07.56$ |  | 2:03.36 |  | $\begin{aligned} & 2: 25.87 \\ & 2: 54.92 \end{aligned}$ |  |  |  |  |  |  |

COMPARISON TIMES FOR MEN - SC NATIONALS - LOS ANGELES, CA MAY 18-21, 1990 - (first place and 10th or last place)

|  | 25-29 | 30-34 | 35-39 | 40-44 | 45-49 | 50-54 | 55-59 | 60-64 | 65-69 | 70-74 | 75-79 | 80-84 | 85-89 | 90-94 | $95+$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 50 YD FREE | $\begin{aligned} & 20.89 \\ & 21.80 \end{aligned}$ | $\begin{aligned} & 21.00 \\ & 22.27 \end{aligned}$ | $\begin{aligned} & 21.35 \\ & 22.37 \end{aligned}$ | $\begin{aligned} & 22.25 \\ & 23.68 \end{aligned}$ | $\begin{aligned} & 21.87 \\ & 24.24 \end{aligned}$ | $\begin{aligned} & 23.36 \\ & 26.17 \end{aligned}$ | $\begin{aligned} & 25.07 \\ & 27.91 \end{aligned}$ | $\begin{aligned} & 25.75 \\ & 33.09 \end{aligned}$ | $\begin{aligned} & 27.05 \\ & 35.35 \end{aligned}$ | $\begin{aligned} & 30.60 \\ & 34.15 \end{aligned}$ | $\begin{aligned} & 30.43 \\ & 51.65 \end{aligned}$ | $\begin{aligned} & 35.93 \\ & 45.90 \end{aligned}$ | $\begin{aligned} & 50.63 \\ & 57.87 \end{aligned}$ | $\begin{aligned} & 1: 06.72 \\ & 1: 07.20 \end{aligned}$ | 1:22.93 |
| 100 YD FREE | $\begin{aligned} & 45.41 \\ & 48.20 \end{aligned}$ | $\begin{aligned} & 46.01 \\ & 48.60 \end{aligned}$ | $\begin{aligned} & 47.51 \\ & 49.91 \end{aligned}$ | $\begin{aligned} & 49.51 \\ & 52.28 \end{aligned}$ | $\begin{aligned} & 49.50 \\ & 54.64 \end{aligned}$ | $\begin{aligned} & 52.56 \\ & 58.13 \end{aligned}$ | $\begin{array}{r} 56.31 \\ 1: 02.60 \end{array}$ | $\begin{array}{r} 59.05 \\ 1: 13.93 \end{array}$ | $\begin{aligned} & 1: 01.55 \\ & 1: 13.84 \end{aligned}$ | $\begin{aligned} & 1: 05.98 \\ & 1: 24.34 \end{aligned}$ | $\begin{aligned} & 1: 10.01 \\ & 1: 52.71 \end{aligned}$ | $\begin{aligned} & 1: 23.12 \\ & 1: 48.09 \end{aligned}$ | $\begin{aligned} & 1: 27.45 \\ & 2: 26.02 \end{aligned}$ |  | 3:20.38 |
| 200 YD FREE | $\begin{aligned} & 1: 40.57 \\ & 1: 45.86 \\ & \hline \end{aligned}$ | $\begin{aligned} & 1: 42.26 \\ & 1: 48.40 \end{aligned}$ | $1: 42.78$ $1: 53.68$ | $1: 49.31$ $1: 56.57$ | $1: 50.42$ 2:01.14 | $1: 56.24$ $2: 20.02$ | 2:03.91 2:24.65 | $2: 15.39$ <br> $3: 20.07$ | $2: 19.97$ $2: 44.74$ | $\begin{aligned} & 2: 35.19 \\ & 3: 33.46 \end{aligned}$ | $\begin{aligned} & 2: 42.93 \\ & 5: 08.45 \end{aligned}$ | $\begin{aligned} & 3: L 8.71 \\ & 3: 58.17 \end{aligned}$ | $\begin{aligned} & 3: 17.83 \\ & 4: 16.36 \end{aligned}$ | 5:22.61 |  |
| 500 YD FREE | $\begin{aligned} & 4: 34.04 \\ & 4: 52.59 \end{aligned}$ | $\begin{aligned} & 4: 43.35 \\ & 4: 53.37 \end{aligned}$ | $1: 53.43 .75$ $5: 10.56$ | 4:54.70 $5: 45.20$ | $\begin{aligned} & 5:) 8.82 \\ & 6: 00.37 \end{aligned}$ | $\begin{aligned} & 5: 13.80 \\ & 6: 29.65 \end{aligned}$ | $\begin{aligned} & 5: 32.89 \\ & 6: 31.34 \end{aligned}$ | 6:L0.81 7:23.86 | $\begin{aligned} & 6: 49.54 \\ & 8: 29.84 \end{aligned}$ | $\begin{aligned} & \hline 7: 04.61 \\ & 9: 08.88 \end{aligned}$ | $\begin{array}{r} 7: 20.97 \\ 12: 43.06 \\ \hline \end{array}$ | $\begin{array}{r} 8: 43.88 \\ 10: 53.33 \\ \hline \end{array}$ | $\begin{array}{\|r\|} \hline 9: 00.31 \\ 11: 32.58 \\ \hline \end{array}$ | 14:20.28 |  |
| 1000 YD FREE | $\begin{array}{\|c\|} \hline 9: 51.79 \\ 11: 19.98 \\ \hline \end{array}$ | $\begin{array}{r} 9: 49.79 \\ 10: 48.14 \\ \hline \end{array}$ | $\begin{aligned} & 10: 26.75 \\ & 14: 22.93 \\ & \hline \end{aligned}$ | $\begin{aligned} & 10: 44.87 \\ & 14: 18.41 \\ & \hline \end{aligned}$ | $\begin{aligned} & 10: 54.95 \\ & 15: 02.98 \\ & \hline \end{aligned}$ | $\begin{aligned} & 11: 34.04 \\ & 14: 26.55 \end{aligned}$ | $\begin{aligned} & 12: 42.34 \\ & 14: 51.59 \end{aligned}$ | $\begin{aligned} & 12: 46.13 \\ & 17: 12.70 \end{aligned}$ | $\begin{aligned} & 14: 21.96 \\ & 21: 00.51 \\ & \hline \end{aligned}$ | $\begin{aligned} & 14: 30.58 \\ & 16: 20.11 \end{aligned}$ | $\begin{aligned} & 15: 24.63 \\ & 27: 04.99 \\ & \hline \end{aligned}$ | 28:39.62 |  |  |  |
| 1650 YD FREE | $\begin{aligned} & 15: 46.91 \\ & 19: 49.94 \\ & \hline \end{aligned}$ | $\begin{array}{\|l\|} \hline 16: 39.08 \\ 20: 28.65 \\ \hline \end{array}$ | $\begin{array}{\|l\|} \hline 17: 12.96 \\ 19: 09.86 \\ \hline \end{array}$ | $17: 02.40$ 20:42.73 | $19: 12.90$ <br> $22: 08.20$ | $\begin{aligned} & 18: 56.37 \\ & 26: 51.60 \\ & \hline \end{aligned}$ | $\begin{aligned} & 19: 09.91 \\ & 23: 47.20 \end{aligned}$ | $\begin{aligned} & 22: 04.65 \\ & 26: 59.59 \\ & \hline \end{aligned}$ | $\begin{aligned} & 23: 34.92 \\ & 30: 24.75 \\ & \hline \end{aligned}$ | $\begin{aligned} & 25: L 9.64 \\ & 30: 59.50 \end{aligned}$ | $\begin{aligned} & 29: 21.88 \\ & 31: 51.83 \end{aligned}$ | 30:47.17 |  |  |  |
| 50 YD BACK | $\begin{aligned} & 23.31 \\ & 26.28 \\ & \hline \end{aligned}$ | 24.81 <br> 27.04 <br> 52.28 | $\begin{aligned} & 24.21 \\ & 29.16 \\ & \hline \end{aligned}$ | 26.49 28.71 | $\begin{aligned} & 27.16 \\ & 32.98 \\ & \hline \end{aligned}$ | $\begin{aligned} & 30.50 \\ & 36.41 \\ & \hline \end{aligned}$ | $\begin{aligned} & 29.40 \\ & 34.97 \\ & \hline \end{aligned}$ | $\begin{aligned} & 32.44 \\ & 47.21 \\ & \hline \end{aligned}$ |  | $\begin{array}{r} 35.80 \\ 1: 00.41 \\ \hline \end{array}$ | $\begin{array}{r} 38.69 \\ 1: 28.67 \\ \hline \end{array}$ | $\begin{aligned} & 57.82 \\ & 59.96 \\ & \hline \end{aligned}$ | $\begin{aligned} & 1: 03.75 \\ & 1: 34.24 \end{aligned}$ |  | 1:21.86 |
| 100 YD BACK | $\begin{aligned} & 50.72 \\ & 57.26 \\ & \hline \end{aligned}$ | $\begin{aligned} & 52.28 \\ & 56.69 \\ & \hline \end{aligned}$ | $\begin{array}{r} 52.43 \\ 1: 01.31 \\ \hline \end{array}$ | $\begin{array}{r} 58.22 \\ 1: 02.83 \\ \hline \end{array}$ | $\begin{array}{r} 58.98 \\ 1: 22.28 \\ \hline \end{array}$ | $\begin{aligned} & 1: 07.70 \\ & 1: 34.71 \\ & \hline \end{aligned}$ | $\begin{aligned} & 1: 04.60 \\ & 1: 16.44 \\ & \hline \end{aligned}$ | $\begin{aligned} & 1: 10.14 \\ & 1: 24.41 \end{aligned}$ | $\begin{aligned} & 1: 15.31 \\ & 1: 35.32 \\ & \hline \end{aligned}$ | $\begin{aligned} & 1: 17.00 \\ & 2: 02.66 \\ & \hline \end{aligned}$ | $\begin{aligned} & 1: 22.92 \\ & 1: 59.96 \end{aligned}$ |  | $\begin{aligned} & 2: 17.60 \\ & 3: 34.10 \\ & \hline \end{aligned}$ |  |  |
| 200 YD BACK | $\begin{aligned} & 1: 52.11 \\ & 2: 08.69 \\ & \hline \end{aligned}$ | $\begin{aligned} & 1: 57.69 \\ & 2: 07.64 \\ & \hline \end{aligned}$ | $1: 57.05$ $2: 23.38$ | $\begin{aligned} & 2: 06.50 \\ & 2: 32.10 \\ & \hline \end{aligned}$ | $\begin{aligned} & 2: 11.73 \\ & 2: 54.40 \end{aligned}$ | $\begin{aligned} & 2: 30.61 \\ & 3: 20.37 \\ & \hline \end{aligned}$ | $\begin{aligned} & 2: 24.64 \\ & 2: 51.153 \end{aligned}$ | $\begin{aligned} & 2: 32.45 \\ & 3: 27.52 \\ & \hline \end{aligned}$ | $\begin{aligned} & 2: 54.41 \\ & 3: 25.56 \end{aligned}$ | $\begin{aligned} & 2: 56.16 \\ & 5: 18.93 \end{aligned}$ | $\begin{aligned} & 3: 03.65 \\ & 4: 39.21 \end{aligned}$ | $\begin{aligned} & 4: 04.40 \\ & 4: 45.38 \end{aligned}$ | 4:50.27 |  |  |
| 50 YD BREAST | $\begin{aligned} & 26.28 \\ & 28.00 \\ & \hline \end{aligned}$ |  |  |  | $\begin{aligned} & 28.34 \\ & 35.37 \\ & \hline \end{aligned}$ | $\begin{aligned} & 30.96 \\ & 37.39 \\ & \hline \end{aligned}$ | $\begin{aligned} & 30.72 \\ & 35.44 \\ & \hline \end{aligned}$ | $\begin{aligned} & 32.79 \\ & 38.48 \\ & \hline \end{aligned}$ | $\begin{aligned} & 34.58 \\ & 43.91 \\ & \hline \end{aligned}$ | $\begin{array}{r} 38.45 \\ 59.00 \\ \hline \end{array}$ | 40.07 $1: 37.05$ | $\begin{aligned} & 1: 05.61 \\ & 1: 23.46 \end{aligned}$ | $\begin{array}{r} 52.51 \\ 1: 10.15 \end{array}$ | 1:24.24 | 1:39.44 |
| 100 YD BREAST | $\begin{array}{r} 56.21 \\ 1: 02.14 \\ \hline \end{array}$ | $\begin{array}{r} 58.04 \\ 1: 02.84 \\ \hline \end{array}$ | $\begin{aligned} & 1: 00.37 \\ & 1: 08.46 \end{aligned}$ | $\begin{aligned} & 1: 02.04 \\ & 1: 07.42 \\ & \hline \end{aligned}$ | $\begin{aligned} & 1: 02.48 \\ & 1: 13.41 \end{aligned}$ | $\begin{aligned} & 1: 08.49 \\ & 1: 21.38 \end{aligned}$ | $\begin{aligned} & 1: 07.86 \\ & 1: 20.49 \\ & \hline \end{aligned}$ | $\begin{aligned} & 1: 15.43 \\ & 1: 36.39 \end{aligned}$ | $\begin{aligned} & 1: 19.64 \\ & 1: 40.12 \end{aligned}$ | $\begin{aligned} & 1: 22.27 \\ & 2: 02.48 \\ & \hline \end{aligned}$ | $\begin{aligned} & 1: 31.78 \\ & 2: 19.47 \end{aligned}$ | $\begin{aligned} & 1: 54.56 \\ & 2: 35.12 \end{aligned}$ | 2:01.03 |  |  |
| 200 YD BREAST | $\begin{aligned} & 2: 08.47 \\ & 2: 18.60 \\ & \hline \end{aligned}$ | $\begin{aligned} & 2: 05.07 \\ & 2: 19.16 \\ & \hline \end{aligned}$ | $\begin{aligned} & 2: 15.29 \\ & 2: 42.17 \end{aligned}$ | $\begin{aligned} & 2: 18.80 \\ & 2: 35.13 \end{aligned}$ | $\begin{aligned} & 2: 21.37 \\ & 2: 47.93 \end{aligned}$ | $\begin{aligned} & 2: 33.87 \\ & 3: 08.38 \\ & \hline \end{aligned}$ | $\begin{aligned} & 2: 37.85 \\ & 3: 36.79 \\ & \hline \end{aligned}$ | $\begin{aligned} & 2: 49.58 \\ & 3: 53.25 \end{aligned}$ | $\begin{aligned} & 2: 54.27 \\ & 5: 34.45 \end{aligned}$ | $\begin{aligned} & 3: 10.42 \\ & 5: 28.98 \end{aligned}$ | $\begin{aligned} & 3: 32.24 \\ & 5: 08.68 \end{aligned}$ | 5:47.26 | 4:42.42 |  |  |
| 50 YD FLY | $\begin{aligned} & 22.76 \\ & 23.95 \end{aligned}$ |  |  | 24.88 26.06 | $\begin{aligned} & 24.34 \\ & 27.03 \end{aligned}$ | $\begin{aligned} & 26.15 \\ & 28.79 \end{aligned}$ | $\begin{aligned} & 28.90 \\ & 32.73 \end{aligned}$ | $\begin{aligned} & 28.83 \\ & 41.06 \end{aligned}$ | $\begin{aligned} & 30.36 \\ & 45.10 \end{aligned}$ | $\begin{aligned} & 33.41 \\ & 43.00 \end{aligned}$ | $\begin{aligned} & 39.50 \\ & 41.74 \end{aligned}$ | 46.29 | 59.14 |  |  |
| 100 YD FLY | $\begin{aligned} & 50.10 \\ & 53.90 \end{aligned}$ | $\begin{array}{r} 50.02 \\ 53.98 \\ \hline \end{array}$ | $\begin{aligned} & 52.46 \\ & 56.21 \\ & \hline \end{aligned}$ | $\begin{aligned} & 55.52 \\ & 58.29 \\ & \hline \end{aligned}$ | $\begin{array}{r} 54.72 \\ 1: 02.57 \\ \hline \end{array}$ | $\begin{aligned} & 1: 00.75 \\ & 1: 29.44 \end{aligned}$ | $\begin{aligned} & 1: 09.73 \\ & 1: 27.38 \\ & \hline \end{aligned}$ | $\begin{aligned} & 1: 06.47 \\ & 1: 34.69 \\ & \hline \end{aligned}$ | $\begin{aligned} & 1: 30.78 \\ & 2: 47.76 \\ & \hline \end{aligned}$ | 1:38.55 | $\begin{aligned} & 1: 41.04 \\ & 1: 55.77 \end{aligned}$ | 1:52.94 |  |  |  |
| 200 YD FLY | $\begin{aligned} & 1: 49.21 \\ & 2: 00.75 \end{aligned}$ | $\begin{aligned} & 1: 51.28 \\ & 2: 05.67 \end{aligned}$ | $\begin{aligned} & 2: 00.08 \\ & 2: 08.94 \end{aligned}$ | $\begin{aligned} & 2: 02.09 \\ & 2: 13.80 \end{aligned}$ | $\begin{aligned} & 2: 22.70 \\ & 3: 10.01 \end{aligned}$ | $\begin{aligned} & 2: 21.50 \\ & 3: 31.34 \end{aligned}$ | $\begin{aligned} & 2: 36.97 \\ & 3: 08.73 \end{aligned}$ | $\begin{aligned} & 2: 45.20 \\ & 3: 41.79 \end{aligned}$ | $\begin{aligned} & 3: 02.21 \\ & 6: 25: 91 \end{aligned}$ | $\begin{aligned} & 3: 12.22 \\ & 6: 55.03 \end{aligned}$ | $\begin{aligned} & 4: 14.10 \\ & 4: 22.36 \end{aligned}$ |  |  |  |  |
| 100 YD IM | $\begin{aligned} & 51.14 \\ & 55.32 \\ & \hline \end{aligned}$ |  | $\begin{aligned} & 54.93 \\ & 57.71 \\ & \hline \end{aligned}$ | $\begin{array}{r} 56.45 \\ 1: 00.10 \\ \hline \end{array}$ | $\begin{array}{r} 57.75 \\ 1: 03.94 \\ \hline \end{array}$ | $\begin{aligned} & 1: 01.46 \\ & 1: 09.71 \\ & \hline \end{aligned}$ | $1: 05.53$ $1: 14.63$ | $1: 08.81$ $1: 18.67$ | $\begin{aligned} & 1: 11.55 \\ & 1: 37.90 \end{aligned}$ | $\begin{aligned} & 1: 14.14 \\ & 2: 33.78 \end{aligned}$ | $\begin{aligned} & 1: 31.93 \\ & 1: 44.52 \end{aligned}$ | 1:43.70 | $\begin{aligned} & 2: 00.04 \\ & 2: 21.06 \\ & \hline \end{aligned}$ |  |  |
| 200 YD IM | $\begin{aligned} & 1: 52.78 \\ & 1: 59.93 \\ & \hline \end{aligned}$ | $1: 54.79$ $2: 02.60$ | $\begin{aligned} & 2: 00.13 \\ & 2: 08.31 \end{aligned}$ | 2:06.67 2:15.87 | $\begin{aligned} & 2: 06.88 \\ & 2: 23.15 \\ & \hline \end{aligned}$ | $\begin{aligned} & 2: 23.24 \\ & 2: 51.18 \end{aligned}$ | $\begin{aligned} & 2: 22.16 \\ & 2: 58.06 \end{aligned}$ | $\begin{aligned} & 2: 35.94 \\ & 2: 58.11 \end{aligned}$ | $\begin{aligned} & 2: 52.62 \\ & 3: 46.01 \end{aligned}$ | $\begin{aligned} & 2: 49.69 \\ & 5: 45.14 \end{aligned}$ | $\begin{aligned} & 3: 22.28 \\ & 4: 53.48 \end{aligned}$ | 4:06.39 |  |  |  |
| 400 YD IM | $\begin{aligned} & 4: 05.03 \\ & 4: 24.20 \\ & \hline \end{aligned}$ | $\begin{aligned} & 4: 03.23 \\ & 4: 21.27 \end{aligned}$ | $\begin{aligned} & 4: 19.83 \\ & 4: 40.70 \end{aligned}$ | $\begin{aligned} & 4: 28.82 \\ & 5: 20.47 \end{aligned}$ | $\begin{aligned} & 4: 37.10 \\ & 5: 43.49 \end{aligned}$ | $\begin{aligned} & 4: 55.77 \\ & 6: 45.84 \end{aligned}$ | $\begin{aligned} & 5: 03.44 \\ & 6: 18.72 \\ & \hline \end{aligned}$ | $\begin{aligned} & 5: 42.76 \\ & 6: 37.47 \\ & \hline \end{aligned}$ | $\begin{array}{\|r\|} \hline 6: 04.82 \\ 10: 58.84 \\ \hline \end{array}$ | $\begin{aligned} & 6: 27.49 \\ & 7: 25.49 \\ & \hline \end{aligned}$ | $\begin{aligned} & 7: 23.22 \\ & 7: 59.84 \end{aligned}$ |  |  |  |  |
| 200 YD FR | $\begin{aligned} & 1: 23.34 \\ & 1: 29.96 \\ & \hline \end{aligned}$ |  | $\begin{aligned} & 1: 25.72 \\ & 1: 38.09 \end{aligned}$ |  | $\begin{aligned} & 1: 32.89 \\ & 1: 54.31 \end{aligned}$ |  | $\begin{aligned} & 1: 42.55 \\ & 2: 03.34 \end{aligned}$ |  | $\begin{aligned} & 1: 55.12 \\ & 3: 39.41 \end{aligned}$ |  |  |  |  |  |  |
| 200 YD MR | $\begin{aligned} & 1: 32.61 \\ & 1: 40.10 \end{aligned}$ |  | $\begin{aligned} & 1: 39.02 \\ & 1: 47.53 \end{aligned}$ |  | $\begin{aligned} & 1: 46.68 \\ & 2: 07.15 \end{aligned}$ |  | $\begin{aligned} & 1: 58.31 \\ & 2: 16.77 \end{aligned}$ |  | $\begin{aligned} & 2: 12.78 \\ & 3: 09.57 \end{aligned}$ |  |  |  |  |  |  |
| 200 YD MMR | $\begin{aligned} & 1: 39.32 \\ & 1: 47.20 \end{aligned}$ |  | $\begin{aligned} & 1: 47.90 \\ & 1: 58.74 \end{aligned}$ |  | $\begin{aligned} & 1: 56.70 \\ & 2: 21.53 \end{aligned}$ |  | $\begin{aligned} & 2: 21.14 \\ & 2: 54.05 \end{aligned}$ |  | $\begin{aligned} & 2: 51.83 \\ & 3: 08.38 \end{aligned}$ |  |  |  |  |  |  |

# FREESTYLE 

by Tom Lyndon

There I was, poised on a McDonald's Olympic Stadium (How many Big Macs does it take to make a 50 meter pool?) starting block at the University of Southern California! The very same block from which Roway Gaines leapt to his golden victory in the 1984 Olympics in Los Angeles! So what if it was an outside lane; it worked for him. No matter that I have been swimming in nationals for fourteen years and am now back in the second echelon. Every time 1 get on the blocks is a memorable high. This time my head was tuning in and out of a slow motion video of Rowdy's rolling but unchallenged start flowing into his magnificent two lengths of freestyle. After watching his race, I converted to my version of his track start and have felt a lot less uncomfortable having a funny left arm recovery.

Rowdy had more spectators, but I was competing with more swimmers1100 men and 500 women. Over half were from California. Stanford set the record in 1987 with 2300 . Boca Raton's 1800. last year came in second. Some who passed up USC said they had little interest in going to a meet near to downtown Los Angeles. Some said they couldn't deal with the day into night pattern. Some opted for regional Zone championships to vent their greatness.

Whatever, with fewer swimmers at USC (and the maximum number of events a swimmer could enter lowered from six to five), the competitors avoided the stress, boredom, and fatigue of races continuing into the night and had the chance to socialize away from the pool and have supper at reasonable hours. The U.S. Masters hierarchy has spent many hours trying to figure out how to deal with too long nationals. Since the participation appears to vary according to the perceived pleasures of the venue, will we see national sites selected more for their shortcomings?

Ed Bartsch, meet director and swim-
mer, has indicated the meet lost money, with some inferring it was because of the smaller number of entries. If that's the case it will be a damn shame, because practically everyone I talked with gave the meet high marks for efficiency and a good feeling. Ed sald he enjoyed running it. "It was a great experience." "Very friendly", sald Dan Gruender, USMS President, who noted the meet went well despite some pool operating rules that could have become a friction. Bill Barthold, chairman of the USMS Championship committee, noted the meet ran quickly and that the level of "strictness of the officials" is an issue that masters continue to grapple with

A rules dispute that may go to the swimming supreme court with Solomon on the bench. Should a relay team that knowingly breaks the rules turn itself in or is it OK for the relay to be free to choose not to do so? What if it is asked by another relay to turn itself in, after the officials, who are the only ones charged by the rules book to enforce the rules, do nothing when an infraction occurs? At one point, the outcome of the Division II team championship hung on this. The word "sportsmanship" and the notion of where to draw the line in overruling officials have come up.

The dorm living quarters had some similarities with Olympic villages. I shared a perfectly comfortable, tro-jan- if not spartan (no telephone or TV)-, four room suite with my wife and six others in Fluor Tower practically overlooking the pool. No electrical service on our first morning, the day of my big race. We chatted about showering and shaving in the dark while trekking up and down six flights of stairs in the dark. It has been reported Tom Jager bicycled around his Seoul digs to spare his legs from walking.

Our dorm's secur ity was impressive: three keys plus a magnetic card to get through three doors and an elevator to your room. While I was exhausted from all those key choosing decisions, I sure felt safe. At 1:30 am one night from his Hilton window near the campus, Ed Hinshaw heard and witnessed an eleven
shots in a drive by melee.
Olympic training tables we didn't have. After travelling most of the day from Boston, my wife and I dined with my local resident daughter at an actual hole in the wall bar less than a stone's throw from our dorm. Pitchers of beer, pizza, and salad honed my racer's edge. That bar did hone Lynn Morri-son-Casey (36) to a second in the fifty free the next day. Somewhere in the salad course, Lynn stopped by to share her race strategy, "Kick butt and take names!". On the counsel of roommates, we enjoyed a Hilton the next night.

The third night was Gorky's in a downtown LA warehouse district. My daughter assured us it was the place to go, as did some other sources. We arrived to view a patron handcuffed and leaned against the wall in an adjoining room. Two uniformed bouncers roamed about. One looked like Michael Jordan's big brother; the other must have been an interior lineman for the Raiders. The cashier wore a tux and a $T$ shirt. The decor was old cafeteria; the band was volunteer country. The beer was Russian brewed on the premises in four delicious flavors. The food was great! An , the pleasures that await us at Na tionals.

One that did not wait for us was the annual banquet party, billed as a Mexican fiesta this time. Citing lack of interest, it was cancelled and what money had been recelved was refunded. Whether $\$ 25$ was judged too much, the meet was expected to run late and conflict in time with the food and dancing as it did in Boca Raton and Stanford, or something else, I and many others were disappointed.
Near the pool we had plenty of food to choose among. In the early morning a truck loaded with stuff was parked across the street and a non MacDonalds was just down the street. From eleven on, a cafeter la served everything from a wide range of appealing junk food to the purest of unprocessed items for the purists. A pushcart sold two dollar ice cream bars- especially recommended (From July/August Swim Magazine.)
6.90

## Sporismedicine Trish Stemrich, R.P.T. President, <br> Florida Sportsmedicine Center

## Battling Jet Lag

Whether a competitive athlete or weekend jock, traveling through time zones can severely affect performance. Long trips can leave you weary, dehydrated and unable to perform at your best.

So how does someone like number one ranked tennis player, Ivan Lendl, battle the strains of travel?

In a variety of ways.
First, world-class athletes tend to be in excellent cardiovascular condition. They suffer from typical overuse injuries nontraveling athletes encounter.

Yet most follow a more sensible warm-up schedule before competing, and use ice packs immediately after exercise to decrease inflammation and pain when necessary.

It's interesting to note that most traveling athlete's medical problems are more related to traveling stress than actual competition.

Jet lag causes tiredness, sleeplessness, slow reflexes, and poor concentration. All a direct result of time zone changes, disorganized eating schedules, climate changes and dehydration.

The symptoms are not only detrimental to competition, but future competitions as well. The disruptive schedules and lack of familiar training facilities interrupt training schedules. Travel enough and you'll soon find fitness levels diminishing and injuries rising.

## Elaborate Body Time Clock

The body is an elaborate time clock. Hormonal systems are regulated in part by eating, sleeping and day/night cycles.

Jet lag disrupts these cycles. If Lendl arrives at a destination in the evening but it's morning where he came from, his body will be producing glycogen, which contributes to a energy "awake" state, rather than a restorative, fat storing "resting" state.

So what are an athlete's options?
If at all possible, arrive at least a day or two before the event. This time will allow the body to adjust. Adjustment generally takes one day for one time zone and up to five or six when travelling overseas.

You can begin the adjustment process before your trip by eating and sleeping in the new time zone cycles. Avoid alcohol, it magnifies the effects of jet lag. Alcohol, coupled with dry airplane cabin air, will surely dehydrate you. Your best bet is to drink plenty of water throughout the flight.

## Exercise Outdoors

Upon arrival, exercise outdoors. Climate, especially heat and humidity need to be accomodated. To help the body adjust to an earlier day, work out in morning daylight after a flight eastward. Exercise in evening daylight after a westward flight.

The book Overcoming Jet Lag, suggests diet programs that involve timing high protein and high carbohydrate meals, alternating feast and famine meals to control energy levels that induce or hinder sleep, along with meal times that coincide with the destination time zone.

If tapering your training schedule in preparation for the "big day", an additional "easy" day of training will allow the body extra rest for adjustment to the new 24 -hour cycle. Of course, every athlete is different. For whatever reason, some are more susceptible to jet lag's detrimental effects than others.

Although jet lag will never be eliminated, its effects can be minimized if an athlete understands these basic concepts.

## MASTERS WORLD SWIMMING RECORDS

## as at -1 may _1990 . . . SH()RT C()URSE

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|  | : USA | : USA | : USA | USA | ) USA | japan | : USA | - has | : MEy zealan | AND: USA | Japar | USA | : USA | - mustralia |
|  | 1 ) | : | 1 | 1 | 1 | : | ! | : australia | A | ! | - | - 1.53 .70 | : | : |
|  | 58,93 | 57.35 | 1.00.75 | 1.04.92 | 1.07.90 | 1.10 .55 | ; 1.11.63 | 1.17.99 | : 1.21.44 | 1.31 .84 | 1.45 .53 | 1.55 .70 | 3.01 .15 | 4.23 .67 |
| 100 aetre | ; M.Rodant | ; S.Meilson | : J.Hirsty | : 5.5 hriasto | On: M, Ridout | Y.Osaki | : J.Bruner | : C.walker | : P.Seith | : L.Donovan | : V . Cherr | :V.C | A. Bauscher | iv |
|  | ; M. LEALAMD | $0:$ USA | : USA | : Eucland | : USA | Japar | : USA | : USA | USA | USA | : EMSLAMO | : Emblano | USA | : Austracia |
|  | ; | : | 1 | ) | 1 | ; | - | : | ; | ! | - 3.50 .58 | ! | : | ! |
| 200 aetre | 2.06.47 | 2.06.83 | 2.12.69 | 2.21 .91 | 2.28 .69 | 2.36 .01 | 2.40 .27 | 2.50.94 | 3.06.11 | 3.28 .41 | 3.50 .58 | ( 4.17.73 | 5.33.83 | : |
|  | : D.braner | : 5.Neilson | : J.Hirstr | t. lannacon | ne: A. Wueller | : Y.Osaht | : 2.5 toinat | f ; C.witrer | P.Saith | ; L.Wingars | : U.120da | d.Dolce | : . Ackechnie $^{\text {a }}$ |  |
|  | ; USA | - USA | : USA | USA | USA | JAPAM | USA | USA | usa | USA | JaPAM | USA | USA | : |
|  | ; | $\cdots$ | ! | 1. | : | $i$ | 1 | ; | : | - | ${ }^{1} 7.50 .05$ | ! 0.51 .10 | ! | ; |
| 400 setre | 4.26.18 | 4.32.09 | 4.52 .99 | 4.53 .28 | 5.34.44 | 5.32 .67 | 5.34 .32 | 6.02.43 | 6.31 .09 | : 7.17.22 | 7.5d.05 | 8.51 .10 | : | ; |
|  | : D.braner | ; S.Meilson | : B. Dunbar | - B. Dunbar | ; M.Ridout | il.Stoinoff | f il.Stornoft | 6 ; C.Nalker | P. Saith | :R.Sisenton | iv.Cherrisa | an!V.Cherr |  | : |
|  | ; USA | - USA | : USA | : USA | ; USA | : USA | : USA | USA | USA | USA | ! England | : Embland | : | ; |
|  | : | ; | 1 | : | 1 | \% | ) | 1 |  | 1 | ! | ; | : | ; |
| 804 setre | 9.21 .42 | 9.37.11 | 9.46 .95 | ( 10.12.69 | 7 11.14.64 | ( 11.35.78 | ; 11.29 .98 | ( 12.31.12 | : 13.35 .92 | - 15.07.39 | : 17.16 .06 | ; 18.11 .90 | : 24.05 .54 | , |
|  | ; B. Durdy- | : S.Hels | 1 L.Val | - B. Dunbar | I M, Ridout | IL.Stoinotf | f il. Stoinotf | f : C.Walker | P. Soith | IR.Sisonton | : A.Merlino | :V.Cherrisa | anim, Mckechni |  |
|  | 1 Evans | ; m.iealamo | : USA | 1 USA | - USA | USA | - USA | USA | USA | USA | USA | Emblamd | USA | ; |
|  | 1 USA |  | 1 | 1 | 4 | $1-$ | ! | : |  | 1 1 | ! | : | : | : |
| 1500 netre | : 17.42.32 | : 19.17.08 | ; 18.27.71 | : 19.00.81 | : 22.55 .80 | : 21.44 .35 | : 21.55 .84 | : 24.56 .54 | : 28.03 .99 | : 28.49 .23 | : 33.53 .53 | ; 35.44 .26 | : | : |
|  | : B.Evans | : C.Cnay | - L.val | ; B. Dunbar | iP.AcCullag | ght i. Stoinoff | $f$ il.Stomeff | ; : J.Krauser | : iJ.nccollis | -18.Sicontion | : M. Merlino | IV.Cherrise |  | ; |
|  | - Camada | - USA | - USA | 1 USA | - Camada | - USA | - USA | - USA | - ter | - USA | 1 USA | EMGL.and | : | ; |
|  | : | : | : | 1 | : | $t$ | ; | 1 | USA | ) | ; | 1 | , | , |
|  | 25-29 | 30-34 | 5-39 | 40-44 | -49 | 50-54 | 5-59 | 60-64 | 65-69 | 70-74 | 75-79 | 80-84 | 85-6 | $90+$ |
| 50 setre | 30.63 | 32.24 | - 33.39 | 35.09 | 35.43 | 38.14 | 40.38 | 39.60 | 40.48 | 5.08 | 52.11 | 1.05 .08 | 1.13 .51 | 1.55 .07 |
|  | : 0.6 raner | : L.Hassel- | \| S.Rogers | H.Sato | : S.Takeuji | ; 8.Jordan | J.Asher | : C.ualker | 10.5teadaan | : 11. Van Ryse | ( ) M. Wicklun | iv.Cherrio | : A . Hc Kece | iV.Fernanc |
|  | - USA | - oulst | ; EMGLAMD | - JAPAM | 1 Japam | : USA | EMSCAMO | USA | - USA | EMSLAND | USA | EUSLANE | USA | : AUSTRALA : |
|  | : 1.04 | 1 USA | ! | ; | ; | ; | ) | : |  | : | 1 | ; | : |  |
| 100 setre | 1 1.04.06 |  | : 1.10 .47 |  | ( 1.17.13 | 1.23.58 | : 1.30 .03 | 1.29.13 | : 1.30 .41 | 1.44 .02 | 1.58.13 | 2.24 .00 | 2.52 .17 | 4.19 .46 |
|  | : D.braner | : L.Hassel- | $\text { - : P. } 6 i 1 \text { leore }$ | : 0.5 trick- | : S.Takeuji | ; B.Jordan | IF.Connolly | : C.Walker | 10.Steidean |  | : M. Victlun |  |  | iv.fernance: |
|  | - U5A | - quist | - camada | 1 and | 1 Japam | - USA | ; Scotand | : USA | 1 USA | - ESLCMO | 1 USA | : EMGLAND | : USA | ; mustrmia : |
|  | : | : USA | ! | USA | 1 | ! |  | : | ! | 1 | 1 | ! | ; : | : |
| 200 setre | 2.20.66 | : 2.34 .27 | 2.34.09 | 2.45.34 | 2.56.06 | 2.58 .72 | 13.11 .13 | 13.16 .14 | 13.15 .72 | 3.56.72 | : 4.01.89 | 5.18 .44 | ; 6.00.16 | : |
|  | ; D.6raner | ; J.Hudgell | : P.6ilsore | od 5.0 ' Mel ! | : B.Bennett | ; 8.Jordan | il. 5 toinoff | : 0.5 Steadean | :D.Steadean | : Y.Frisch- | : M.Victlun | S.Scott | :M.Ackechni |  |
|  | - USA | ; NEM IEALAMO | (0) camada | : EMGLAND | ) USA | : U5A | 1 USA | - USA | 1 USA | hertz | ; USA | USa | USA | ; |
|  | : | : | , | ! | : | ; | ; | : | ; | USA | 1 | ; | : | ; |
| BEEASTSTROKE | KE 25-29 | -34 | -39 | -4 | 49 | -54 | ; 55-59 | - | 65-69 | -74 | -79 | -84 | 5-8 | 90+ : |
| 50 aetre | 33.60 | 35.75 | : 34.63 | ) 38.00 | 139.21 | : 39.87 | ; 41.63 | 42.02 | 47.39 | 50.95 | 58.41 | 1 1.07.65 | , |  |
|  | IR. Willease | L. Bennett | : L.Osborne | : B.Pronk | :E.Broevich | :F.Connolly | IF.Conaolly | : E.Boeha | :B.Christian | an! 6.lint | 1 D. Veston | iV.Cherrisan | n: $\quad$ |  |
|  | holland | USA | - USA | CAMADA | EMGLand | : SCOTLAND | : scotland | : M. germary | : USA | 1 USA | Emblamb | Encland | ; | : |
|  | ; | : | ) | $!$ |  | $t$ | : | $t$ l | $!$ | 1 | : | $!$ | , |  |
| 100 eetre | 1.13 .60 | 1.18.13 | 1.16 .70 | 1.23 .81 | : 1.26.22 | 1.28.51 | ; 1.28.61 | 1.39.86 | 1.46.19 | 1.55 .84 | 2.06.60 | 2.44.80 | : |  |
|  | :R, willease | : L. Bennett | : L.Osborne | : 6.pierson | IE. Broswich | : J.teilich | if.Connolly | : C.balker | M.Evans | ; 6. 7 int | : D.Veston | iv.Cherrisa |  | , |
|  | hollamg | USA | USA | 1 USA | USA | - USA | : SCOTLMO | USA | EmSLAND | USA | EMELAND | EMSLANO | : $\quad$ |  |
|  | ; | 1 ) | 1 | , | , | , | 1 | : | $t$ | 1 | 1 | ! | ; |  |
| 200 setre | 2.44 .82 | 2.49.16 | 2.50 .93 | \| 3.01.86 | ) 3.06.59 | ; 3.11.20 | : 3.14.\% | 3.41 .14 | 3.46 .02 | I 4.09.41 | 4.35 .24 | 6.49.47 | : | , |
|  | iB. Steinhaf | : E.Isepoi | : L.Osborne | : 6.Pierson | : D.Fort | : d.leilich | IF.Connolly | : M.Evans | : M.Erans | : K. Hasurs | ; M.Nerlino | : D.Hoptins | : | : |
|  | : $\mathrm{N} . \mathrm{bERNaHY}$ | iSuITRERLAMO: | O! USA | : USA | ) EISLAND | 1 USA | : scotana | EMSCAD | Embland | ЈаРаМ | USA | USA | $1 \quad$ : | , |
|  | ; | ; | : | : | 1 ) | : |  | 1 | ; | : | ! | : | ; ; | - |
| BUTTERFLY: | ; 25-29 | 30-34 | 35-39 | -44 | -49 | 50-54 | 53-59 | 60-64 | 65-69 | 70-74 | 75-79 | 80-84 | 85-89 | 90+ |
| 50 aetre | 29.51 | 30.20 | 30.21 | : 32.11 | 33.93 | : 36.43 | ( 37.87 | 39.64 | - 45.75 | 51.96 | 59.27 | ( 1.13 .27 | 1.44.56 | : |
|  | : M.Rodahl | : 5.Meilson : | : L. Val | : B. Dunbar | : B. Hoellen | ; J.Lanble | : J.Asher | A.Adses | : J.Eppley | ; 6.7int | : M. Herling | iv.Cherrisan | in: E.Pecrihas | : |
|  | ; M. lealami | USA | USA | : USA | 1 USA | - U5A | : ENSLAMID | USA | USA | USA | USA | EM6Land | USA | , |
|  | ; : | : | : | 1 | , | : | ; | ; | 1 | $!$ | ; | $!$ | ; | : |
| 100 setre | : 1.05 .71 | : 1.07.34 | ) 1.08.00 | ; 1.10.5b | ; 1.18 .79 | : 1.22 .64 | : 1.27.88 | ( 1.36.95 | ( 1.47.51 | 12.04.25 | ( 2.12.17 | : 3.09.18 | : | : |
|  | iS. McDonald : | : T.Bennett : | ! L.Val | : B. Dunbar | : M.Ridout | : J.Lasble | IF.Connolly | : P. Detson | : J.Eppley | 6.1.nt | : M. Nerlino | : K.Pelton | : | ; |
|  | - scotland | USA | : USA | - USA | 1 USA | : USA | : scotlaid | - USA | - USA | USA | - USA | - USA | ; ; | ; |
|  | , | , | , | $!$ | $!$ ! |  | ! | , | , | 1 | 1 - | ; | : | : 1 |
| 200 setre : | 2.24.89 | 2.30 .73 | : 2.55 .70 | 2.32.19 | ( 2.37.88 | : 3.11.85 | : 3.11.42 | : 3.33. 12 | : 4.10.63 | 1 4.36.96 | : 4.48.50 | : 6.46 .72 | : | - |
|  | : S.Paleer- | ; H.Murray : | : B.Dunber | : B. Donbar | : A.Mueller | : S.Rade- | if.Connolly | : d.Krawser | : d.Eppley | ; M.Nerling | ; m.Nerlino | : D.Hopkins | : | - |
|  | mite | USA | : USA | ; USA | I USA | 1 saker | : scotlamo | USA | ; USA | I USA | ! USa | ! USa | ; ; | ; |
|  | - australia |  | ; | $t$ | 1 ! | USA | $!$ | 1 | 1 | 1 | 1 | 1 | : ; | - |
| MEDEE | 25-29 | 50-34 | 35-39 | 40-44 | 45-49 | 50-54 | 55-59 | 60-64 | 65-69 | 70-74 | 75-79 | 80-84 | 85-89 | $90+$ |
| 100 setre | 1.06 .84 | 1.07.78 | 1.11.55 | 1.16.08 | 1.14.41 | 1.23.90 | 1.24.19 | 1 1.27.50 | 1.45.67 | 1. 1.50 .32 | : 2.00.07 | 12.21 .39 | 14.32 .97 | ; |
|  | ; M. Rodahl | (S.Meilson | J.Hirsty | ( 8.0 'llueil | : A. Wueller | i Y.Osaki | : J. Bruner | : C.Walter | id. Donnelly | 1 6. Iint | i M. Nerlino | IV.Cherrisan | A:A.Bauscher | - |
|  | - M.jealamo : | - usa ! | USA | EMGLAMD | USA | Јарай | : U5A | USA | ! Usa | - USA | USA | Enschavo | USA : | - |
|  | ¢ 2.24.07 | 1 ! | 1 1 | ! | 1 |  |  | , | , | ! | : | ) | : | - |
| 200 entre | 2.24 .07 | 2.27.11 | 2.35 .52 | 1 2.48 .57 | 12.42 .88 | ) 2.59 .01 | : 3.05.45 | : 3.18.11 | : 3.50.00 | : 4.04.81 | ( 4.17.89 | : 6.10 .22 | : 9.49.56 | 1 |
|  | ; D.6raner 1 | 1 s.meilson : | : C.Kohn | : 5.0 ' Nanl | : A.hueller | : Y.Osaki | IF.Conaolly | : C.walter | :D. Donnelly | : R . Sisonton | ; M.Merlino | ; K.Peliton | ;A.Bauscher | ! |
|  | - USA ; | - USA | USA | EmSLand | : USA | jпрай | : scotlano | usa | USA | ; USA | 1 USA | USA | USA ; | ; |
|  | 1 : | ! | 1 ) | 1 | 1 | ) | : | ; | 1 | 1 | 1 | , | : | - |
| 400 entre | 5.14.28 | \| 5.21.25 | ) 5.32.65 | 1 5.46.82 | I 5.55.35 | 1 6.39 .01 | : 6.40 .91 | : 7.12.48 | 18.05.06 | - 8.34.79 | : 9.07.66 | : 12.11.13 | , | , |
|  | B.Evans | ; M.Aurray | ; P. Silacre | 1 B. Dunbar | : A.Mueller : | : J.Seit1 | :F.Conmelly | 1 J.Krasser | C.terr | 18.Sisentor | 1 M. Werlino | : D. Hentios |  |  |
|  | CAMMDA | USA | ) Cmman | 1 USA | USA |  | : scotuase | - USA | - CMman | 1 USA | ) USA | USA | 1 ! | -7- |

# MASIERS WORLD SWIMMING RECORDS 

 SH(IIRT C()UIRSE


## FROM THE EDITOR

I believe that it istime to retire SWIM-MASTER. next year it will be twenty years old. It $1 s$ time for a new beginning and so next year will be the last year for SWIM-MASTER. It has been like a member of my family - like a child that has finally grown up! It has been a rewarding experience and has given me the opportunity to aquaint myself with computers. Just in case you would like to receive the remaining issures I have prepared the following price list for the remaining year and a half.

| CODE \# |  | USA | FOREIGN |
| :---: | :---: | :---: | :---: |
| 690 | \$ | 12.00 | \$ 19.50 |
| 790 | \$ | 11.00 | \$ 18.00 |
| 890 | \$ | 10.00 | \$ 16.50 |
| 990 | \$ | 9.00 | \$ 15.00 |
| 191 | \$ | 8.00 | \$ 13.50 |
| 291 | \$ | 7.00 | \$ 12.00 |
| 391 | \$ | 6.00 | \$ 10.50 |
| 491 | \$ | 5.00 | \$ 9.00 |
| 591 | \$ | 4.00 | \$ 7.50 |
| 691 | \$ | 3.00 | \$ 6.00 |
| 791 | \$ | 2.00 | \$ 4.00 |
| 891 | \$ | 1.00 | \$ 2.00 |

## MASTERS WORLD SWIMMING RECORDS SHOIRT C()UIRSE



June Krauser, Editor

Ft. Lauderdale, FL 33305

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