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CONDITIONING

by

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People who take part in sports must keep in condition. "Condition" being the state in which a person or thing is. Exercise conditions your muscles. Training develops strength and endurance through proper exercise and diet which is necessary to make one fit for a sport.

For competitive swimming, many hours of training are necessary to condition your body for competition. The amount of conditioning needed per individual will vary with each individual swimmer. Each person adjusts differently to a certain amount of stress. The more stress your body is subjected to, the more it will adapt, up to a certain point, and then it will break down. There must be a certain amount of breakdown, but not so much that the body cannot recover.

Basically, there are four areas of competitive swimmers. First, the novice group with youngsters just learning the four strokes. These novice swimmers are just learning about competitive swimming and the primary goal is to give the kids an enjoyable experience with our sport. We want to introduce them to swimming and teach them the fundamentals.

The second area of competitive swimming is perhaps our largest in terms of numbers - age group. Age groupings provided are 10 & under, 11-12, 13-14, 15-18. The novice group can step right into the age group program which consists of swimmers with varying degrees of ability. As the swimmer moves through the age groups he should become progressively faster and progressively more interested in swimming and more dedicated to the sport.

As the age grouper swims faster he can move right up into the Senior group which is our third group. All registered swimmers are eligible for the senior class. Senior swimmers also have a wide range of ability. The top senior swimmers are chosen to represent the United States in foreign competition and also have the opportunity to compete for membership on the United States Olympic Team. Many senior swimmers are old enough to be in college or at universities and a few are older.

After finishing school, swimmers now have the opportunity to continue their competitive swimming in the Masters Swimming Program - the fourth area of competitive swimming. This program is designed to develop training and offer swimming competition for men and women 25 years of age and older and to encourage people to swim regularly and to be generally concerned about their physical fitness.

Reportedly, there are two types of training programs being used today - 1) conventional training and 2) cycle training. The vast majority of coaches use the conventional type of training program. In this type of training program the swimmer first warms up, and then does some kicks and pulls. After this he does a mean series of repeats of anywhere from 1,000 to 4,000 yards plus a few sprints. He then loosens up and gets out. He does pretty much the same thing every workout.

The cycle method of training is relatively new and the basic idea behind cycle training is that the body can adapt to stress. Briefly, in cycle training, you have an alterna-

ting recovery and stress period. Some go on a two day cycle - one day hard, one day easy, back and forth with Sundays off. Others will go one day hard - two days easy or two days hard and one day easy. On a hard day a greater overload can be given with much more yardage. On an easy day, kicking and pulling or other swim drills can be used with less yardage. If most of your meets occur on Saturdays or Sundays, Fridays can be your easy day. It lets the swimmer rest mentally and physically without really giving up much yardage.

A combination of various training techniques are used in conditioning competitive swimmers. Slow, easy MARATHON swimming is usually done in warmups. It is also used on an alternating basis with one length easy, one length hard for say - 1000 yd warmup.

OVER DISTANCE training consists of swimming a set of repeats at a distance greater than the distance of the actual event. For example, the race is 200 yards. You might swim 5 x 250 yards or 5 x 300 yards, etc.

INTERVAL TRAINING is widely used. The distance you swim will be less than the event for which you are training. The rest interval will vary but should never be longer than 10 to 30 seconds when doing 50 yard repeats or 20 to 60 seconds when doing 100 yard repeats. Research has indicated that this method gives the best stimulus for improvement of the cardio-respiratory system. An example of interval training would be doing 10 x 100 yards on 1:30 or 10 x 50 yards on 45 seconds.

REPETITION TRAINING consists of a rest interval long enough for the heart rate to almost completely recover. A heart rate of 160 to 180 recovers to about 120 to 110 within a minute rest, if in good condition. An example of this training method is 10 x 50 yards on two or three minutes. The distance used in this technique is short enough to enable the swimmer to swim at the speed used in his race. This technique is used for pace in a competitive race.

SPRINT TRAINING is done with a rest interval which allows for almost complete recovery. Two or three minutes rest is allowed between 50 yard repeats such as 5 x 50 on three to five minutes or 10 x 25 yards on the two minutes. This technique is used as a means of increasing strength and can cause stiff and sore muscles.

STIMULATORS are used to duplicate the stress of swimming a certain event and learning the pace for the race. It consists of breaking down your event by 25's, 50's or 100's with 10 seconds rest between. For example, a goal time of 2:10 for the 200 yard free. The first dive-in 50 might be at 28 seconds and three push-off 50's with 10 seconds rest at times of 34, 34 and 34 giving an even pace with the time of 2:10. Sometimes this is called a split 200. This technique is exhausting and should not be used very often.

We have four areas of competitive swimming: basically two types of training programs; and various training techniques. There have been books and many articles written on how certain athletes train. Workout schedules have been included. The yardage per day, per week and per year has been recorded. The athlete most often written about is in the Senior Swimming area and is of National caliber. The Olympic champion. Or, the book or article is written about a well known coach and how he trains his team.

We find many variables contributing to the amount of condi-

tioning that certain swimmers can get. First is the ability of the swimmer. Those that swim faster can certainly get in more yardage in a shorter period of time. Second is the time factor. The amount of time that the pool is available; the amount of time that the coach is available; and the amount of time that the swimmer is available. The amount of stress that a certain individual can tolerate. Therefore, the number of workouts per week varies as does the amount of yardage per workout.

The novice group of swimmers will average between three and five workouts per week. Each workout will last approximately one hour. Most workouts will consist of learning the strokes and the yardage will be very little - perhaps 500 to 1000 yards per workout.

The age group swimmers vary greatly on ability. For example, a real good 10-year-old cannot keep up with a good 15-year-old. And yet some 8-year-olds might be able to keep up with some 12-year-olds. So, it is best to group age group swimmers according to ability to withstand a given amount of stress in a given amount of time. The older, better and more dedicated the age-grouper becomes, the more stress he can take. Age group swimmers will average anywhere from five to twelve workouts per week and from one hour to two hours per workout and from 2000 to 6000 yards per workout.

Our Senior swimming group overlaps the age-group. Most senior swimmers will be on a two workout per day schedule averaging 8000 to 10,000 yards per day with distance swimmers doing as much as 13,000 to 15,000 yards per day.

To date, little has been written on the conditioning of the Masters Swimmer. Many of these Masters Swimmers are former competitors. Training techniques have changed throughout the years. Swimming is one of the most healthful forms of exercise and conditioning results in benefits to the cardiovascular-respiratory system. Competition is a measuring device for improvement of performance. The aging process can be slowed down by a daily exercise program.

In order to arrive at some statistics for Masters Swimmers on how they are getting themselves back into condition with the number of workouts per week, the average yardage per workout, and the types of training techniques being used, a Conditioning Questionnaire was sent to over 500 Masters Swimmers. Following are the results compiled from the questionnaires returned along with some examples of workouts for the 25-34, 35-44, 45-54, and 55 & over age groups.

| WOMEN | AVERAGE WORKOUTS PER WEEK | AVERAGE YARDS PER WORKOUT | AVERAGE YARDS PER WEEK |
|-----------|---------------------------|---------------------------|------------------------|
| 25-34 | 4.8 | 1,778 | 8,534 |
| 35-44 | 4.5 | 3,660 | 16,470 |
| 45-54 | 5.4 | 2,180 | 11,772 |
| 55 & over | 4.58 | 1,333 | 6,106 |
| MEN | | | |
| 25-34 | 4.23 | 2,800 | 11,564 |
| 35-44 | 4.7 | 2,063 | 9,700 |
| 45-54 | 4.76 | 1,763 | 8,394 |
| 55 & over | 4.64 | 1,916 | 8,816 |

25-34 Woman - 4 to 5 workouts per week - avg. 1500 yards. Also does half-hearted weightlifting & stretching exercises.

| | |
|----------------------------|--------------------------------|
| #1 500 free warmup | #2 200 free, back, brst warmup |
| 8 x 50 kick on 1:30 | 2 x 100 IM kick |
| 4 x 100 free pull on 2:00 | 2 x 200 pull free |
| 4 x 50 sprint (IM) on 1:00 | 2 x 100 IM sprint |
| slow swimdown | slow swimdown |

25-34 Woman - 5 workouts per wk - averaging 2000 meters
 400 warmup
 4 x 100 on 2:00
 500 kick (all strokes)
 400 stroke technique
 200 warmdown
 Sometimes will warm up 400, then repeat 3 x 400. Other times emphasis will be on 200 repeats or 100 repeats

25-34 Woman - 5 workouts per wk - averaging 2000-5000 yards
 400 warmup
 2 x 800 or 4 x 400
 5 x 200 fly or 5 x 100 fly or 5 x 100 back
 several one lap sprints to finish
 also does jogging

35-44 Woman - 5 workouts per wk - averaging 1300-1600 yards
 400 IM warmup
 5 x 100 negative splits of one stroke
 5 x 50 of one stroke
 100-200 yards slow warmdown

35-44 Woman - 4 workouts per wk - averaging 1500-2000 yards
 500 warmup
 4 x 50 on 1:00
 4 x 200 on 3:30
 300 warmdown
 500 warmup
 10 x 100 on 2:30
 300 warmdown
 4 x 50 on 1
 1 x 1650
 4 x 200 on 5
 3 x 200 on 4
 10 x 50 on 1
 2 x 25
 200 warmdown
 200 warmdown

35-44 Woman - 9 workouts per wk - averaging 3000 yards
 300 kick (fly, brst, free)
 3 x 100 free on 2:00
 4 x 200 free on 5:00
 4 x 100 free kick on 2:15
 400 free pull with pull-buoy
 5 x 100 breast on 2:00

45-54 Woman - 4-5 workouts per wk - averaging 1300 yards
 200 breast warmup
 4 x 50 free
 4 x 100 breast
 2 x 50 back
 2 x 50 fJy
 200 IM kick
 200 IM pull
 200 breast warmdown

45-54 Woman - 5 workouts per wk - averaging 1600 meters
 500 free kick & pull warmup
 100 fly kick
 100 back kick
 100 free kick
 100 breast kick
 200 free swim
 3 x 100 free - short interval
 200 free - fast pace

45-54 Woman - 5-8 workouts per wk - averaging 4000-5000 yds
 1000 warmup slow & easy
 10 x 200 on 4:00
 5 x 100 kick
 5 x 100 pull/pull buoy
 16 x 50 on 1:15 (all strokes)
 500 swim for time after a 5 minute rest

55 & over Woman - 4 workouts per wk - averaging 400-500 yds
 3 x 100 kick free, back, breast
 3 x 100 pull free, fly, back

55 & over Woman - 6 workouts per wk - averaging 2200 yards
 400 free warmup
 200 kick free and breast
 4 x 100 pull - four strokes
 500 free warmup
 4 x 50 kick each stroke
 4 x 50 pull each stroke

55 & over Woman - 4 workouts per wk - averaging 2200 yards
 400 free warmup
 200 kick free & breast
 4 x 100 pull - four strokes
 6 x 200 IM on 5:00
 100 free - easy
 500 free warmup
 4 x 50 kick each stroke
 4 x 50 pull each stroke
 2 x 200 free
 4 x 100 each stroke
 8 x 50 sprints
 100 free - easy

25-34 Man - 5 workouts per wk - averaging 3000 yards - cycle
 Stress Workout
 200 free drill
 200 choice
 5 x 200 free on 3:00
 200 back drills
 3 x 200 back on 3:30
 200 breast drills
 3 x 200 breast on 3:30
 non Stress Workout
 200 choice
 3 x 800 free on 11:00
 6 x 50 fly on 1:00
 4 x 125 free on 2:00
 200 back drills
 200 breast drills
 200 fly drills

25-34 Man - 5 workouts per wk - averaging 1200 yards
 200 warmup 500 warmup
 3 x 200 on 30 sec RI 5 x 100 on 2:00
 10 x 50 on 1:00/paddles 4 x 50 on 1:30
 rest 50-100 warmdown
 1 x 50 fast sprint
 50-100 warmdown

25-34 Man - 3 workouts per week - averaging 2500 yards
 500 warmup - pull, kick, swim, 100 easy, 100 IM
 500 kick - straight or repeats
 500 pull - repeats with tube, ie. 5 x 100 on 1:30
 1000 broken into repeat swims of 5 x 200 or 10 x 100 or
 2 x 500

25-34 May - 3.5 workouts per wk - 4500 yards
 1000 free warmup 4 x 200 free or specialty
 20 x 50 free on :45 8 x 100 free or specialty
 8 x 50 kick for time 500 of 50 yd sprints or 25's

35-44 Man - 5 workouts per wk - averaging 1500 yards
 500 swim - breast, back, free
 400 kick & pull 8 x 50 on 1:30, alternating
 8 x 50 on 1:30 with 25 fly/25 free
 100 warmdown - generally keep pulse rate between 120-160 for
 entire workout

35-44 Man - 6 workouts per week - averaging 3000-4000 yards
 500 free or breast warmup rest
 500 breast kick 300 pull - back
 1,000 hard swim - back & free 200 kick free or fly
 500-1000 IM moderate

35-44 MAN - 3 workouts per wk - averaging 2400 yards
 200 free warmup 8 x 50 on 1:00
 4 x 200 on 4:00 8 x 25 on :30
 8 x 100 on 2:00 100 free warmdown

45-54 Man - 5 workouts per wk - averaging 1000-1500 yards
 Other sports include handball, racquetball, volleyball,
 running and cycling.
 Mon - repeat 100's with 1 min rest intervals
 Tue - repeat 200's with 2 min rest intervals
 Wed - 10 x 100 and 10 x 50
 Thu - 5 s 200 and 1 or 2 400's
 Fri - Pyramids - 50-100-150-200-150-100-50-50; 25 yd sprints

45-54 Man - 4 workouts per wk - averaging 3000 yards
 500 kick 500 swim 1000 swim
 10 x 100 on 2:00 500 kick 15 x 75 on 1:45
 20 x 75 on 1:45 10 x 100/20 sec RI 15 x 25 on :45
 10 x 50 on 1:00 10 x 75/20 sec RI every 3rd fly
 20 x 25 on :45 10 x 50/20 sec RI 10 x 75 on 1:30
 10 x 25/20 sec RI 10 x 25 on :30
 every 3'rd fly.

45-54 MAN - 5 workouts per wk - averaging 2500 yards
 400 swim warmup 5 x 50 - alternating on 1:00
 6 x 100/fast-slow/ on 2:00 3 min rest
 3 x 50 kick on 1:15 4 x 25 sprints
 2 x 50 back on 1:15 4 x 25 kick
 400 alternating

55+ Man - 4 workouts per wk - averaging 3/4 - 1 mile
 5 x 200 with 2 min rest
 200 pulling
 200 kicking
 500 free

55+ Man - 5 workouts per week - averaging 2750 yards
 Some exer-ginie work and leg and arm presses plus sit-ups.
 warmup -1000 breast, back, free
 400 kicking 6-8 x 100 free on 2:00
 200 breast with paddles 8-10 x 50 free on 1:00
 200 free with paddles swim down 300-400 all strokes

55+ Man - 5 workouts per week - averaging 3500 yards
 1000 warmup 1000 warmup
 5 x 200 on 5 minutes 5 x 400 on 8:00
 10 x 100 on 2:00 or 3:00 8 x 100 on 2:00
 5 x 100 pull 5 x 100 pull

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CNCA report on Masters Swimming

By Tom Faupl
 of The Journal Staff

Elizabeth John was beaming Saturday afternoon,
 even though she was the first to admit it wasn't one of
 her better performances.

John, a 68 year old swimmer,
 had just completed the 50
 yard freestyle, her fourth and
 final event in an Amateur Ath-
 letic Union Wisconsin Masters
 Meet at Wauwatosa East High
 School.

No, John didn't set any spec-
 tacular times, but that is un-
 derstandable considering that
 she is the oldest swimmer,
 male or female, competing in
 AAU Masters meets in Wis-
 consin.

"Well, I wasn't so good to-
 day," said John, who was
 clocked at 1 minute 52.9 sec-
 onds in the freestyle. "That's what happens when you
 get older. It still feels great to compete, even if I'm not
 as fast as when I was younger."

John was referring to 1977, when she was named an
 All-American for setting a national short course record
 in the 50 yard breaststroke at 52.95 seconds in the 65-69
 age bracket. The year before, she had set a national long
 course mark in the 50 meter breaststroke at 59.11. Not
 bad for someone who started swimming competitively
 only three years before.

"I was 64 when I joined and, boy, was I nervous,"
 said John, who was the only woman among the 25
 swimmers who competed Saturday. "Actually, I was
 very lucky and I finished among the top 10 in the coun-
 try in all the meets I swam in then. This year, I was
 in the top 10 in five events."

John concedes that setting records isn't too difficult,
 since there aren't that many women her age swimming
 competitively. But records are not her main goal, any-
 way.

"I just wanted to get in and see if I could do it," said
 John, who is divorced and lives in Cedarburg. "I just
 tried to set goals. I wanted the opportunity to swim in a
 meet. And why shouldn't I try for the best time?"

Saturday, John finished the 50 yard breaststroke at
 58.76, the 100 yard breaststroke at 2:16.85, and the 50
 yard backstroke at 1:09.37. Those weren't among her
 best times. But she isn't training as hard these days.

"I try to swim every day in the summer," John said.
 "If I do a mile, I'm okay, although in the winter I don't
 swim as much. I also like to hike and I try for three
 miles a week during the summer. Hiking and swimming
 are good for an old lady, you know."

John, in fact, has been swimming since she was 10
 years old, when her doctor ordered her to swim as ther-
 apy for tuberculosis.

"I had to swim as a young girl and I remember my
 father taking me to the Milwaukee Athletic Club," she
 said. "I had tuberculosis and in those days you had to do
 exercises. I remember I had to swim the breaststroke."

For now, John will take it easy until the state meet in
 early April. After that, she'll be waiting for her big
 birthday.

"On July 30th, I'll be 69, but that's not the big one,"
 John said. "The year after that I'll be 70, and that's
 when I'll be the youngest in the next age bracket. Then
 maybe I can make All-American again."



Elizabeth John

At 68, She's Still in the Swim



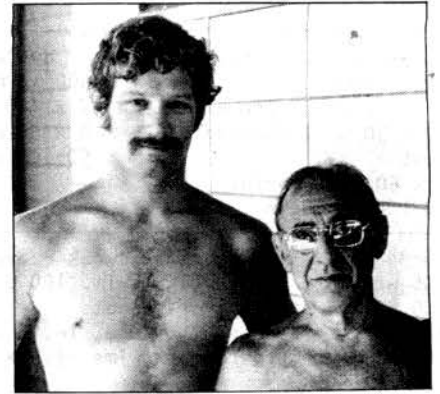
CORPUS CHRISTI MASTERS Frt. Charles Teas, Tommy Kirksmith, Fran Woolsey, Mary Jane Geckle. Back. Tom Hetzel, Ray Nicol, Ralph Geckle, Steve Odrobina, Haynie Glasgow.



Hi Pt Winners! Tommy Kirksmith, Mildred Anderson & Joanita Reed



Jamie Stewart



Phillip Whitten, 35, the author of this article, came in first in two events at the World Masters Swimming Championships in Toronto last summer. Fellow swimmer Abe Olanoff, 72, is one of the top breaststrokers in the men's 70 to 74 age group.

Be sure to read Phillip Whitten's article in FAMILY HEALTH - Feb.

The Author: A Born-Again Swimmer

When we asked author Phillip Whitten to tell us a little about himself and his own involvement in the Masters Swimming program, he was too modest to mention his two gold medals from last summer's World Championships. However, he did report this:

December 2, 1971, was the day I first became involved in Masters Swimming. I remember it well.

I had read about the program a few months earlier, and after obtaining a card to use the Yale University athletic facilities, I decided to get myself back into shape. Not that I thought I was really out of shape, you understand. After all, I was just 28 and only a few years had passed since my All-American swimming honors, when I set a number of national age-group, Junior Olympic, high school and collegiate records, and represented the United States in international competition. Even after receiving my B.A. in 1965, I remained fairly active—swimming and running a few times a month, playing tennis and touch football. I didn't smoke, and I was only about ten pounds above my collegiate swimming weight. It would be easy, I thought.

Wrong! Was I in for a surprise!

At my first workout, I decided to clock myself for the 100 meters breaststroke. After a few stiff strokes, I felt as if I were carrying a piano on my back. Somehow, I managed to drag myself,

panting, through all 100 agonizing meters. My time was one minute, 35 seconds—S-L-O-W! Not just slow, but monstrously S-L-O-W. And very painful. It was an incredible shock to my ego. I swam another half mile that day, nice and easy. Afterward, as I sat recovering in the steam room, the full realization of how grossly out of condition I had become seeped in. I resolved then to do something about it.

Since that eye-opening day, I have trained fairly regularly, swimming about two miles a day, three or four days a week. Several months before an important Masters meet—such as the nationals—I increase both the intensity and distance of my workouts (about two-and-a-half miles a day, five or six days a week) and add some weight training to build up my strength.

My swimming times have improved steadily each year. In some events (though not the breaststroke), I swim faster now than I ever did before. With the prospect of another 40 or 50 years of competition before me, I have more than enough time to improve my stroke technique and pacing even further. More important, I feel great. I catch colds much less frequently now. I have lost the ten pounds I put on after college, and reduced my waist line from almost 35 inches to less than 32 inches. I no longer have the high blood pressure I had at one point. And my energy level is higher than it's been in years.

1978's World Best

A letter dated February 1 was sent to countries known to conduct events for Masters Swimmers. The intention was to list 10 times in each event but the lack of response - for various reasons - has prompted the listing of only 5 times - 1978's WORLD BEST. My thanks to Gary Stutsel for Australian times, Bonnie Pronk for Canadian times and Haike Holer for West German times. England has had no Masters meets in 50 meter pools and most countries conduct little competition over the 50 meter course. There are many odd length pools in the World and this listing will be restricted to 50 meter pool times only. Hopefully, it will encourage Masters swimmers throughout the World to swim in Long Course meets so their times may be considered for the 1979's WORLD BEST!

| WOMEN 25-29 | | | 400 METER INDIVIDUAL MEDLEY | | | 200 METER INDIVIDUAL MEDLEY | | | 200 METER BUTTERFLY | | | 100 METER BUTTERFLY | | |
|------------------------------------|--|--|-------------------------------|--|--|------------------------------------|--|--|------------------------------------|--|--|------------------------------------|--|--|
| 50 METER FREESTYLE | | | 1 C. Ruppert USA 5:35.29 | | | 1 L. Johnson USA 2:47.70 | | | 1 C. DeLuca USA 2:59.85 | | | 1 H. Holer GER 1:21.70 | | |
| 1 K. Eaton USA 28.22 | | | 2 S. Walsh USA 5:58.65 | | | 2 A. Grams USA 2:52.00 | | | 2 B. Bennett USA 3:15.08 | | | 2 H. Buss USA 1:26.58 | | |
| 2 M. Noppen CAN 28.44 | | | 3 J. Stewart USA 6:10.20 | | | 3 J. Gettling USA 2:55.00 | | | 3 N. Ridout USA 3:17.90 | | | 3 F. Saeyes CAN 1:31.27 | | |
| 3 B. Dunbar USA 29.35 | | | 4 J. Gettling USA 6:20.27 | | | 4 B. West USA 2:56.66 | | | 4 J. Royer USA 3:19.61 | | | 4 B. Whitall CAN 1:31.98 | | |
| 4 M. Stratten CAN 29.42 | | | 5 C. Dietrick USA 6:25.77 | | | 5 P. Harris USA 2:57.58 | | | 5 C. Martin USA 3:47.34 | | | 5 N. Whitehall USA 1:34.60 | | |
| 5 S. Byrne USA 29.45 | | | WOMEN 30-34 | | | 400 METER INDIVIDUAL MEDLEY | | | 200 METER INDIVIDUAL MEDLEY | | | 200 METER BUTTERFLY | | |
| 100 METER FREESTYLE | | | 1 D. Todd USA 29.45 | | | 1 L. Johnson USA 6:06.58 | | | 1 J. Katz USA 2:51.47 | | | 1 H. Buss USA 3:18.45 | | |
| 1 M. Noppen CAN 1:01.72 | | | 2 S. Schaffer USA 6:20.15 | | | 2 S. Schaffer USA 6:20.15 | | | 2 B. Pronk CAN 2:53.83 | | | 2 J. Gray USA 3:39.25 | | |
| 2 M. Stratten CAN 1:03.98 | | | 3 A. Grams USA 30.00 | | | 3 P. Harris USA 6:23.22 | | | 3 M. Breen USA 2:58.60 | | | 3 J. Culbertson USA 3:40.30 | | |
| 3 C. Ruppert USA 1:03.98 | | | 3 C. Johnson USA 30.50 | | | 4 A. Brown USA 6:31.69 | | | 4 B. Bennett USA 2:59.45 | | | 4 S. Rittenhouse USA 3:41.60 | | |
| 4 D. Csepregi CAN 1:04.34 | | | 4 L. Johnson USA 30.74 | | | 5 J. Menard USA 6:32.22 | | | 5 C. Macpherson USA 3:02.70 | | | 5 B. Zaremski USA 3:50.88 | | |
| 5 P. Baier USA 1:04.96 | | | 100 METER FREESTYLE | | | 50 METER FREESTYLE | | | 400 METER INDIVIDUAL MEDLEY | | | 200 METER INDIVIDUAL MEDLEY | | |
| 200 METER FREESTYLE | | | 1 L. Johnson USA 1:05.54 | | | 1 N. Ridout USA 31.10 | | | 1 J. Katz USA 6:04.18 | | | 1 H. Holer GER 3:01.06 | | |
| 1 M. Stratten CAN 2:17.90 | | | 2 A. Grams USA 1:05.80 | | | 2 M. Soucheray USA 31.35 | | | 2 B. Bennett USA 6:23.49 | | | 2 T. Seidl GER 3:03.88 | | |
| 2 M. Noppen CAN 2:18.88 | | | 3 D. Todd USA 1:05.89 | | | 3 C. McCullough USA 31.39 | | | 3 B. Royer USA 6:41.57 | | | 3 H. Mulder GER 3:04.69 | | |
| 3 D. Wise USA 2:22.44 | | | 4 C. Johnson USA 1:08.00 | | | 4 L. Woodman USA 32.40 | | | 4 N. Ridout USA 6:49.90 | | | 4 H. Kaiser GER 3:07.30 | | |
| 4 S. Byrne USA 2:23.89 | | | 5 J. Gettling USA 1:08.81 | | | 4 N. Breen USA 32.40 | | | 5 M. Soucheray USA 7:03.41 | | | 5 M. Schulz GER 3:07.35 | | |
| 5 P. Baier USA 2:26.21 | | | 50 METER FREESTYLE | | | 100 METER FREESTYLE | | | WOMEN 40-44 | | | 400 METER INDIVIDUAL MEDLEY | | |
| 400 METER FREESTYLE | | | 1 A. Grams USA 2:22.80 | | | 1 J. Katz USA 1:08.49 | | | 1 J. Bruner USA 31.56 | | | 1 H. Buss USA 6:36.93 | | |
| 1 P. Baier USA 4:57.65 | | | 2 L. Johnson USA 2:30.02 | | | 2 N. Ridout USA 1:08.70 | | | 2 H. Holer GER 31.97 | | | 2 M. Brown USA 6:46.13 | | |
| 2 C. Ruppert USA 4:58.49 | | | 3 C. Johnson USA 2:31.90 | | | 3 L. Weir USA 1:12.00 | | | 3 B. Zaremski USA 32.28 | | | 3 J. Bruner USA 6:59.49 | | |
| 3 M. Stratten CAN 5:01.37 | | | 4 M. Richison USA 2:33.30 | | | 4 B. Pronk CAN 1:12.21 | | | 4 M. Schulz USA 32.49 | | | 4 J. Gray USA 7:09.15 | | |
| 4 D. Wise USA 5:08.66 | | | 5 J. Gettling USA 2:34.00 | | | 5 B. Bennett USA 1:12.37 | | | 5 S. Kearney USA 32.73 | | | 5 B. Zaremski USA 7:13.88 | | |
| 5 S. Byrne USA 5:11.09 | | | 100 METER FREESTYLE | | | 200 METER FREESTYLE | | | 100 METER FREESTYLE | | | 50 METER FREESTYLE | | |
| 1500 METER FREESTYLE | | | 1 L. Johnson USA 5:19.52 | | | 1 J. Katz USA 2:27.97 | | | 1 M. Lush CAN 1:11.91 | | | 1 H. Palmer USA 33.88 | | |
| 1 C. Ruppert USA 19:19.62 | | | 2 C. Johnson USA 5:23.30 | | | 2 B. Bennett USA 2:31.07 | | | 2 J. Bruner USA 1:13.50 | | | 2 L. Stoynoff USA 34.04 | | |
| 2 P. Baier USA 19:48.59 | | | 3 M. Richison USA 5:26.60 | | | 3 N. Ridout USA 2:37.70 | | | 3 H. Holer GER 1:14.50 | | | 3 J. Smith USA 34.82 | | |
| 3 B. Dunbar USA 20:58.77 | | | 4 J. Menard USA 5:31.45 | | | 4 T. Bertenlink CAN 2:41.06 | | | 4 S. Kearney USA 1:15.31 | | | 4 J. Gettling CAN 35.70 | | |
| 4 D. Wise USA 21:01.15 | | | 5 K. King USA 5:33.68 | | | 5 J. Royer USA 2:45.33 | | | 5 H. Buss USA 1:15.43 | | | 5 D. Hann USA 35.85 | | |
| 5 P. Courtet USA 21:13.45 | | | 1500 METER FREESTYLE | | | 400 METER FREESTYLE | | | 200 METER FREESTYLE | | | 100 METER FREESTYLE | | |
| 50 METER BACKSTROKE | | | 1 J. May USA 21:44.43 | | | 1 J. Katz USA 5:10.73 | | | 1 M. Buss USA 2:39.10 | | | 1 L. Stoynoff USA 1:16.00 | | |
| 1 L. Skrifvars USA 33.71 | | | 2 K. Ecker USA 21:44.93 | | | 2 B. Bennett USA 5:36.16 | | | 2 H. Mulder GER 2:40.23 | | | 2 H. Palmer USA 1:17.48 | | |
| 2 C. Csepregi CAN 33.90 | | | 3 J. Menard USA 22:04.43 | | | 3 N. Ridout USA 5:36.80 | | | 3 T. Seidl GER 2:41.15 | | | 3 J. Smith USA 1:20.34 | | |
| 3 D. Pflugheber USA 34.19 | | | 4 B. West USA 22:13.60 | | | 4 T. Bertenlink CAN 5:42.88 | | | 4 M. Lush CAN 2:42.62 | | | 4 D. Hann USA 1:22.49 | | |
| 4 C. Brewton USA 35.40 | | | 5 E. Long AUS 22:16.00 | | | 5 J. Royer USA 5:53.59 | | | 5 H. Kaiser GER 2:46.42 | | | 5 K. Eason CAN 1:22.86 | | |
| 5 U. Reimer GER 36.30 | | | 50 METER BACKSTROKE | | | 1500 METER FREESTYLE | | | 400 METER FREESTYLE | | | 200 METER FREESTYLE | | |
| 100 METER BACKSTROKE | | | 1 B. Merten GER 35.80 | | | 1 J. Katz USA 20:42.04 | | | 1 M. Buss USA 5:38.50 | | | 1 L. Stoynoff USA 2:45.70 | | |
| 1 L. Skrifvars USA 1:14.63 | | | 2 L. Johnson USA 36.20 | | | 2 B. Bennett USA 23:06.00 | | | 2 H. Kaiser GER 5:56.36 | | | 2 H. Palmer USA 3:00.94 | | |
| 2 C. Pflugheber USA 1:15.14 | | | 3 B. Foley AUS 37.60 | | | 3 N. Ridout USA 23:10.60 | | | 3 M. Brown USA 6:00.61 | | | 3 E. Metzger GER 3:01.84 | | |
| 3 D. Csepregi CAN 1:15.31 | | | 4 C. Lamers GER 37.90 | | | 4 J. Royer USA 23:38.90 | | | 4 B. Zaremski USA 6:10.01 | | | 4 J. Smith USA 3:07.70 | | |
| 4 K. Eaton USA 1:18.47 | | | 5 E. Long AUS 38.20 | | | 5 M. Hough CAN 24:47.60 | | | 5 H. Saeyes CAN 6:12.71 | | | 5 K. Eason CAN 3:09.86 | | |
| 5 U. Reimer GER 1:20.00 | | | 100 METER BACKSTROKE | | | 50 METER BACKSTROKE | | | 1500 METER FREESTYLE | | | 400 METER FREESTYLE | | |
| 200 METER BACKSTROKE | | | 1 D. Ustual USA 1:18.08 | | | 1 C. McCullough USA 35.18 | | | 1 H. Kaiser GER 23:30.97 | | | 1 L. Stoynoff USA 5:53.70 | | |
| 1 D. Csepregi CAN 2:44.67 | | | 2 L. Johnson USA 1:23.61 | | | 2 B. Bennett USA 36.72 | | | 2 N. Brown USA 23:44.87 | | | 2 H. Palmer USA 6:17.56 | | |
| 2 D. Wise USA 2:44.84 | | | 3 J. French USA 1:24.05 | | | 3 K. Kliesen GER 37.10 | | | 3 B. Zaremski USA 24:28.41 | | | 3 K. Eason CAN 6:47.68 | | |
| 3 P. Baier USA 2:53.31 | | | 4 C. Chidester USA 1:24.77 | | | 4 D. Harke GER 37.70 | | | 4 J. Gray USA 24:40.89 | | | 4 J. McIntyre USA 6:54.80 | | |
| 4 C. Morse USA 2:54.57 | | | 5 P. Harris USA 1:25.85 | | | 5 P. Hewlcke GER 38.50 | | | 5 F. Saeyes CAN 24:48.34 | | | 5 G. Roper USA 6:55.10 | | |
| 5 N. Jannarone USA 2:57.43 | | | 200 METER BACKSTROKE | | | 100 METER BACKSTROKE | | | 50 METER BACKSTROKE | | | 1500 METER FREESTYLE | | |
| 50 METER BREASTSTROKE | | | 1 D. Ustual USA 2:53.78 | | | 1 B. Bennett USA 1:19.89 | | | 1 H. Holer GER 38.31 | | | 1 L. Stoynoff USA 23:38.70 | | |
| 1 C. Elsher GER 35.89 | | | 2 L. Johnson USA 2:58.87 | | | 2 C. McCullough USA 1:20.16 | | | 2 B. Jordan USA 38.90 | | | 2 H. Palmer USA 24:43.14 | | |
| 2 J. Gettling USA 38.10 | | | 3 J. Trenck USA 3:00.83 | | | 3 B. Pronk CAN 1:22.24 | | | 3 M. Gray USA 39.01 | | | 3 C. Baxter USA 26:36.35 | | |
| 3 M. Kopen GER 38.23 | | | 4 C. Chidester USA 3:02.26 | | | 4 J. Katz USA 1:22.33 | | | 4 F. Hoeben AUS 39.53 | | | 4 A. Bergquist USA 27:25.03 | | |
| 4 C. Heeren GER 38.31 | | | 5 C. Brown USA 3:03.74 | | | 5 B. Frid USA 1:26.85 | | | 5 M. Schulz GER 39.70 | | | 5 J. Kerswill USA 27:37.10 | | |
| 5 U. Deus GER 39.31 | | | 50 METER BREASTSTROKE | | | 200 METER BACKSTROKE | | | 100 METER BREASTSTROKE | | | 50 METER BREASTSTROKE | | |
| 100 METER BREASTSTROKE | | | 1 J. Gettling USA 38.20 | | | 1 B. Bennett USA 2:51.84 | | | 1 A. Konig USA 1:28.10 | | | 1 C. Haier GER 40.90 | | |
| 1 C. Elsher GER 1:18.94 | | | 2 S. Roy USA 38.81 | | | 2 J. Katz USA 2:57.76 | | | 2 B. Jordan USA 1:28.20 | | | 2 E. Metzger GER 41.90 | | |
| 2 B. Hannowsky GER 1:22.47 | | | 3 M. Grottenpick GER 40.52 | | | 3 B. Pronk CAN 3:00.03 | | | 3 M. Gray USA 1:28.33 | | | 3 J. Oliver CAN 42.44 | | |
| 3 J. Gettling USA 1:23.93 | | | 4 C. Lamers GER 40.67 | | | 4 B. Frid USA 3:10.12 | | | 4 C. Macpherson USA 1:30.30 | | | 4 L. Stoynoff USA 43.08 | | |
| 4 M. Phelan USA 1:24.34 | | | 5 B. Merten GER 40.84 | | | 5 P. Hills USA 3:12.30 | | | 5 S. Rittenhouse USA 1:31.50 | | | 5 S. Kreplin USA 44.70 | | |
| 5 M. Kopen GER 1:25.24 | | | 100 METER BREASTSTROKE | | | 50 METER BREASTSTROKE | | | 200 METER BACKSTROKE | | | 100 METER BREASTSTROKE | | |
| 200 METER BREASTSTROKE | | | 1 J. Gettling USA 1:25.02 | | | 1 B. Pronk CAN 38.88 | | | 1 A. Konig USA 3:12.90 | | | 1 L. Stoynoff USA 1:34.19 | | |
| 1 M. Phelan USA 3:03.28 | | | 2 S. Roy USA 1:26.13 | | | 2 M. Jennfleben GER 38.92 | | | 2 N. Brown USA 3:13.48 | | | 2 C. Baxter USA 1:35.04 | | |
| 2 D. Wise USA 3:05.60 | | | 3 C. Lane USA 1:28.43 | | | 3 A. Dittberner GER 39.77 | | | 3 C. Macpherson USA 3:13.89 | | | 3 J. McIntyre USA 1:36.60 | | |
| 3 Y. Cattrail CAN 3:10.85 | | | 4 M. Grottenpick GER 1:29.38 | | | 4 I. Heuser GER 40.58 | | | 4 H. Kaiser USA 3:16.41 | | | 4 J. Oliver CAN 1:37.37 | | |
| 4 G. Drake USA 3:11.93 | | | 5 C. Sillak USA 1:29.47 | | | 5 R. Franke GER 41.43 | | | 5 S. Rittenhouse USA 3:16.90 | | | 5 S. Kreplin USA 1:39.67 | | |
| 5 J. Gettling USA 3:12.40 | | | 200 METER BREASTSTROKE | | | 100 METER BREASTSTROKE | | | 50 METER BREASTSTROKE | | | 200 METER BACKSTROKE | | |
| 50 METER BUTTERFLY | | | 1 S. Roy USA 3:05.60 | | | 1 B. Pronk CAN 1:24.80 | | | 1 J. Vejoncic GER 41.15 | | | 1 L. Stoynoff USA 3:19.84 | | |
| 1 K. Eaton USA 30.81 | | | 2 J. Gettling USA 3:12.60 | | | 2 M. Jennfleben GER 1:29.08 | | | 2 G. Krutz GER 41.27 | | | 2 C. Baxter USA 3:24.80 | | |
| 2 B. Dunbar USA 31.30 | | | 3 C. Lane USA 3:13.31 | | | 3 R. Franke GER 1:29.67 | | | 3 G. Leinewer GER 41.66 | | | 3 S. Kreplin USA 3:34.60 | | |
| 3 M. Noppen CAN 31.57 | | | 4 S. Westnedge USA 3:14.55 | | | 4 A. Dittberner GER 1:30.49 | | | 4 G. Fischer GER 42.33 | | | 4 J. McIntyre USA 3:36.55 | | |
| 4 C. Pflugheber USA 32.12 | | | 5 J. Sherman USA 3:15.55 | | | 5 R. Binder GER 1:34.72 | | | 5 A. Ludicke GER 43.29 | | | 5 I. Roberts USA 3:40.59 | | |
| 5 L. McKenzie AUS 32.36 | | | 50 METER BUTTERFLY | | | 200 METER BREASTSTROKE | | | 100 METER BREASTSTROKE | | | 50 METER BREASTSTROKE | | |
| 100 METER BUTTERFLY | | | 1 D. Todd USA 32.80 | | | 1 B. Pronk CAN 3:06.22 | | | 1 G. Fischer GER 1:35.61 | | | 1 A. Duren GER 44.19 | | |
| 1 C. Ruppert USA 1:08.38 | | | 2 L. Johnson USA 33.48 | | | 2 R. Franke GER 3:18.46 | | | 2 J. Bruner USA 1:37.32 | | | 2 B. Smith USA 44.28 | | |
| 2 B. Dunbar USA 1:09.08 | | | 3 B. Edwards USA 33.50 | | | 3 J. Sike USA 3:24.66 | | | 3 R. Tautz GER 1:38.32 | | | 3 S. Eisele CAN 44.61 | | |
| 3 S. Walsh USA 1:11.83 | | | 4 I. David USA 33.58 | | | 4 J. Katz USA 3:24.84 | | | 4 A. McEmond USA 1:38.60 | | | 4 E. Mestler GER 45.17 | | |
| 4 A. Westphal GER 1:12.02 | | | 5 P. Harris USA 33.62 | | | 5 E. Unse GER 3:25.12 | | | 5 C. Taylor USA 1:38.70 | | | 5 C. Taylor USA 45.48 | | |
| 5 S. Warming GER 1:12.73 | | | 100 METER BUTTERFLY | | | 50 METER BUTTERFLY | | | 200 METER BREASTSTROKE | | | 100 METER BREASTSTROKE | | |
| 200 METER BUTTERFLY | | | 1 L. Johnson USA 1:14.49 | | | 1 H. Kampeschulte GER 33.35 | | | 1 J. Bruner USA 3:34.34 | | | 1 J. Bertram CAN 1:38.03 | | |
| 1 C. Ruppert USA 2:42.61 | | | 2 P. Harris USA 1:15.02 | | | 2 N. Breen USA 33.50 | | | 2 R. VanEgmond USA 3:38.30 | | | 2 S. Eisele CAN 1:39.14 | | |
| 2 J. Reuter USA 2:44.14 | | | 3 A. Grams USA 1:15.30 | | | 3 M. Soucheray USA 34.07 | | | 3 L. Hoey USA 3:38.50 | | | 3 A. Duren GER 1:39.64 | | |
| 3 J. Stewart USA 2:51.40 | | | 4 I. David USA 1:17.02 | | | 4 C. DeLuca USA 34.39 | | | 4 J. Gray USA 3:43.33 | | | 4 E. Mestler GER 1:39.91 | | |
| 4 J. Mason USA 3:02.99 | | | 5 C. Johnson USA 1:17.50 | | | 5 N. Ridout USA 34.70 | | | 5 A. Champ USA 3:52.69 | | | 5 A. Pisciotta USA 1:41.20 | | |
| 5 C. Engelhardt USA 3:03.50 | | | 200 METER BUTTERFLY | | | 100 METER BUTTERFLY | | | 50 METER BUTTERFLY | | | 200 METER BREASTSTROKE | | |
| 400 METER INDIVIDUAL MEDLEY | | | 1 C. Ruppert USA 2:53.62 | | | 1 C. DeLuca USA 1:17.63 | | | 1 H. Holer GER 34.18 | | | 1 J. Bertram CAN 1:39.24 | | |
| 1 C. Ruppert USA 2:53.62 | | | 2 D. Wise USA 2:59.71 | | | 2 N. Ridout USA 1:21.60 | | | 2 T. Seidl GER 36.39 | | | 2 A. Pisciotta USA 3:37.10 | | |
| 2 D. Wise USA 2:59.71 | | | 3 M. Noppen CAN 2:41.67 | | | 3 M. Soucheray USA 1:21.62 | | | 3 N. Brown USA 37.60 | | | 3 A. Duren GER 3:37.88 | | |
| 3 M. Noppen CAN 2:41.67 | | | 4 B. Hannowsky GER 2:43.46 | | | 4 B. Bennett USA 1:22.37 | | | 4 F. Saeyes CAN 37.95 | | | 4 C. Baxter USA 3:41.34 | | |
| | | | | | | | | | | | | | | |

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|------------------------------------|-----|----------|------------------------------------|-----|----------|------------------------------------|-----|----------|-------------------------------|-----|----------|------------------------------------|-----|----------|--|
| 50 METER BUTTERFLY | | | 400 METER INDIVIDUAL MEDLEY | | | 400 METER FREESTYLE | | | 200 METER BACKSTROKE | | | 100 METER BUTTERFLY | | | |
| 1 J. Oliver | CAN | 40.35 | 1 A. Adams | USA | 7:04.25 | 1 J. Osborne | USA | 7:22.42 | 1 G. McCarthy | USA | 4:14.40 | 1 K. Pelton | USA | 4:38.76 | |
| 2 J. Smith | USA | 42.20 | 2 J. Krauser | USA | 7:15.06 | 2 R. Simonon | USA | 7:27.88 | 2 H. Offenhausser | USA | 4:23.73 | 200 METER BUTTERFLY | | | |
| 3 B. Callison | USA | 43.80 | 3 T. Bolster | USA | 7:35.23 | 3 J. Durston | USA | 7:34.00 | 3 S. Sheppard | USA | 4:40.52 | 1 K. Pelton | USA | 6:17.42 | |
| 4 J. Bertram | CAN | 43.89 | 4 R. Turcotte | USA | 7:56.40 | 4 J. McDonsey | USA | 7:46.13 | 4 E. Muller | USA | 4:50.80 | 200 METER INDIVIDUAL MEDLEY | | | |
| 5 E. Nestler | GER | 44.08 | 5 E. Rogers | USA | 8:14.20 | 5 N. Clark | USA | 8:00.80 | 5 M. Scanlon | USA | 5:08.56 | 1 S. Scott | USA | 8:19.45 | |
| 100 METER BUTTERFLY | | | 50 METER FREESTYLE | | | 1500 METER FREESTYLE | | | 50 METER BREASTSTROKE | | | 400 METER INDIVIDUAL MEDLEY | | | |
| 1 J. Oliver | CAN | 1:35.02 | 1 D. Donnelly | USA | 34.63 | 1 R. Simonon | USA | 29:05.13 | 1 H. Butzbach | GER | 52.67 | 1 S. Scott | USA | 17:13.68 | |
| 2 B. Callison | USA | 1:40.40 | 2 D. Ressigue | USA | 35.20 | 2 M. Brown | USA | 29:05.41 | 2 G. Schubert | GER | 55.37 | WOMEN 75-79 | | | |
| 3 A. Piscicotta | USA | 1:41.50 | 3 J. Pieretti | USA | 38.29 | 3 J. Osborne | USA | 29:43.50 | 3 E. Sandeman | USA | 55.80 | 1 F. Watkins | USA | 1:14.50 | |
| 4 H. Palmer | USA | 1:44.68 | 4 N. Phillips | USA | 39.06 | 4 J. Durston | USA | 30:32.54 | 4 E. Matthes | GER | 57.95 | 1 D. Hogan | USA | 1:14.50 | |
| 5 J. Bertram | CAN | 1:45.00 | 5 H. Loser | GER | 39.50 | 5 M. George | USA | 31:08.79 | 5 H. Lochter | GER | 58.23 | 3 J. Cameron | USA | 1:38.60 | |
| 200 METER BUTTERFLY | | | 100 METER FREESTYLE | | | 50 METER BACKSTROKE | | | 100 METER BREASTSTROKE | | | 300 METER FREESTYLE | | | |
| 1 A. Adams | USA | 3:42.33 | 1 D. Donnelly | USA | 1:17.91 | 1 W. VanRysel | GB | 44.25 | 1 M. Butzbach | GER | 1:57.79 | 1 D. Hogan | USA | 2:35.88 | |
| 2 C. Baxter | USA | 3:46.99 | 2 J. Pieretti | USA | 1:25.82 | 2 C. Thiel | GER | 48.31 | 2 E. Sandeman | USA | 2:04.70 | 2 B. Hogan | USA | 2:48.27 | |
| 3 H. Palmer | USA | 3:52.44 | 3 N. Phillips | USA | 1:30.56 | 3 V. Andresen | USA | 48.50 | 3 M. Merlino | USA | 2:06.76 | 3 J. Cameron | USA | 3:46.90 | |
| 4 A. Piscicotta | USA | 3:54.70 | 4 B. Dandy | USA | 1:31.22 | 4 H. Elsfield | GER | 51.60 | 4 M. Miller | USA | 2:15.50 | 200 METER FREESTYLE | | | |
| 5 B. Callison | USA | 3:59.30 | 5 B. Bailey | AUS | 1:35.19 | 5 C. Spindelndreher | GER | 53.23 | 5 G. McCarthy | USA | 2:18.77 | 1 D. Hogan | USA | 6:12.19 | |
| 200 METER INDIVIDUAL MEDLEY | | | 200 METER FREESTYLE | | | 100 METER BACKSTROKE | | | 200 METER BREASTSTROKE | | | 400 METER FREESTYLE | | | |
| 1 E. Metzger | GER | 3:16.71 | 1 D. Ressigue | USA | 3:02.90 | 1 W. VanRysel | GB | 1:42.62 | 1 M. Butzbach | GER | 4:15.43 | 2 J. Cameron | USA | 7:56.00 | |
| 2 J. Oliver | CAN | 3:28.11 | 2 D. Donnelly | USA | 3:04.84 | 2 C. Thiel | GER | 1:49.09 | 2 M. Merlino | USA | 4:28.43 | 1 D. Hogan | USA | 13:01.00 | |
| 3 C. Baxter | USA | 3:30.14 | 3 G. Orsco | USA | 3:11.60 | 3 M. George | USA | 1:57.59 | 3 E. Sandeman | USA | 4:30.09 | 2 J. Cameron | USA | 18:23.70 | |
| 4 B. Callison | USA | 3:31.30 | 4 J. Pieretti | USA | 3:20.69 | 4 M. Jewett | USA | 2:00.68 | 4 A. Jannarone | USA | 4:54.22 | 3 R. Deal | USA | 23:38.07 | |
| 5 J. Smith | USA | 3:33.74 | 5 H. Hummer | USA | 3:22.88 | 5 L. Peterson | USA | 2:12.20 | 5 M. Gottschalk | GER | 4:55.51 | 50 METER BACKSTROKE | | | |
| 400 METER INDIVIDUAL MEDLEY | | | 400 METER FREESTYLE | | | 200 METER BACKSTROKE | | | 50 METER BUTTERFLY | | | 100 METER BREASTSTROKE | | | |
| 1 C. Baxter | USA | 7:27.00 | 1 G. Orsco | USA | 6:39.89 | 1 W. VanRysel | GB | 3:50.37 | 1 M. Merlino | USA | 54.54 | 1 F. Watkins | USA | 1:15.01 | |
| 2 J. Smith | USA | 7:42.03 | 2 J. Eppley | USA | 7:05.27 | 2 M. George | USA | 4:15.52 | 2 G. McCarthy | USA | 1:02.38 | 2 J. Cameron | USA | 3:02.80 | |
| 3 B. Callison | USA | 7:42.99 | 3 H. Hummer | USA | 7:13.76 | 3 P. Matthiesen | USA | 4:24.28 | 3 H. Offenhausser | USA | 1:10.60 | 100 METER BACKSTROKE | | | |
| 4 N. MacBeth | USA | 7:44.69 | 4 J. Pieretti | USA | 7:14.98 | 4 M. Jewett | USA | 4:32.37 | 4 E. Goldman | USA | 1:13.50 | 1 F. Watkins | USA | 2:42.29 | |
| 5 P. Puckett | USA | 7:57.40 | 5 H. Hamner | USA | 7:19.48 | 5 J. Meservey | USA | 4:38.99 | 5 J. Bennett | USA | 1:22.30 | 200 METER BACKSTROKE | | | |
| WOMEN 50-54 | | | 1500 METER FREESTYLE | | | 50 METER BREASTSTROKE | | | 100 METER BUTTERFLY | | | 100 METER BREASTSTROKE | | | |
| 1 B. Bennett | USA | 33.70 | 1 J. Eppley | USA | 27:50.30 | 1 C. Spindelndreher | GER | 50.80 | 1 M. Merlino | USA | 2:09.20 | 1 R. Deal | USA | 11:42.12 | |
| 2 A. Adams | USA | 35.90 | 2 H. Hummer | USA | 28:37.24 | 2 H. Elsfield | GER | 50.86 | 2 E. Sandeman | USA | 2:22.70 | 1 D. Hogan | USA | 3:24.03 | |
| 3 G. Bohner | GER | 37.07 | 3 M. Hamner | USA | 28:54.02 | 3 C. Thiel | GER | 51.44 | 3 H. Offenhausser | USA | 2:39.01 | 2 J. Cameron | USA | 6:13.30 | |
| 4 D. LaChasse | USA | 37.64 | 4 J. Pieretti | USA | 29:28.44 | 4 G. Harnisch | GER | 53.11 | 4 E. Mattila | USA | 2:58.38 | 200 METER FREESTYLE | | | |
| 5 S. Erickson | USA | 37.85 | 5 M. Lee | USA | 29:42.31 | 5 V. Thompson | USA | 53.68 | 5 J. Bennett | USA | 3:10.10 | 1 D. Hogan | USA | 7:06.04 | |
| 50 METER FREESTYLE | | | 50 METER BACKSTROKE | | | 100 METER BREASTSTROKE | | | 200 METER BUTTERFLY | | | 50 METER BUTTERFLY | | | |
| 1 A. Adams | USA | 1:20.12 | 1 D. Donnelly | USA | 44.79 | 1 V. Thompson | USA | 1:56.42 | 1 M. Merlino | USA | 4:33.30 | 1 M. Merlino | USA | 4:33.30 | |
| 2 B. Bennett | USA | 1:21.30 | 2 L. Arbogast | GER | 45.95 | 2 V. Thompson | USA | 1:57.86 | 2 H. Offenhausser | USA | 6:06.70 | 2 H. Offenhausser | USA | 6:06.70 | |
| 3 R. Turcotte | USA | 1:24.14 | 3 N. Phillips | USA | 47.61 | 3 E. Dirken | GER | 2:09.23 | 3 L. Bennett | USA | 9:57.93 | 200 METER INDIVIDUAL MEDLEY | | | |
| 4 D. LaChasse | USA | 1:26.18 | 4 H. Loser | GER | 47.65 | 4 B. Skoczek | USA | 2:10.66 | 1 M. Merlino | USA | 4:12.10 | 1 M. Merlino | USA | 4:12.10 | |
| 5 S. Erickson | USA | 1:28.14 | 5 B. Callaghan | AUS | 47.78 | 5 P. Matthiesen | USA | 2:11.24 | 2 E. Sandeman | USA | 4:36.50 | 2 E. Sandeman | USA | 4:36.50 | |
| 200 METER FREESTYLE | | | 100 METER BACKSTROKE | | | 200 METER BREASTSTROKE | | | 400 METER FREESTYLE | | | 200 METER FREESTYLE | | | |
| 1 A. Adams | USA | 2:56.81 | 1 M. Hamner | USA | 1:38.92 | 1 V. Thompson | USA | 4:17.64 | 3 H. Offenhausser | USA | 4:54.47 | 3 H. Offenhausser | USA | 4:54.47 | |
| 2 J. Krauser | USA | 3:05.20 | 2 D. Donnelly | USA | 1:39.96 | 2 G. Malcherlk | GER | 4:18.38 | 4 E. Goldman | USA | 5:13.10 | 4 E. Goldman | USA | 5:13.10 | |
| 3 B. Bennett | USA | 3:06.80 | 3 N. Phillips | USA | 1:43.96 | 3 E. Dirken | GER | 4:36.00 | 5 E. Mattila | USA | 5:13.22 | 50 METER INDIVIDUAL MEDLEY | | | |
| 4 R. Turcotte | USA | 3:08.53 | 4 Z. Taft | USA | 1:51.60 | 4 P. Matthiesen | USA | 4:36.91 | 1 M. Merlino | USA | 8:42.66 | 2 H. Offenhausser | USA | 10:20.23 | |
| 5 S. Erickson | USA | 3:12.67 | 5 H. Kruskalka | USA | 1:53.42 | 5 M. George | USA | 4:37.55 | 3 E. Mattila | USA | 11:02.47 | 4 D. Cole | USA | 12:18.95 | |
| 400 METER FREESTYLE | | | 200 METER BACKSTROKE | | | 50 METER BUTTERFLY | | | 200 METER BUTTERFLY | | | 50 METER BUTTERFLY | | | |
| 1 A. Adams | USA | 6:12.22 | 1 M. Hamner | USA | 3:31.62 | 1 V. Thompson | USA | 47.18 | 1 W. VanRysel | GB | 49.37 | 1 M. Merlino | USA | 8:42.66 | |
| 2 J. Krauser | USA | 6:26.47 | 2 D. Donnelly | USA | 3:43.13 | 2 W. Thompson | USA | 49.37 | 3 N. Clark | USA | 58.30 | 2 H. Offenhausser | USA | 10:20.23 | |
| 3 B. Bennett | USA | 6:31.30 | 3 N. Phillips | USA | 3:47.85 | 3 N. Clark | USA | 58.30 | 4 M. Anderson | USA | 59.46 | 3 E. Mattila | USA | 11:02.47 | |
| 4 R. Turcotte | USA | 6:43.28 | 4 Z. Taft | USA | 4:02.50 | 5 M. George | USA | 1:00.09 | 5 M. George | USA | 1:00.09 | 4 D. Cole | USA | 12:18.95 | |
| 5 S. Erickson | USA | 6:49.49 | 50 METER BREASTSTROKE | | | 100 METER BUTTERFLY | | | 50 METER FREESTYLE | | | WOMEN 70-74 | | | |
| 1 A. Adams | USA | 24:47.17 | 1 M. Loser | GER | 45.95 | 1 R. Simonon | USA | 2:05.40 | 1 V. Cherriman | GB | 47.51 | 50 METER FREESTYLE | | | |
| 2 J. Krauser | USA | 24:58.32 | 2 M. Eickler | GER | 47.57 | 2 V. Thompson | USA | 2:09.50 | 2 K. Eschmann | USA | 50.15 | 2 K. Eschmann | USA | 50.15 | |
| 3 S. Erickson | USA | 27:08.29 | 3 C. Costello | USA | 47.85 | 3 P. Matthiesen | USA | 2:25.63 | 3 M. Bishop | AUS | 52.31 | 3 M. Bishop | AUS | 52.31 | |
| 4 C. Derr | USA | 27:49.50 | 4 B. Callaghan | USA | 49.10 | 4 M. Reeves | USA | 2:36.20 | 4 H. Montgomery | USA | 57.40 | 4 H. Montgomery | USA | 57.40 | |
| 5 K. Harrison | USA | 28:24.40 | 5 E. Rauner | GER | 49.22 | 5 M. Anderson | USA | 2:48.75 | 100 METER FREESTYLE | | | 100 METER FREESTYLE | | | |
| 50 METER BACKSTROKE | | | 100 METER BREASTSTROKE | | | 200 METER BUTTERFLY | | | 200 METER BUTTERFLY | | | 200 METER BUTTERFLY | | | |
| 1 A. Adams | USA | 42.90 | 1 P. Pickets | USA | 1:40.19 | 1 R. Simonon | USA | 4:31.50 | 1 V. Cherriman | GB | 4:00.67 | 1 V. Cherriman | GB | 4:00.67 | |
| 2 R. Turcotte | USA | 43.65 | 2 C. Costello | USA | 1:42.83 | 2 M. George | USA | 4:50.74 | 2 R. Switzer | USA | 4:19.53 | 2 R. Switzer | USA | 4:19.53 | |
| 3 L. Wolf | GER | 45.77 | 3 M. Eickler | GER | 1:46.22 | 3 M. Anderson | USA | 5:31.08 | 3 K. Pelton | USA | 5:09.57 | 3 K. Pelton | USA | 5:09.57 | |
| 4 S. Erickson | USA | 45.91 | 4 N. Pessel | USA | 1:51.50 | 4 R. Steward | USA | 8:04.71 | 4 E. Somers | USA | 5:11.75 | 4 E. Somers | USA | 5:11.75 | |
| 5 M. Weaver | CAN | 47.05 | 5 M. Hamner | USA | 1:52.63 | 200 METER INDIVIDUAL MEDLEY | | | 5 D. Newton | USA | 7:04.20 | 5 D. Newton | USA | 7:04.20 | |
| 100 METER BACKSTROKE | | | 200 METER BREASTSTROKE | | | 400 METER INDIVIDUAL MEDLEY | | | 50 METER FREESTYLE | | | 50 METER FREESTYLE | | | |
| 1 A. Adams | USA | 1:32.13 | 1 C. Costello | USA | 3:47.56 | 1 J. Osborne | USA | 3:50.10 | 1 V. Cherriman | GB | 8:29.26 | 1 V. Cherriman | GB | 8:29.26 | |
| 2 R. Turcotte | USA | 1:32.99 | 2 N. Pessel | USA | 3:50.35 | 2 R. Simonon | USA | 4:05.11 | 2 R. Switzer | USA | 9:03.19 | 2 R. Switzer | USA | 9:03.19 | |
| 3 D. LaChasse | USA | 1:38.61 | 3 M. Hamner | USA | 4:07.34 | 3 V. Thompson | USA | 8:53.01 | 3 E. Somers | USA | 10:33.20 | 3 E. Somers | USA | 10:33.20 | |
| 4 S. Erickson | USA | 1:44.92 | 4 E. Sagasti | USA | 4:11.33 | 4 M. George | USA | 4:20.06 | 4 E. Mauric | USA | 10:33.59 | 4 E. Mauric | USA | 10:33.59 | |
| 5 G. Hinricks | USA | 1:46.27 | 5 E. Hoff | GER | 4:17.56 | 5 P. Matthiesen | USA | 4:27.77 | 5 T. Nurdock | USA | 11:52.40 | 5 T. Nurdock | USA | 11:52.40 | |
| 200 METER BACKSTROKE | | | 50 METER BUTTERFLY | | | WOMEN 65-69 | | | 100 METER FREESTYLE | | | 100 METER FREESTYLE | | | |
| 1 A. Adams | USA | 3:15.01 | 1 C. Costello | USA | 41.57 | 1 G. McCarthy | USA | 4:00.00 | 1 V. Cherriman | GB | 33:37.31 | 1 V. Cherriman | GB | 33:37.31 | |
| 2 R. Turcotte | USA | 3:21.52 | 2 J. Eppley | USA | 43.00 | 2 D. Musselman | USA | 4:01.11 | 2 R. Switzer | USA | 35:52.89 | 2 R. Switzer | USA | 35:52.89 | |
| 3 D. LaChasse | USA | 3:35.92 | 3 H. Loser | GER | 47.55 | 3 M. Merlino | USA | 4:29.98 | 3 M. McKechnie | USA | 38:21.48 | 3 M. McKechnie | USA | 38:21.48 | |
| 4 S. Erickson | USA | 3:42.55 | 4 H. Hummer | USA | 50.39 | 4 H. Offenhausser | USA | 4:29.98 | 4 E. Somers | USA | 41:03.64 | 4 E. Somers | USA | 41:03.64 | |
| 5 J. Krauser | USA | 3:46.71 | 5 B. Dandy | USA | 52.22 | 4 G. Schubert | GER | 47.36 | 5 E. Mauric | USA | 41:13.80 | 5 E. Mauric | USA | 41:13.80 | |
| 50 METER BREASTSTROKE | | | 100 METER BUTTERFLY | | | 200 METER FREESTYLE | | | 50 METER BACKSTROKE | | | 50 METER BACKSTROKE | | | |
| 1 J. Sanson | AUS | 44.62 | 1 J. Eppley | USA | 1:44.27 | 1 D. Musselman | USA | 1:32.60 | 1 K. Eschmann | USA | 56.04 | 1 K. Eschmann | USA | 56.04 | |
| 2 A. Horst | USA | 45.30 | 2 C. Costello | USA | 1:44.87 | 2 M. Merlino | USA | 1:35.76 | 2 H. Montgomery | USA | 1:01.50 | 2 H. Montgomery | USA | 1:01.50 | |
| 3 G. Bohner | GER | 45.79 | 3 G. Orsco | USA | 1:54.30 | 3 G. McCarthy | USA | 1:36.00 | 3 M. McKechnie | USA | 1:04.96 | 3 M. McKechnie | USA | 1:04.96 | |
| 4 R. Henschel | GER | 45.86 | 4 H. Hummer | USA | 2:02.27 | 4 C. Ballard | USA | 1:47.62 | 4 K. Pelton | USA | 1:12.18 | 4 K. Pelton | USA | 1:12.18 | |
| 5 A. Adams | USA | 47.60 | 5 Z. Taft | USA | 2:05.80 | 5 S. Sheppard | USA | 2:05.15 | 5 R. Caplane | USA | 1:15.59 | 5 R. Caplane | USA | 1:15.59 | |
| 100 METER BREASTSTROKE | | | 200 METER BUTTERFLY | | | 100 METER FREESTYLE | | | 50 METER BACKSTROKE | | | 50 METER BACKSTROKE | | | |
| 1 T. Bolster | USA | 1:44.07 | 1 J. Eppley | USA | 3:57.32 | 1 D. Musselman | USA | 1:32.60 | 1 K. Eschmann | USA | 56.04 | 1 K. Eschmann | USA | 56.04 | |
| 2 J. Reed | USA | 1:46.25 | 2 G. Orsco | USA | 4:10.86 | 2 M. Merlino | USA | 1:35.76 | 2 H. Montgomery | USA | 1:01.50 | 2 H. Montgomery | USA | 1:01.50 | |
| 3 V. Akkerman | USA | 1:46.26 | 3 R. Simonon | USA | 4: | | | | | | | | | | |

50 METER BUTTERFLY

| | |
|-------------------|-------|
| 1 P. O'Connor USA | 27.06 |
| 2 R. McKay USA | 27.30 |
| 3 P. Katz USA | 27.46 |
| 4 J. Foote USA | 27.52 |
| 5 G. Jeffers USA | 27.89 |

100 METER BUTTERFLY

| | |
|--------------------|---------|
| 1 R. Orr USA | 1:00.60 |
| 2 F. Forshey USA | 1:02.77 |
| 3 A. Focke GER | 1:02.84 |
| 4 G. Hidle USA | 1:03.10 |
| 5 J. Salvatore USA | 1:04.24 |

200 METER BUTTERFLY

| | |
|-------------------|---------|
| 1 P. Katz USA | 2:26.70 |
| 2 G. Hidle USA | 2:34.60 |
| 3 D. Levinson USA | 2:38.96 |
| 4 E. King USA | 2:44.10 |
| 5 L. Troxell USA | 2:48.37 |

200 METER INDIVIDUAL MEDLEY

| | |
|----------------------|---------|
| 1 T. Huesken USA | 2:24.52 |
| 2 R. Whitchurch USA | 2:26.50 |
| 3 F. Forshey USA | 2:28.80 |
| 4 A. Aguarrivera VEN | 2:28.95 |
| 5 R. Cooley USA | 2:29.08 |

400 METER INDIVIDUAL MEDLEY

| | |
|-------------------|---------|
| 1 R. Orr USA | 5:26.00 |
| 2 D. Levinson USA | 5:28.94 |
| 3 S. Harrison USA | 5:31.86 |
| 4 V. Hintlian USA | 5:37.36 |
| 5 G. Spohn USA | 5:48.28 |

MEN 30-34

50 METER FREESTYLE

| | |
|-------------------|-------|
| 1 K. Krueger USA | 25.73 |
| 2 J. Stafford USA | 26.24 |
| 3 V. Capriles VEN | 26.32 |
| 4 A. Jarvis CAN | 26.34 |
| 5 D. Gray USA | 26.40 |

100 METER FREESTYLE

| | |
|--------------------|-------|
| 1 F. Schlicher USA | 55.51 |
| 2 J. Gordon USA | 57.42 |
| 3 D. Gray USA | 58.20 |
| 4 J. Stafford USA | 58.24 |
| 5 B. Peterson USA | 58.70 |

200 METER FREESTYLE

| | |
|--------------------|---------|
| 1 F. Schlicher USA | 2:02.11 |
| 2 T. Spieker USA | 2:07.91 |
| 3 D. Gray USA | 2:08.30 |
| 4 J. Stafford USA | 2:09.37 |
| 5 G. Hill USA | 2:09.46 |

400 METER FREESTYLE

| | |
|------------------|---------|
| 1 T. Spieker USA | 4:31.01 |
| 2 W. Cerny USA | 4:39.50 |
| 3 K. Bell USA | 4:40.29 |
| 4 G. Hill USA | 4:40.45 |
| 5 J. Sanders USA | 4:45.80 |

1500 METER FREESTYLE

| | |
|------------------|----------|
| 1 T. Spieker USA | 18:05.49 |
| 2 W. Cerny USA | 18:44.10 |
| 3 K. Bell USA | 18:58.23 |
| 4 G. Hill USA | 19:13.10 |
| 5 W. Damm USA | 19:15.05 |

50 METER BACKSTROKE

| | |
|--------------------|-------|
| 1 K. Krueger USA | 29.21 |
| 2 F. Schlicher USA | 29.92 |
| 3 V. Capriles VEN | 30.31 |
| 4 P. Heeren GER | 30.56 |
| 5 M. Esser GER | 31.30 |

100 METER BACKSTROKE

| | |
|--------------------|---------|
| 1 K. Krueger USA | 1:05.34 |
| 2 T. Spieker USA | 1:05.78 |
| 3 V. Capriles VEN | 1:08.13 |
| 4 J. Gordon USA | 1:08.59 |
| 5 W. Levingood USA | 1:09.03 |

200 METER BACKSTROKE

| | |
|-------------------|---------|
| 1 T. Spieker USA | 2:19.85 |
| 2 J. Gordon USA | 2:29.79 |
| 3 K. Krueger USA | 2:36.79 |
| 4 D. Good USA | 2:39.30 |
| 5 M. McKinlay USA | 2:40.70 |

50 METER BREASTSTROKE

| | |
|--------------------|-------|
| 1 W. Gutcke GER | 32.40 |
| 2 G. Vonhausen GER | 33.20 |
| 3 W. Gruters GER | 33.80 |
| 4 D. Hotel GER | 34.10 |
| 5 W. Temke GER | 34.20 |

100 METER BREASTSTROKE

| | |
|-------------------|---------|
| 1 M. Cohen USA | 1:14.77 |
| 2 H. Cole USA | 1:15.24 |
| 3 P. Pederson USA | 1:17.07 |
| 4 T. Gorski USA | 1:17.24 |
| 5 N. Kleffman USA | 1:18.55 |

200 METER BREASTSTROKE

| | |
|-------------------|---------|
| 1 H. Cole USA | 2:44.83 |
| 2 M. Cohen USA | 2:49.00 |
| 3 T. Gorski USA | 2:49.43 |
| 4 J. Wanner USA | 2:50.20 |
| 5 P. Pederson USA | 2:53.38 |

50 METER BUTTERFLY

| | |
|--------------------|-------|
| 1 F. Schlicher USA | 26.74 |
| 2 A. Jarvis CAN | 27.01 |
| 3 K. Krueger USA | 27.59 |
| 4 D. Ennis USA | 27.70 |
| 5 P. Lumsden USA | 28.32 |

100 METER BUTTERFLY

| | |
|---------------------|---------|
| 1 F. Schlicher USA | 59.07 |
| 2 A. Helaned USA | 1:02.04 |
| 3 D. Ennis USA | 1:03.33 |
| 4 A. Jarvis CAN | 1:03.44 |
| 5 G. Betancourt VEN | 1:04.20 |

200 METER BUTTERFLY

| | |
|-------------------|---------|
| 1 J. Katis USA | 2:31.60 |
| 2 L. Faust USA | 2:32.80 |
| 3 K. Bell USA | 2:33.15 |
| 4 J. Green USA | 2:34.51 |
| 5 M. Snithers USA | 2:37.50 |

200 METER INDIVIDUAL MEDLEY

| | |
|---------------------|---------|
| 1 F. Schlicher USA | 2:18.78 |
| 2 K. Bell USA | 2:30.29 |
| 3 T. Spieker USA | 2:30.66 |
| 4 J. Katis USA | 2:32.40 |
| 5 G. Betancourt VEN | 2:35.15 |

400 METER INDIVIDUAL MEDLEY

| | |
|--------------------|---------|
| 1 F. Schlicher USA | 5:01.43 |
| 2 T. Spieker USA | 5:18.14 |
| 3 K. Bell USA | 5:27.05 |
| 4 J. Katis USA | 5:29.00 |
| 5 W. Cerny USA | 5:33.90 |

MEN 35-39

50 METER FREESTYLE

| | |
|--------------------|-------|
| 1 S. Clark USA | 25.60 |
| 1 T. Mann USA | 25.60 |
| 3 J. Geoghegan USA | 25.96 |
| 4 B. Clark USA | 26.60 |
| 5 D. Brown CAN | 26.97 |

100 METER FREESTYLE

| | |
|--------------------|-------|
| 1 S. Clark USA | 56.63 |
| 2 J. Geoghegan USA | 58.01 |
| 3 T. Garton USA | 58.22 |
| 4 T. Mann USA | 59.40 |
| 5 D. Hershey USA | 59.86 |

200 METER FREESTYLE

| | |
|--------------------|---------|
| 1 J. Geoghegan USA | 2:13.60 |
| 2 D. Hershey USA | 2:13.63 |
| 3 J. Crane USA | 2:13.80 |
| 4 J. Bohan GER | 2:17.89 |
| 5 C. Neuman USA | 2:21.60 |

400 METER FREESTYLE

| | |
|------------------|---------|
| 1 J. Crane USA | 4:39.80 |
| 2 D. Hershey USA | 4:52.83 |
| 3 P. Schlup USA | 4:57.89 |
| 4 P. Goode USA | 4:58.40 |
| 5 A. Somers USA | 5:00.30 |

50 METER FREESTYLE

| | |
|-------------------|----------|
| 1 J. Crane USA | 19:13.30 |
| 2 P. Schlup USA | 19:46.93 |
| 3 P. Goode USA | 20:07.50 |
| 4 H. Hamilton USA | 20:12.50 |
| 5 D. Hershey USA | 20:16.95 |

50 METER BACKSTROKE

| | |
|-------------------|-------|
| 1 T. Mann USA | 28.04 |
| 2 L. Hershey USA | 30.58 |
| 2 L. Schaefer USA | 30.58 |
| 4 F. Nelson USA | 30.87 |
| 5 T. McAbee USA | 31.26 |

100 METER BACKSTROKE

| | |
|--------------------|---------|
| 1 T. Mann USA | 1:03.00 |
| 2 D. Hershey USA | 1:07.37 |
| 3 L. Schaeffer USA | 1:07.95 |
| 4 G. Stratton CAN | 1:09.41 |
| 5 J. Heimann USA | 1:10.69 |

200 METER BACKSTROKE

| | |
|-------------------|---------|
| 1 T. Mann USA | 2:19.40 |
| 2 D. Hershey USA | 2:26.28 |
| 3 G. Stratton CAN | 2:33.96 |
| 4 J. Heimann USA | 2:36.25 |
| 5 J. Pringle USA | 2:36.67 |

50 METER BREASTSTROKE

| | |
|-----------------|-------|
| 1 P. Kunze GER | 33.90 |
| 2 T. McAbee USA | 33.96 |
| 3 C. Haunz USA | 34.50 |
| 4 R. Neeves USA | 34.70 |
| 5 H. Beer GER | 34.90 |

100 METER BREASTSTROKE

| | |
|-------------------|---------|
| 1 R. Neeves USA | 1:15.62 |
| 2 R. Stanley USA | 1:17.02 |
| 3 J. Pringle USA | 1:19.12 |
| 4 W. Mulliken USA | 1:19.39 |
| 5 P. Whitten USA | 1:19.92 |

200 METER BREASTSTROKE

| | |
|-------------------|---------|
| 1 H. Beer GER | 2:48.66 |
| 2 R. Neeves USA | 2:51.00 |
| 3 W. Mulliken USA | 2:53.53 |
| 4 H. Cole USA | 2:54.64 |
| 5 R. Stanley USA | 2:56.51 |

50 METER BUTTERFLY

| | |
|--------------------|-------|
| 1 J. Geoghegan USA | 28.00 |
| 2 J. Geoghegan USA | 28.23 |
| 3 H. Brock GER | 28.97 |
| 4 D. Brown CAN | 29.04 |
| 5 T. Calomeris USA | 29.07 |

100 METER BUTTERFLY

| | |
|---------------------|---------|
| 1 J. Geoghegan USA | 1:04.11 |
| 2 S. Clark USA | 1:04.70 |
| 3 P. Goode USA | 1:05.27 |
| 4 A. Cartwright USA | 1:05.70 |
| 5 H. Beer GER | 1:06.95 |

200 METER BUTTERFLY

| | |
|---------------------|---------|
| 1 P. Goode USA | 2:30.27 |
| 2 A. Cartwright USA | 2:33.80 |
| 3 T. McAbee USA | 2:37.70 |
| 4 T. Gorski USA | 2:40.00 |
| 5 H. Roddin USA | 2:41.36 |

50 METER INDIVIDUAL MEDLEY

| | |
|---------------------|---------|
| 1 T. McAbee USA | 2:29.63 |
| 2 J. Pringle USA | 2:32.36 |
| 3 E. Snyder USA | 2:32.52 |
| 4 A. Cartwright USA | 2:33.50 |
| 5 H. Beer GER | 2:34.06 |

400 METER INDIVIDUAL MEDLEY

| | |
|---------------------|---------|
| 1 J. Pringle USA | 5:24.26 |
| 2 A. Cartwright USA | 5:32.00 |
| 3 E. Snyder USA | 5:35.85 |
| 4 J. Geoghegan USA | 5:38.17 |
| 5 S. Engel USA | 5:39.85 |

MEN 40-44

50 METER FREESTYLE

| | |
|------------------|-------|
| 1 C. Bechtel USA | 26.47 |
| 2 W. Dobler USA | 27.56 |
| 3 P. Gay USA | 27.65 |
| 4 W. Earley USA | 27.74 |
| 5 G. Rosser USA | 27.81 |

100 METER FREESTYLE

| | |
|------------------|---------|
| 1 T. Boyes GB | 1:00.87 |
| 2 C. Bechtel USA | 1:01.38 |
| 3 A. Coxon USA | 1:02.58 |
| 4 G. Rosser USA | 1:03.08 |
| 5 P. Gay USA | 1:03.53 |

200 METER FREESTYLE

| | |
|---------------------|---------|
| 1 T. Boyes GB | 2:15.38 |
| 2 C. Bechtel USA | 2:19.80 |
| 3 C. Woolley USA | 2:20.06 |
| 4 K. Canterbury USA | 2:21.63 |
| 5 A. Coxon USA | 2:23.22 |

400 METER FREESTYLE

| | |
|----------------------|---------|
| 1 T. Boyes GB | 4:55.86 |
| 2 C. Woolley USA | 4:59.34 |
| 3 K. Canterbury USA | 5:00.63 |
| 4 A. Coxon USA | 5:08.59 |
| 5 F. Jurgenfeyer GER | 5:08.87 |

1500 METER FREESTYLE

| | |
|-------------------|----------|
| 1 C. Woolley USA | 20:02.86 |
| 2 R. Nekton USA | 20:35.44 |
| 3 K. Price USA | 21:15.35 |
| 4 J. Berthe USA | 21:19.11 |
| 5 P. Ferguson USA | 21:37.02 |

50 METER BACKSTROKE

| | |
|------------------|-------|
| 1 A. Coxon USA | 32.63 |
| 2 W. Earley USA | 32.75 |
| 3 R. Schwind GER | 32.99 |
| 4 D. Clayton USA | 33.13 |
| 5 J. Bohan USA | 33.30 |

100 METER BACKSTROKE

| | |
|---------------------|---------|
| 1 K. Canterbury USA | 1:12.82 |
| 2 W. Earley USA | 1:12.88 |
| 3 A. Coxon USA | 1:13.40 |
| 4 D. Clayton USA | 1:13.41 |
| 5 F. Ferguson USA | 1:16.11 |

200 METER BACKSTROKE

| | |
|---------------------|---------|
| 1 K. Canterbury USA | 2:41.10 |
| 2 D. Clayton USA | 2:43.95 |
| 3 A. Coxon USA | 2:44.05 |
| 4 W. Earley USA | 2:45.42 |
| 5 P. Ferguson USA | 2:50.99 |

50 METER BREASTSTROKE

| | |
|---------------------|-------|
| 1 G. Schman GER | 32.63 |
| 2 H. Winterbach GER | 34.10 |
| 3 R. Schonhaar GER | 35.00 |
| 3 G. Dieckhock GER | 35.00 |
| 5 H. Fock USA | 35.78 |

100 METER BREASTSTROKE

| | |
|--------------------|---------|
| 1 G. Schman GER | 1:13.60 |
| 2 G. Dieckhock GER | 1:21.49 |
| 3 R. Nekton USA | 1:25.21 |
| 4 W. Parks USA | 1:25.53 |
| 5 L. Abel USA | 1:26.94 |

200 METER BREASTSTROKE

| | |
|---------------------|---------|
| 1 G. Schman GER | 2:43.84 |
| 2 R. Schonhaar GER | 2:50.56 |
| 3 K. Canterbury USA | 3:09.66 |
| 4 B. Symes USA | 3:14.13 |
| 5 L. Abel USA | 3:15.84 |

50 METER BUTTERFLY

| | |
|----------------------|-------|
| 1 W. Dobler USA | 29.08 |
| 2 C. Worthington USA | 30.00 |
| 3 D. Drum USA | 30.20 |
| 4 C. Bechtel USA | 30.41 |
| 5 E. Leskowitz CAN | 30.82 |

100 METER BUTTERFLY

| | |
|---------------------|---------|
| 1 W. Dobler USA | 1:10.54 |
| 2 T. Boyes GB | 1:13.02 |
| 3 K. Canterbury USA | 1:13.99 |
| 4 C. Bechtel USA | 1:14.88 |
| 5 G. Rosser USA | 1:15.52 |

200 METER BUTTERFLY

| | |
|----------------------|---------|
| 1 A. Coxon USA | 3:08.33 |
| 2 B. Fasbender USA | 3:12.40 |
| 3 C. LeBourgeois USA | 3:21.40 |
| 4 C. Schaumburg USA | 3:25.30 |
| 5 R. Burns USA | 3:27.25 |

50 METER INDIVIDUAL MEDLEY

| | |
|-------------------|---------|
| 1 T. Boyes GB | 2:37.82 |
| 2 G. Schman GER | 2:41.86 |
| 3 A. Coxon USA | 2:42.13 |
| 3 P. Ferguson USA | 2:43.01 |
| 5 R. Nekton USA | 2:44.75 |

400 METER INDIVIDUAL MEDLEY

| | |
|---------------------|---------|
| 1 T. Boyes GB | 5:38.52 |
| 2 K. Canterbury USA | 5:45.43 |
| 3 R. Nekton USA | 5:57.54 |
| 4 A. Coxon USA | 5:59.60 |
| 5 P. Ferguson USA | 6:03.45 |

MEN 45-49

50 METER FREESTYLE

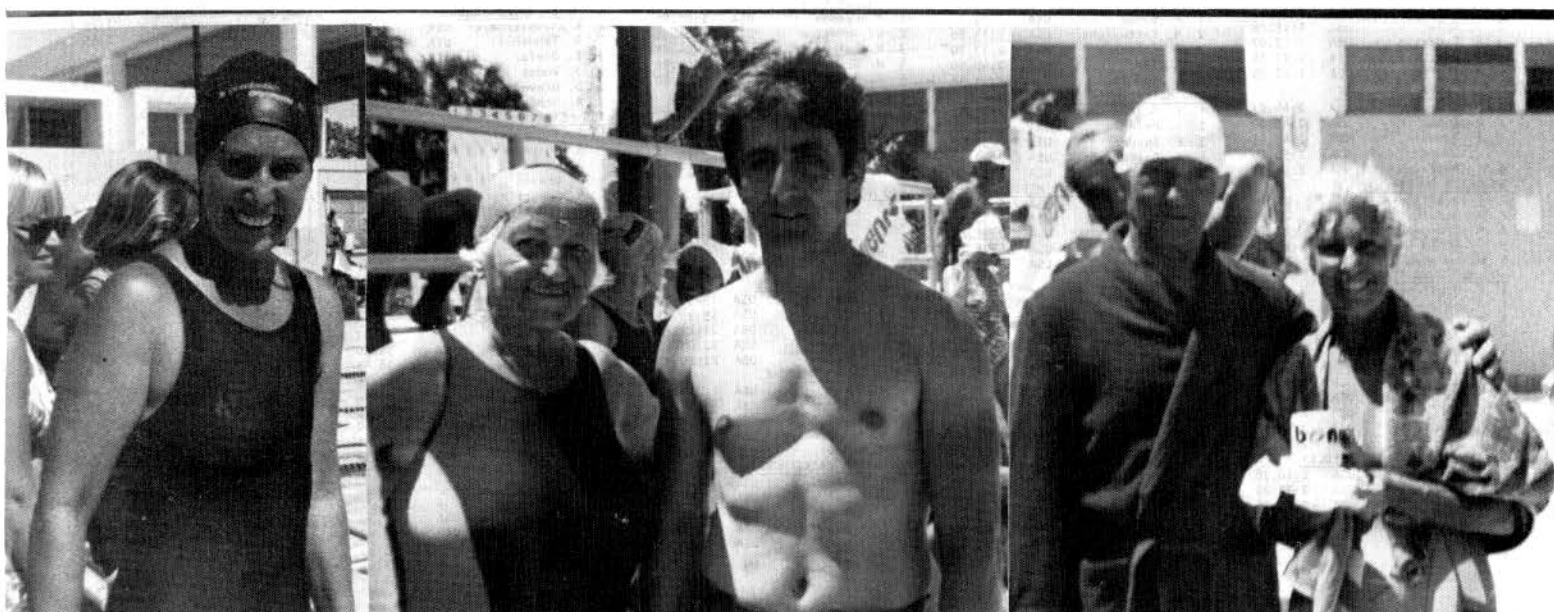
| | |
|---------------|-------|
| 1 D. Hill USA | 26.25 |
| | |

| | | | | | | | | | |
|------------------------------------|--------------|------------------------------------|--------------|------------------------------------|-------------|------------------------------------|--------------|-------------------------------|--------------|
| 400 METER INDIVIDUAL MEDLEY | | 100 METER BUTTERFLY | | 100 METER BREASTSTROKE | | 100 METER BACKSTROKE | | 1500 METER FREESTYLE | |
| 1 P. Herron | USA 6:31.18 | 1 F. Havlicek | USA 1:30.90 | 1 H. Mier | GER 1:36.76 | 1 A. Hargrave | USA 1:36.10 | 1 G. Langner | USA 29:01.42 |
| 2 J. Crews | USA 6:40.59 | 2 C. Wilson | USA 1:32.47 | 2 H. Ruckwoldt | GER 1:38.91 | 2 H. Eisenschmidt | USA 1:40.90 | 2 F. Allen | USA 35:50.06 |
| 3 R. Nakomaki | USA 7:04.72 | 3 J. Higgins | USA 1:39.43 | 3 F. Meier | USA 1:39.54 | 3 O. Sigrist | USA 1:43.49 | 3 G. Mauric | USA 39:09.71 |
| 4 E. Walter | USA 7:10.87 | 4 C. Croome | USA 1:40.82 | 4 H. Koppel | USA 1:39.69 | 4 H. Lappe | USA 1:48.60 | 4 R. Fletcher | USA 39:29.95 |
| 5 W. Stadig | USA 7:25.00 | 5 P. Krup | USA 1:41.24 | 5 H. Perry | USA 1:43.60 | 5 H. Strothman | USA 1:53.60 | 5 R. Webster | USA 54:37.50 |
| MEN 60-64 | | 200 METER BUTTERFLY | | 200 METER BREASTSTROKE | | 200 METER BACKSTROKE | | 50 METER BACKSTROKE | |
| 1 J. Welch | USA 30.20 | 1 D. Rankin | USA 3:51.49 | 1 F. Meier | USA 3:39.59 | 1 A. Hargrave | USA 3:30.10 | 1 J. Anderson | USA 48.66 |
| 2 G. Hein | GER 30.57 | 2 C. Croome | USA 3:58.15 | 2 H. Clark | USA 3:42.01 | 2 F. Lappe | USA 3:42.40 | 2 C. Fletcher | USA 59.80 |
| 3 H. Havlicek | USA 30.68 | 3 C. Wilson | USA 3:48.47 | 3 H. Koppel | USA 3:55.72 | 3 H. Eisenschmidt | USA 3:42.80 | 3 S. Rosen | USA 1:08.10 |
| 4 J. Siefert | USA 31.39 | 4 E. Sielski | USA 4:01.20 | 4 H. Perry | USA 3:57.20 | 4 O. Sigrist | USA 4:00.95 | 4 F. Allen | USA 1:18.44 |
| 5 H. Rawstrom | USA 31.50 | 5 W. Grant | USA 4:06.38 | 5 W. Share | USA 3:59.46 | 5 H. Strothman | USA 4:12.00 | 5 J. Risher | USA 1:18.98 |
| 100 METER FREESTYLE | | 200 METER INDIVIDUAL MEDLEY | | 50 METER BUTTERFLY | | 50 METER BACKSTROKE | | 100 METER BACKSTROKE | |
| 1 J. Welch | USA 1:07.06 | 1 F. Havlicek | USA 3:14.24 | 1 H. Mier | GER 36.55 | 1 W. Kratz | USA 50.18 | 1 C. Ross | USA 2:00.12 |
| 2 F. Havlicek | USA 1:09.70 | 2 J. Higgins | USA 3:14.41 | 2 C. Bartsch | GER 37.29 | 2 T. Johnson | USA 50.78 | 2 J. Anderson | USA 2:00.73 |
| 3 H. Rawstrom | USA 1:10.34 | 3 C. Wilson | USA 3:17.63 | 3 K. Wittenberg | GER 39.67 | 3 A. Olanoff | USA 52.80 | 3 C. Fletcher | USA 2:17.60 |
| 4 J. Siefert | USA 1:13.84 | 4 E. Blackledge | USA 3:25.16 | 4 H. Ruckwoldt | GER 42.51 | 4 A. Kallunki | USA 53.60 | 4 G. Langner | USA 2:19.97 |
| 5 H. Bottcher | GER 1:14.10 | 5 D. Rankin | USA 3:25.28 | 5 J. Bartlett | USA 43.40 | 5 S. Craigie | USA 55.20 | 5 S. Rosen | USA 2:36.80 |
| 200 METER FREESTYLE | | 400 METER INDIVIDUAL MEDLEY | | 100 METER BUTTERFLY | | 100 METER BREASTSTROKE | | 200 METER BACKSTROKE | |
| 1 J. Welch | USA 2:34.64 | 1 J. Higgins | USA 6:57.10 | 1 H. Mier | GER 1:34.96 | 1 W. Kratz | USA 1:54.84 | 1 C. Ross | USA 4:28.65 |
| 2 H. Rawstrom | USA 2:46.78 | 2 D. Rankin | USA 7:08.75 | 2 J. Bartlett | USA 1:43.30 | 2 O. Sigrist | USA 1:55.23 | 2 J. Anderson | USA 4:43.15 |
| 3 E. Moran | USA 2:47.29 | 3 C. Wilson | USA 7:19.11 | 3 H. Ruckwoldt | GER 1:45.61 | 3 H. Strothman | USA 1:56.47 | 3 J. Burns | USA 5:46.99 |
| 4 F. Havlicek | USA 2:49.02 | 4 E. Blackledge | USA 7:46.57 | 4 C. Straus | USA 1:54.00 | 4 T. Johnson | USA 1:57.54 | 4 P. Dunakin | USA 6:49.29 |
| 5 H. Arendt | GER 2:49.95 | 5 C. Croome | USA 7:48.67 | 5 W. Stinson | USA 1:54.60 | 5 E. Walther | AUS 2:02.10 | 5 J. Risher | USA 6:52.17 |
| 400 METER FREESTYLE | | MEN 65-69 | | 200 METER BUTTERFLY | | 200 METER BREASTSTROKE | | 50 METER BREASTSTROKE | |
| 1 J. Welch | USA 5:36.58 | 1 W. Bowersock | USA 31.51 | 1 J. Bartlett | USA 4:08.40 | 1 A. Guth | USA 4:04.63 | 1 J. Anderson | USA 54.30 |
| 2 D. Rankin | USA 5:57.30 | 2 R. Lawrence | USA 32.65 | 2 A. Guth | USA 4:36.55 | 2 O. Sigrist | USA 4:14.41 | 2 C. Cushman | USA 1:00.67 |
| 3 H. Rawstrom | USA 6:00.86 | 3 R. Richardson | USA 32.65 | 3 W. Stinson | USA 4:51.30 | 3 W. Kratz | USA 4:19.13 | 3 S. Rosen | USA 1:05.20 |
| 4 E. Moran | USA 6:02.95 | 4 F. Booth | USA 33.29 | 4 E. Hale | USA 5:10.95 | 4 H. Strothman | USA 4:25.13 | 4 J. Whittemore | USA 1:07.88 |
| 5 L. Surles | USA 6:20.78 | 5 G. Sobel | USA 33.90 | 1 H. Mier | GER 3:32.21 | 5 A. Olanoff | USA 4:29.97 | 5 C. Fletcher | USA 1:08.22 |
| 1500 METER FREESTYLE | | 100 METER FREESTYLE | | 200 METER INDIVIDUAL MEDLEY | | 50 METER BUTTERFLY | | 100 METER BACKSTROKE | |
| 1 J. Welch | USA 22:28.74 | 1 R. Richardson | USA 1:14.81 | 1 H. Mier | GER 3:32.21 | 1 S. Craigie | USA 47.20 | 1 J. Anderson | USA 2:10.15 |
| 2 D. Rankin | USA 22:53.86 | 2 W. Bowersock | USA 1:14.87 | 2 C. Bartsch | GER 3:32.82 | 2 A. Guth | USA 49.33 | 2 G. Langner | USA 2:15.35 |
| 3 E. Moran | USA 24:07.12 | 3 L. Osborne | USA 1:18.15 | 3 R. Richardson | USA 3:40.69 | 3 T. Johnson | USA 51.28 | 3 C. Cushman | USA 2:20.71 |
| 4 H. Rawstrom | USA 25:14.96 | 4 R. Lawrence | USA 1:18.18 | 4 B. Wood | USA 3:55.40 | 4 H. Young | USA 54.49 | 4 A. Beffie | USA 2:39.43 |
| 5 H. Sexton | USA 25:16.20 | 5 F. Booth | USA 1:18.32 | 5 D. Stevenson | USA 3:55.66 | 5 O. Sigrist | USA 55.35 | 5 S. Rosen | USA 2:41.40 |
| 50 METER BACKSTROKE | | 200 METER FREESTYLE | | 400 METER INDIVIDUAL MEDLEY | | 100 METER BUTTERFLY | | 200 METER BREASTSTROKE | |
| 1 G. Hein | GER 37.40 | 1 R. Richardson | USA 2:50.83 | 1 W. Stinson | USA 8:59.70 | 1 W. Steimel | GER 1:52.19 | 1 G. Langner | USA 4:57.35 |
| 2 D. Volk | USA 39.42 | 2 L. Osborne | USA 2:54.86 | 2 W. Loughborough | USA 9:01.38 | 2 A. Guth | USA 1:55.75 | 2 C. Cushman | USA 5:12.77 |
| 3 H. Arendt | GER 40.70 | 3 K. Wittenberg | GER 3:01.70 | 3 W. Murphy | USA 9:05.42 | 3 S. Craigie | USA 2:15.30 | 3 J. Anderson | USA 5:22.72 |
| 4 G. Schmidt | USA 40.90 | 4 H. Schwarz | GER 3:03.69 | 4 E. Dnsgard | USA 9:21.66 | 4 I. Merritt | USA 2:44.99 | 4 A. Beffie | USA 6:11.38 |
| 5 H. Schluch | GER 41.20 | 5 H. Ernen | GER 3:04.58 | 5 E. Hale | USA 9:42.77 | 5 S. Silbert | USA 2:53.67 | 5 R. Webster | USA 6:25.40 |
| 100 METER BACKSTROKE | | 400 METER FREESTYLE | | MEN 70-74 | | 200 METER BUTTERFLY | | 50 METER BUTTERFLY | |
| 1 J. Higgins | USA 1:28.34 | 1 H. Howe | USA 5:59.67 | 1 A. Hargrave | USA 35.10 | 1 A. Guth | USA 4:47.13 | 1 J. Anderson | USA 53.50 |
| 2 D. Rowan | USA 1:28.43 | 2 R. Richardson | USA 6:18.50 | 2 M. Vogt | USA 35.58 | 2 S. Craigie | USA 5:24.20 | 2 S. Rosen | USA 1:06.10 |
| 3 J. Merrill | USA 1:29.28 | 3 L. Osborne | USA 6:30.60 | 3 S. Craigie | USA 36.31 | 3 I. Merritt | USA 6:26.18 | 3 A. Beffie | USA 1:23.78 |
| 4 D. Volk | USA 1:29.50 | 4 C. Roth | USA 6:52.13 | 4 H. Eisenschmidt | USA 36.98 | 4 I. Merritt | USA 2:44.99 | 4 A. Beffie | USA 6:11.38 |
| 5 E. Moran | USA 1:29.67 | 5 R. Portman | USA 6:54.80 | 5 J. Rogers | USA 37.35 | 5 S. Silbert | USA 2:53.67 | 5 R. Webster | USA 6:25.40 |
| 200 METER BACKSTROKE | | 1500 METER FREESTYLE | | 100 METER FREESTYLE | | 200 METER INDIVIDUAL MEDLEY | | MEN 80+ | |
| 1 J. Higgins | USA 3:11.25 | 1 H. Howe | USA 25:07.50 | 1 A. Hargrave | USA 1:23.50 | 1 A. Guth | USA 3:55.81 | 1 F. Lough | AUS 39.60 |
| 2 D. Rowan | USA 3:11.44 | 2 L. Osborne | USA 26:22.30 | 2 M. Vogt | USA 1:25.79 | 2 W. Steimel | GER 4:01.58 | 2 T. Lane | USA 49.16 |
| 3 J. Merrill | USA 3:13.50 | 3 W. Murphy | USA 28:34.95 | 3 W. Steimel | GER 1:27.43 | 3 H. Strothman | USA 4:14.96 | 3 C. Wheeler | USA 52.20 |
| 4 E. Moran | USA 3:18.34 | 4 W. Bowersock | USA 29:01.04 | 4 H. Eisenschmidt | USA 1:27.50 | 4 O. Sigrist | USA 4:14.96 | 4 R. Simmonds | USA 52.90 |
| 5 R. Guido | USA 3:24.86 | 5 D. McAfee | USA 29:16.73 | 5 G. Ryan | AUS 1:29.90 | 1 A. Guth | USA 8:26.15 | 5 I. Kasten | USA 1:11.11 |
| 50 METER BREASTSTROKE | | 50 METER BACKSTROKE | | 200 METER FREESTYLE | | 400 METER INDIVIDUAL MEDLEY | | 100 METER FREESTYLE | |
| 1 B. Allen | USA 39.96 | 1 H. Schwarz | GER 37.40 | 1 A. Hargrave | USA 3:17.60 | 1 A. Guth | USA 8:26.15 | 1 T. Lane | USA 1:11.11 |
| 2 A. Bennett | USA 40.80 | 2 R. Reinstadtler | GER 39.70 | 2 G. Ryan | AUS 3:25.70 | 2 S. Craigie | USA 9:35.38 | 1 F. Lough | AUS 1:34.80 |
| 3 A. Lontz | GER 41.02 | 3 R. Oligschlager | GER 40.00 | 3 H. Eisenschmidt | AUS 3:26.59 | 3 I. Merritt | USA 11:36.29 | 2 C. Wheeler | USA 1:57.40 |
| 4 E. Schacht | GER 41.31 | 3 F. Herrmann | GER 40.00 | 4 W. Steimel | GER 3:27.22 | 1 C. Ross | USA 38.22 | 3 R. Simmonds | USA 2:08.30 |
| 5 T. Lind | USA 41.35 | 5 W. Webb | USA 40.92 | 5 L. Chapin | USA 3:33.79 | 2 J. Anderson | USA 40.67 | 4 I. Kasten | USA 2:58.24 |
| 100 METER BREASTSTROKE | | 100 METER BACKSTROKE | | 400 METER FREESTYLE | | 200 METER FREESTYLE | | 200 METER FREESTYLE | |
| 1 B. Allen | USA 1:32.37 | 1 H. Schwarz | GER 1:26.14 | 1 W. Steimel | GER 7:39.17 | 3 J. Burns | USA 45.15 | 1 C. Wheeler | USA 4:15.10 |
| 2 A. Bennett | USA 1:33.10 | 2 L. Chapin | USA 1:34.72 | 2 L. Chapin | USA 7:42.53 | 4 W. Trask | USA 48.20 | 2 R. Simmonds | USA 4:39.10 |
| 3 J. Higgins | USA 1:33.48 | 3 J. McPherson | USA 7:58.51 | 3 J. McPherson | USA 7:58.51 | 5 F. Allen | USA 51.31 | 1 C. Wheeler | USA 9:30.30 |
| 4 E. Blackledge | USA 1:36.21 | 4 F. Lappe | USA 7:58.80 | 4 F. Lappe | USA 7:58.80 | 1 J. Anderson | USA 1:31.41 | 2 R. Simmonds | USA 10:11.90 |
| 5 C. Wilson | USA 1:37.58 | 5 C. Wood | USA 8:01.18 | 5 C. Wood | USA 8:01.18 | 3 J. Burns | USA 1:52.46 | 3 T. Lane | USA 11:00.03 |
| 200 METER BREASTSTROKE | | 1500 METER FREESTYLE | | 50 METER FREESTYLE | | 400 METER INDIVIDUAL MEDLEY | | 1500 METER FREESTYLE | |
| 1 J. Higgins | USA 2:27.69 | 1 F. Lappe | USA 30:35.60 | 1 C. Ross | USA 38.22 | 1 A. Guth | USA 8:26.15 | 1 T. Lane | USA 38:36.30 |
| 2 C. Wilson | USA 3:32.36 | 2 L. Chapin | USA 30:45.52 | 2 J. Anderson | USA 40.67 | 2 W. Trask | USA 1:56.30 | 2 T. Lane | USA 38:36.50 |
| 3 E. Blackledge | USA 3:33.49 | 3 A. Guth | USA 30:50.67 | 3 J. Burns | USA 45.15 | 3 W. Trask | USA 1:56.30 | 1 C. Wheeler | USA 1:12.30 |
| 4 B. Allen | USA 3:37.40 | 4 G. Langner | USA 31:03.10 | 4 W. Trask | USA 48.20 | 4 F. Allen | USA 4:42.56 | 2 C. Wheeler | USA 1:20.62 |
| 5 D. Rankin | USA 3:39.19 | 5 S. Craigie | USA 33:24.58 | 5 F. Allen | USA 1:58.55 | 5 R. Fletcher | USA 4:42.56 | 3 A. Waites | CAN 2:07.62 |
| 50 METER BUTTERFLY | | 50 METER BACKSTROKE | | 400 METER FREESTYLE | | 100 METER FREESTYLE | | 100 METER BACKSTROKE | |
| 1 F. Havlicek | USA 37.13 | 1 A. Hargrave | USA 43.00 | 1 C. Ross | USA 38.22 | 1 T. Lane | USA 1:11.11 | 1 T. Lane | USA 2:12.99 |
| 2 E. Jennings | USA 37.81 | 2 H. Eisenschmidt | USA 45.40 | 2 J. Anderson | USA 40.67 | 2 T. Lane | USA 1:11.11 | 2 T. Lane | USA 5:05.23 |
| 3 J. Welch | USA 38.21 | 3 F. Lappe | USA 50.30 | 3 J. Burns | USA 45.15 | 1 T. Lane | USA 1:11.11 | 1 T. Lane | USA 58.81 |
| 4 R. Knapp | USA 38.22 | 4 P. Jurczyk | USA 50.92 | 4 W. Trask | USA 48.20 | 1 T. Lane | USA 1:11.11 | 100 METER BREASTSTROKE | |
| 5 W. Grant | USA 38.39 | 5 S. Craigie | USA 52.80 | 5 J. Anderson | USA 9:47.90 | 1 T. Lane | USA 1:11.11 | 200 METER BREASTSTROKE | |
| | | | | | | | | 1 T. Lane | USA 2:26.30 |
| | | | | | | | | 200 METER BACKSTROKE | |
| | | | | | | | | 1 T. Lane | USA 5:40.12 |

AST - AUSTRIA
AUS - AUSTRALIA

CAN - CANADA
FRN - FRANCE

GER - WEST GERMANY
USA - UNITED STATES
VEN - VENEZUELA



ERIKA VOOGSANG

- 8 -

GUNTER SCHMAH

HANNES SCHWARTZ

JUNE KRAUSER

9th Southern Regional



1 Charlie Dunworth
 2 The Debonair Duo - Gerry DeLong & Cal Winn
 3 Sun Coast Master Hi Point Winner

4 Georgia Masters
 5 Meet Director - Joe Biondi
 6 German visitors
 7 A future Masters recruit
 8 Hanns Tremmel - tour director from Germany
 9 John McGuire with runner-up St. Pete trophy
 10 A close encounter of 3 kinds - Bob Coykendall, Cynthia Bruce and Snag Holmes
 11 John Zeigler & Bruce Bartling in closest dual for high point - "Ziggy" won by one
 12 Nat Clement - the power behind Suncoast Masters, 3rd year winners of the meet

NATIONAL MASTERS ONE HOUR SWIM FOR DISTANCE (POSTAL) CHAMPIONSHIPS JANUARY 1979

WOMEN 25-29 YARDS

| | |
|----------------------|------|
| *1. M. Brems 29 | 4865 |
| 2. B. Dunbar 29 | 4670 |
| 3. N. Begley 27 | 4455 |
| 4. J. Litman 28 | 4210 |
| 5. S. Hill 28 | 4050 |
| 6. L. Kulchinski 29 | 3950 |
| 7. D. Cruickshank 26 | 3935 |
| 8. J. Douglas 29 | 3820 |
| 9. A. Johnson 25-29 | 3720 |
| 10. M. Hardesty 28 | 3710 |
| 11. D. Davis 27 | 3705 |
| 12. R. Andrews 28 | 3680 |
| 13. M. Langhorst 25 | 3675 |
| 14. G. Richards 26 | 3650 |
| 14. B. Walsh 28 | 3650 |
| 16. C. Bond 28 | 3555 |
| 17. G. Suzanski 25 | 3550 |
| 18. L. Prodan 29 | 3535 |
| 19. B. Durning 28 | 3500 |
| 19. G. Mulane 26 | 3500 |
| 21. J. Harper 25 | 3485 |
| 22. K. Krebs 29 | 3470 |
| 23. A. Ellsworth 29 | 3465 |
| 23. C. Silvestri 29 | 3465 |
| 25. E. Gibbs 26 | 3450 |
| 26. R. Leeds 26 | 3350 |
| 27. B. Jacroux 27 | 3345 |
| 28. P. Townley 28 | 3280 |
| 29. N. Troemel 28 | 3235 |
| 30. P. Watson 25 | 3220 |
| 31. E. Thornton 27 | 3090 |
| 32. C. Taigart 29 | 3085 |
| 33. D. Titts 27 | 3050 |
| 34. J. Hoamer 27 | 2950 |
| 35. D. Neuman 28 | 2950 |
| 36. D. Dorsett 29 | 2900 |
| 37. D. Rybka 26 | 2790 |
| 38. L. Banigan 27 | 2785 |
| 39. K. Donnelly 28 | 2725 |
| 40. M. Blanche 29 | 2555 |
| 41. L. Dodge 27 | 2520 |
| 42. B. Dresser 27 | 2305 |
| 43. D. Kitley 26 | 1970 |
| 44. J. Baska 26 | 1085 |

WOMEN 30-34 YARDS

| | |
|----------------------|------|
| REC: J. Katz 34(78) | 4410 |
| 1. C. Johnson 33 | 4325 |
| 2. K. King 31 | 4200 |
| 2. P. Wirth 34 | 4200 |
| 4. C. Sliimak 30 | 4020 |
| 4. T. Stuedemann 30 | 4020 |
| 6. K. Crandell 30 | 3925 |
| 7. T. A. Smith 30 | 3910 |
| 8. L. Sadowski 30 | 3900 |
| 9. K. Watson 31 | 3885 |
| 10. L. McHenry 31 | 3875 |
| 11. B. Weber 32 | 3820 |
| 12. L. Broker 31 | 3780 |
| 13. J. Chastain 33 | 3760 |
| 14. H. Rees 32 | 3635 |
| 15. G. Stark 31 | 3610 |
| 16. J. Wortman 30 | 3525 |
| 17. G. Miller 32 | 3500 |
| 18. S. Goetz 30 | 3475 |
| 19. K. Barberio 32 | 3300 |
| 20. J. R. Hodges 33 | 3245 |
| 21. J. Belluz 33 | 3200 |
| 22. M. Pierce 32 | 3125 |
| 23. C. Olmsted 30 | 3075 |
| 24. J. Baker 33 | 3035 |
| 25. W. Brant 34 | 3000 |
| 26. J. Gandolfi 32 | 2985 |
| 27. P. Pollington 30 | 2860 |
| 28. K. Butler 34 | 2835 |
| 29. B. Marshall 33 | 2815 |
| 30. K. Cottrell 33 | 2800 |
| 31. D. Brumbaugh 31 | 2780 |
| 32. C. Patterson 33 | 2750 |
| 33. R. Jones 32 | 2740 |
| 34. J. May 33 | 2715 |
| 35. C. Davis 35 | 2600 |
| 36. R. McKie 32 | 2460 |
| 37. J. Crosswell 30 | 2425 |
| 38. L. Theuns 32 | 2370 |
| 39. E. Collier 31 | 2350 |
| 40. R. Steller 33 | 2240 |
| 41. J. Schuster 34 | 2065 |

WOMEN 35-39 YARDS

| | |
|-----------------------|------|
| *1. N. Riddout 37 | 4475 |
| 2. J. Royer 37 | 4115 |
| 3. W. Cavanaugh 38 | 4050 |
| 4. C. Jewell 36 | 4000 |
| 5. S. Humberger 37 | 3850 |
| 6. N. Kirkendall 36 | 3775 |
| 7. B. Newby 36 | 3700 |
| 8. A. Barrett 36 | 3635 |
| 9. J. Trenck 35 | 3635 |
| 10. R. Hosking 38 | 3565 |
| 11. I. Stine 39 | 3550 |
| 12. J. Rogers 37 | 3500 |
| 13. A. Hummel 38 | 3445 |
| 14. S. Scutt 39 | 3200 |
| 15. J. Ford 35 | 3090 |
| 16. B. Swanwick 38 | 3075 |
| 17. S. Walker 35 | 3035 |
| 17. I. Wyatt 37 | 3035 |
| 19. R. Carroll 39 | 3000 |
| 20. C. Beauchamp 39 | 2950 |
| 21. E. Walsham 38 | 2930 |
| 22. C. Rattray 38 | 2800 |
| 23. P. Sullivan 35 | 2785 |
| 24. S. Keating 36 | 2775 |
| 25. B. Potter 35 | 2570 |
| 26. M. Bower 39 | 2540 |
| 27. S. Walters 36 | 2515 |
| 28. M. Cooper 36 | 2510 |
| 29. M. Guariniello 37 | 1050 |

Women 40-44 YARDS

| | |
|----------------------|------|
| *1. H. Buss 43 | 4455 |
| 2. A. McGuire 44 | 3905 |
| 3. L. Holey 44 | 3890 |
| 4. B. Wilson 44 | 3800 |
| 5. P. Saeyes 42 | 3775 |
| 5. N. Whitehall 44 | 3775 |
| 7. D. Heinzl 43 | 3745 |
| 8. M. Dabrock 44 | 3650 |
| 9. A. Pipes 44 | 3580 |
| 10. M. Wilson 41 | 3515 |
| 11. C. Dowd 40 | 3500 |
| 12. B. Love 41 | 3360 |
| 13. J. Cadden 40 | 3255 |
| 14. J. Puliston 43 | 3080 |
| 15. D. Carter 40 | 3065 |
| 16. M. Smith 40 | 3050 |
| 17. H. Hewitt 40 | 3045 |
| 17. T. Orbeck 41 | 3045 |
| 19. P. Bravence 41 | 2855 |
| 20. J. Barry 43 | 2805 |
| 21. A.S.W.Elliott 40 | 2685 |
| 22. M. Connolly 44 | 2680 |
| 23. K. Drefs 44 | 2665 |
| 24. D. Shuman 41 | 2530 |
| 25. J. Baker 44 | 2300 |
| 26. G. Wheeler 41 | 1900 |

Women 45-49 YARDS

| | |
|-----------------------|------|
| *1. L. Stainoff 46 | 3940 |
| 2. H. Palmer 49 | 3875 |
| 3. S. Beetham 45 | 3440 |
| 4. B. Picker 44 | 3360 |
| 4. S. Kreplin 49 | 3325 |
| 5. L. Weir 46 | 3325 |
| 7. C. Millican 48 | 3300 |
| 8. L. Senadignos 49 | 3255 |
| 9. B. Eyre 46 | 3210 |
| 10. S. Howard 47 | 3140 |
| 11. M. Yungel 46 | 3140 |
| 12. W. Williams 46 | 3085 |
| 13. J. T. Wright 47 | 3055 |
| 14. S. Holliday 45 | 3050 |
| 15. B. Glancy 47 | 2940 |
| 16. N. Morris 47 | 2900 |
| 17. C. Sturtevant 45 | 2850 |
| 18. G. Andrejewski 48 | 2810 |
| 19. B. Parker 46 | 2805 |
| 20. D. Murray 49 | 2650 |
| 21. B. Solomon 46 | 2640 |
| 22. E. Lyman 46 | 2460 |
| 23. E. Dickworth 49 | 2410 |
| 24. M. Feldhuhn 49 | 2325 |
| 25. A. Daniluk 48 | 2275 |
| 26. H. Broten 49 | 1730 |

Women 50-54 YARDS

| | |
|-----------------------|------|
| *1. A. Adams 50 | 4070 |
| 2. J. Krauser 52 | 3870 |
| 3. E. Gruender 50 | 3640 |
| 4. T. Bolster 50 | 3575 |
| 5. C. Billingham 52 | 3445 |
| 6. G. Altus 54 | 3340 |
| 7. J. McDaris 53 | 3335 |
| 8. D. La Chasse 54 | 3330 |
| 9. J. McIntyre 50 | 3275 |
| 10. C. Derr 50 | 3215 |
| 11. P. Gentry 50 | 3205 |
| 12. J. Nairn 51 | 3200 |
| 13. M. Sciborski 54 | 3125 |
| 14. B. Garwood 51 | 3105 |
| 15. E. Schappel 52 | 3100 |
| 16. B. Smith 54 | 3000 |
| 17. E. Christmann 54 | 2860 |
| 18. G. Olsen 52 | 2780 |
| 19. P. Wise 54 | 2650 |
| 19. E. Wright 54 | 2650 |
| 21. M. Dickens 52 | 2635 |
| 22. F. Dickie 53 | 2570 |
| 23. E. Foley 51 | 2550 |
| 24. B. Brandstater 51 | 2500 |
| 25. B. Echentile 54 | 2450 |
| 26. M. Burke 53 | 2405 |
| 27. N. Rimmer 53 | 2390 |
| 28. J. Gruender 50 | 2320 |
| 29. C. Rafes 52 | 2200 |
| 30. J. Dickson 51 | 1560 |

Women 55-59 YARDS

| | |
|---------------------|------|
| *1. G. Orosco 56 | 3930 |
| 2. S. Erickson 55 | 3460 |
| 3. J. Pieretti 58 | 3440 |
| 4. R. Runner 59 | 3385 |
| 5. N. Phillips 57 | 3350 |
| 6. S. Taft 59 | 3325 |
| 7. K. Harrison 55 | 3310 |
| 8. B. Golstet 59 | 3200 |
| 9. D. Donnelly 57 | 3175 |
| 10. M. Lee 58 | 3135 |
| 11. B. Condon 55-59 | 3095 |
| 12. M. Ewbank 59 | 3060 |
| 13. M. Carlson 58 | 3030 |
| 14. J. Haroreava 59 | 2995 |
| 15. E. Watson 57 | 2925 |
| 16. L. Kytte 57 | 2800 |
| 17. M. Schaffer 56 | 2725 |
| 18. B. Callaghan 56 | 2650 |
| 19. G. Lawton 55 | 2500 |
| 20. R. Landauer 55 | 2475 |
| 21. M. Hilton 55 | 2460 |
| 22. V. MacDonald 59 | 2455 |
| 24. M. Kreipe 59 | 2245 |
| 25. B. Goyette 58 | 2220 |
| 26. J. Haupt 55 | 2185 |
| 27. J. Baker 57 | 2105 |

Women 60-64 YARDS

| | |
|-----------------------|------|
| *1. J. McCollister 60 | 3365 |
| 2. M. Brown 61 | 3290 |
| 3. W. van Rysel 62 | 3220 |
| 4. J. Daborne 62 | 3130 |
| 5. J. Meservey 64 | 2815 |
| 6. P. Matthiosen 62 | 2715 |
| 7. H. Roumasset 63 | 2550 |
| 8. L. Knipp 62 | 2540 |
| 9. M. Wentworth 62 | 2400 |
| 10. R. Steward 60 | 2315 |
| 11. M. Anderson 64 | 2240 |
| 12. M. Bergeron 63 | 2175 |
| 13. J. Meager 61 | 2005 |
| 14. G. Dunn 62 | 1800 |

Women 65-69 YARDS

| | |
|-----------------------|------|
| *1. H. Offenhauser 66 | 2940 |
| 2. S. Sheppard 67 | 2750 |
| 3. D. Nicol 65 | 2685 |
| 4. A. Jannarone 2515 | |
| 5. G. Abraham 68 | 2405 |
| 6. R. Lechner 66 | 2325 |
| 7. G. McConkey 68 | 2175 |
| 8. J. Gordon 66 | 1760 |

Women 70-74 YARDS

| | |
|---------------------|------|
| *1. R. Switzer 70 | 2795 |
| 2. E. Somers 71 | 2475 |
| 3. R. Shephard 70 | 2275 |
| 4. H. Montgomery 72 | 2195 |
| 5. K. Pelton 73 | 1990 |
| 6. H. Bressie 70 | 1925 |
| 7. O. Newton 70 | 1670 |

Women 75-79 YARDS

| | |
|-------------------------|------|
| REC: W. Hughes 77 ('78) | 1575 |
| 1. J. Cameron 79 | 1260 |

Women 80 and above YARDS

| | |
|------------------------|------|
| REC: N. Brown 84 ('78) | |
| L. Florence 81 ('78) | 1620 |

1. N. Brown 85 1500

MEN 25-29 YARDS

| | |
|-------------------------|------|
| *1. A. Shestakov 29 | 5245 |
| 2. L. Markel 29 | 4950 |
| 3. M. Altepeter 25 | 4835 |
| 4. R. Watson 29 | 4800 |
| 5. D. Levinson 28 | 4745 |
| 6. R. Benetz 25 | 4725 |
| 7. B. Gest 29 | 4720 |
| 8. R. Rober 27 | 4655 |
| 9. M. Richards 28 | 4650 |
| 10. J. Emberson 27 | 4625 |
| 11. M. Gilmore 25 | 4505 |
| 12. B. Shapland 27 | 4485 |
| 13. M. Woo 29 | 4425 |
| 14. G. Hafer 27 | 4390 |
| 15. R. Morehead 28 | 4300 |
| 16. M. Reckwith 27 | 4255 |
| 17. R. Manley 28 | 4220 |
| 18. A.R. Stanley 29 | 4165 |
| 19. A. Stern 29 | 4100 |
| 20. D. Onbar 29 | 4065 |
| 21. J. Donnelly 29 | 3950 |
| 22. P. Rorden 28 | 3905 |
| 23. F. Gordon 25 | 3770 |
| 24. J. Thorpe 28 | 3660 |
| 25. D. Hannis 28 | 3650 |
| 25. K. Nitz 27 | 3650 |
| 27. T. Griffiths 29 | 3585 |
| 28. T. Edwards 26 | 3450 |
| 29. B. Simoneaux 27 | 3285 |
| 30. E. Connolly 29 | 3175 |
| 31. M. Griffin 25 | 3135 |
| 32. R. Schlobohm 25 | 3085 |
| 33. T. Hollingsworth 29 | 3005 |
| 34. D. Henry 26 | 2995 |
| 35. J. Whittle 25 | 2815 |
| 36. T. Rumble 25 | 2760 |
| 37. A. Nicol 29 | 2735 |
| 38. E. Von Lehn 25 | 2675 |
| 39. J. Padgett 29 | 2655 |
| 40. A. Riem 28 | 2615 |
| 41. R. Spink 29 | 2515 |

MEN 30-34 YARDS

| | |
|-----------------------|------|
| *1. B. Damm 32 | 5325 |
| 2. R.T. Spieker 30 | 5040 |
| 3. J. Selmer 33 | 4940 |
| 4. R.J. Rauer 30 | 4800 |
| 5. J. Johnson 30 | 4700 |
| 6. C. Shapland 31 | 4595 |
| 7. J. Koorey 34 | 4580 |
| 8. H. Johnson 30 | 4505 |
| 9. S. Highley 32 | 4490 |
| 10. R. Pohlonski 34 | 4305 |
| 11. R. Justman 31 | 4220 |
| 12. K. Daniel 33 | 4025 |
| 13. A. Dowler 31 | 4005 |
| 14. T. Maxon 34 | 3980 |
| 15. S. Toos 30 | 3940 |
| 16. K. Pierce 34 | 3900 |
| 17. D. Spender 30 | 3800 |
| 18. G. Burke 30 | 3875 |
| 19. R. Aispaugh 30-34 | 3850 |
| 20. R. Tittley 32 | 3830 |
| 21. J. Mairuin 33 | 3775 |
| 22. M. Rodin 32 | 3750 |
| 23. P. Thorn 32 | 3720 |
| 24. D. Kudder 31 | 3700 |
| 25. A. Rapp 33 | 3675 |

26. D. Harris 31 3625

| | |
|----------------------|------|
| 27. T. M. Erikson 32 | 3610 |
| 28. K. Lewis 33 | 3595 |
| 29. B. Timms 31 | 3580 |
| 30. E. Dawson 32 | 3500 |
| 31. D. Trifon 34 | 3395 |
| 32. J. Nicol 32 | 3335 |
| 33. M. Stein 31 | 3200 |
| 34. B. Lawrence 33 | 3125 |
| 35. T. Gay 30-34 | 3115 |
| 35. E. Wilson 32 | 3115 |
| 37. G. Neuman 31 | 3025 |
| 38. R. Matthews 30 | 2775 |
| 39. R. Dressler 34 | 2685 |
| 40. B. Chapman 34 | 2406 |
| 41. B. Hilbert 33 | 2350 |

MEN 35-39 YARDS

| | |
|-------------------------|--------|
| REC: P. Thompson 37 | |
| 1. P. Thompson 38 | 5005 |
| 2. P. Schlup 38 | 4875 |
| 3. R. Tesch 37 | 4600 |
| 4. S. Engel 35 | 4590 |
| 4. B. Kanner 39 | 4590 |
| 6. R. Lawson 39 | 4570 |
| 7. R. Gifford 38 | 4555 |
| 8. D. Pohlonski 35 | 4550 |
| 9. D. Caspell 39 | 4525 |
| 10. J. Geoghagan 36 | 4440 |
| 11. P. Whitten 35 | 4420 |
| 12. N. Casbolt 37 | 4405 |
| 13. R. Stanley 36 | 4245 |
| 14. S. Ginsburg 37 | 4210 |
| 15. J.N. Gillanders 39 | 4195 |
| 16. D. Northway 36 | 4140 |
| 17. P. Rastrogram 37 | 4135 |
| 18. R. Clark 36 | 4125 |
| 19. P. Ford 39 | 4090 |
| 20. T. Cameron 36 | 4045 |
| 21. J. Brumbaugh 36 | 4040 |
| 22. R. Reitman 38 | 4005 |
| 23. O.J. Bree 36 | 3975 |
| 24. R. Hutterly 36 | 3965 |
| 25. R. Hahn 36 | 3900 |
| 26. J. Robertson 35 | 3855 |
| 27. H. Dunseath 35 | 3840 |
| 28. R. Shay 38 | 3835 |
| 29. M. Chastain 38 | 3775 |
| 29. M. Landau 37 | 3775 |
| 31. B. Osborne 38 | 3750 |
| 32. T. Ramsey 38 | 3745 |
| 33. R. Keeney 35 | 3735 |
| 34. J. Schwinghammer 39 | 3730 |
| 34. M. McMaion 36 | 3730 |
| 36. S. Lautermilch 36 | 3720 |
| 37. R. Pierce 38 | 3710 |
| 38. M. Fems 39 | 3690 |
| 39. R. Friedman 36 | 3650 |
| 40. M. Murayama 35 | 3610 |
| 41. J.R. Finlay 35 | 3585</ |

AMERICAN SWIMMING RECORDS

1979 SHORT COURSE RECORDS

| For Masters | | | | | | | | | | | | |
|--------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| EVENTS | 25-29 | 30-34 | 35-39 | 40-44 | 45-49 | 50-54 | 55-59 | 60-64 | 65-69 | 70-74 | 75-79 | 80+ |
| WOMEN | | | | | | | | | | | | |
| 50 free | 25.24 | 25.31 | 26.53 | 27.50 | 28.50 | 29.69 | 30.64 | 33.16 | 35.58 | 40.92 | 59.47 | 1:14.71 |
| 100 free | 55.16 | 57.16 | 59.46 | 1:01.32 | 1:02.80 | 1:07.25 | 1:08.51 | 1:16.20 | 1:24.44 | 1:35.00 | 2:14.95 | 2:43.15 |
| 200 free | 2:02.30 | 2:05.66 | 2:12.57 | 2:17.12 | 2:19.50 | 2:32.33 | 2:35.87 | 3:03.30 | 3:21.37 | 3:33.41 | 4:51.00 | 5:49.49 |
| 500 free | 5:25.68 | 5:38.25 | 5:54.17 | 6:05.10 | 6:20.20 | 6:59.20 | 7:21.05 | 8:11.38 | 8:53.95 | 9:25.54 | 18:56.10 | 18:23.67 |
| 1650 free | 18:49.89 | 19:40.81 | 19:46.80 | 21:05.69 | 21:53.07 | 24:07.90 | 25:35.02 | 27:56.87 | 29:55.14 | 34:26.26 | 42:38.14 | 66:53.90 |
| 50 back | 30.30 | 29.47 | 30.50 | 32.50 | 34.80 | 37.79 | 39.60 | 40.80 | 43.95 | 55.00 | 1:09.16 | 1:16.17 |
| 100 back | 1:05.40 | 1:07.90 | 1:08.83 | 1:11.49 | 1:15.30 | 1:19.18 | 1:26.37 | 1:30.30 | 1:40.54 | 2:00.80 | 2:24.35 | 2:47.66 |
| 200 back | 2:21.18 | 2:27.64 | 2:31.51 | 2:39.62 | 2:42.70 | 2:50.00 | 3:08.20 | 3:21.52 | 3:37.33 | 4:27.30 | 8:37.04 | 5:44.14 |
| 50 brst | 32.20 | 35.26 | 36.40 | 36.70 | 36.90 | 40.30 | 40.00 | 47.20 | 49.70 | 59.01 | 1:03.73 | 1:24.08 |
| 100 brst | 1:10.18 | 1:15.06 | 1:18.10 | 1:19.03 | 1:18.86 | 1:28.20 | 1:30.51 | 1:35.10 | 1:46.20 | 2:09.00 | 2:34.07 | 3:06.11 |
| 200 brst | 2:32.40 | 2:42.29 | 2:50.41 | 2:50.07 | 2:42.30 | 3:17.20 | 3:14.87 | 3:40.84 | 3:54.82 | 4:51.00 | 5:42.31 | ----- |
| 50 fly | 27.72 | 28.03 | 28.52 | 28.90 | 30.70 | 34.22 | 35.90 | 41.36 | 47.28 | 1:01.69 | 3:53.00 | ----- |
| 100 fly | 1:01.12 | 1:02.62 | 1:03.34 | 1:09.00 | 1:11.15 | 1:21.12 | 1:29.75 | 1:43.86 | 1:49.29 | 2:31.86 | ----- | ----- |
| 200 fly | 2:15.24 | 2:26.41 | 2:27.45 | 2:50.00 | 2:42.30 | 3:01.20 | 3:31.46 | 4:01.59 | 4:05.86 | ----- | ----- | ----- |
| 100 I.M. | 1:04.21 | 1:05.46 | 1:08.42 | 1:09.70 | 1:11.35 | 1:17.19 | 1:22.54 | 1:34.45 | 1:37.43 | 2:11.40 | 6:27.14 | ----- |
| 200 I.M. | 2:18.53 | 2:23.60 | 2:31.34 | 2:35.13 | 2:34.41 | 2:51.31 | 3:05.40 | 3:33.81 | 3:36.14 | 4:54.20 | ----- | ----- |
| 400 I.M. | 4:56.24 | 5:16.41 | 5:37.30 | 5:44.17 | 5:34.41 | 6:15.40 | 6:43.56 | 7:39.30 | 7:39.41 | 10:37.90 | ----- | ----- |
| 200 F.R. | 1:43.31 | | 1:55.26 | | 2:07.57 | | 2:25.77 | | 3:09.91 | | | |
| 200 M.R. | 1:58.01 | | 2:11.21 | | 2:27.15 | | 2:57.00 | | 4:51.90 | | | |
| 200 M.F.R. | 1:35.07 | | 1:41.74 | | 1:50.08 | | 1:58.89 | | 2:27.27 | | | |
| MEN | | | | | | | | | | | | |
| 50 free | 21.30 | 21.73 | 22.19 | 23.15 | 22.85 | 24.68 | 25.20 | 26.53 | 27.64 | 30.70 | 32.03 | 41.37 |
| 100 free | 46.62 | 48.27 | 49.18 | 51.39 | 52.33 | 56.75 | 56.84 | 58.85 | 1:03.90 | 1:10.65 | 1:12.90 | 1:39.20 |
| 200 free | 1:43.71 | 1:47.02 | 1:50.82 | 1:51.63 | 1:57.09 | 2:07.35 | 2:08.50 | 2:13.21 | 2:28.10 | 2:48.40 | 2:48.60 | 3:33.80 |
| 500 free | 4:44.78 | 4:57.68 | 5:04.02 | 5:09.20 | 5:18.20 | 5:50.78 | 5:58.77 | 6:08.60 | 6:46.59 | 7:50.40 | 7:47.28 | 10:54.00 |
| 1650 free | 16:56.86 | 17:36.69 | 17:34.73 | 18:25.66 | 18:31.86 | 20:13.06 | 20:58.39 | 21:36.04 | 23:26.43 | 26:41.59 | 27:30.40 | 39:46.00 |
| 50 back | 25.37 | 25.37 | 27.17 | 28.20 | 29.57 | 29.70 | 31.48 | 32.60 | 36.05 | 36.30 | 45.80 | 55.90 |
| 100 back | 55.50 | 56.24 | 56.84 | 1:00.20 | 1:01.59 | 1:05.40 | 1:09.30 | 1:11.10 | 1:19.50 | 1:20.80 | 1:42.60 | 1:59.41 |
| 200 back | 2:01.45 | 2:06.24 | 2:07.80 | 2:15.89 | 2:15.70 | 2:24.50 | 2:30.70 | 2:47.37 | 3:02.11 | 3:03.60 | 3:57.42 | ----- |
| 50 brst | 28.30 | 28.40 | 29.24 | 30.40 | 29.87 | 32.19 | 33.12 | 35.01 | 35.02 | 40.40 | 49.16 | 53.90 |
| 100 brst | 1:00.38 | 1:01.81 | 1:04.04 | 1:06.86 | 1:06.62 | 1:11.68 | 1:14.21 | 1:18.30 | 1:25.55 | 1:34.42 | 1:57.64 | 2:11.24 |
| 200 brst | 2:12.52 | 2:18.27 | 2:22.75 | 2:28.84 | 2:32.14 | 2:41.43 | 2:51.32 | 2:54.09 | 3:11.40 | 3:36.16 | 4:21.60 | 5:00.69 |
| 50 fly | 23.59 | 23.87 | 25.12 | 25.45 | 25.88 | 27.76 | 29.18 | 30.70 | 34.50 | 37.60 | 59.00 | ----- |
| 100 fly | 51.13 | 53.01 | 55.40 | 57.93 | 1:00.07 | 1:04.75 | 1:07.22 | 1:15.98 | 1:26.93 | 1:37.68 | ----- | ----- |
| 200 fly | 1:57.60 | 2:00.52 | 2:07.59 | 2:18.32 | 2:21.89 | 2:31.90 | 3:43.24 | 3:01.75 | 3:34.93 | 3:47.95 | ----- | ----- |
| 100 I.M. | 54.87 | 55.80 | 57.59 | 59.62 | 59.60 | 1:04.53 | 1:07.84 | 1:11.56 | 1:16.94 | 1:27.65 | 2:09.90 | ----- |
| 200 I.M. | 1:59.22 | 2:05.47 | 2:06.94 | 2:12.80 | 2:12.90 | 2:26.68 | 2:34.99 | 2:44.22 | 2:59.78 | 3:25.73 | ----- | ----- |
| 400 I.M. | 4:26.90 | 4:39.28 | 4:45.35 | 4:56.11 | 5:03.09 | 5:22.90 | 5:44.39 | 5:53.40 | 7:04.60 | 7:45.81 | ----- | ----- |
| 200 F.R. | 1:27.63 | | 1:31.76 | | 1:41.52 | | 1:48.33 | | 2:08.59 | | | |
| 200 M.R. | 1:39.25 | | 1:45.21 | | 1:56.08 | | 2:08.47 | | 2:28.91 | | | |

1979 LONG COURSE RECORDS

EVENTS

| WOMEN | 25-29 | 30-34 | 35-39 | 40-44 | 45-49 | 50-54 | 55-59 | 60-64 | 65-69 | 70-74 | 75-79 | 80+ |
|------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| 50 free | 28.22 | 29.45 | 30.56 | 31.56 | 32.40 | 33.70 | 34.63 | 36.23 | 40.00 | 50.15 | 1:10.03 | 1:37.83 |
| 100 free | 1:03.98 | 1:05.54 | 1:08.29 | 1:10.67 | 1:09.85 | 1:17.45 | 1:16.55 | 1:25.86 | 1:32.60 | 1:54.54 | 2:35.42 | 3:37.81 |
| 200 free | 2:22.44 | 2:22.80 | 2:27.97 | 2:35.00 | 2:38.20 | 2:56.80 | 2:54.10 | 3:23.47 | 3:43.90 | 4:19.53 | 6:12.19 | 7:07.50 |
| 400 free | 4:57.65 | 5:01.50 | 5:10.73 | 5:22.40 | 5:36.70 | 6:09.52 | 6:23.80 | 7:22.42 | 7:59.30 | 9:03.19 | 13:01.00 | 15:17.93 |
| 1500 free | 19:19.62 | 20:39.41 | 20:42.04 | 21:23.78 | 23:01.60 | 24:19.40 | 26:02.31 | 29:05.13 | 30:49.40 | 35:52.89 | 46:56.21 | 68:35.20 |
| 50 back | 33.71 | 34.58 | 35.18 | 38.10 | 39.70 | 41.18 | 44.79 | 47.50 | 50.60 | 56.04 | 1:15.01 | 2:13.00 |
| 100 back | 1:13.40 | 1:16.88 | 1:19.89 | 1:24.30 | 1:26.14 | 1:31.66 | 1:38.92 | 1:44.68 | 1:50.80 | 2:08.20 | 2:42.29 | 4:10.51 |
| 200 back | 2:41.40 | 2:48.07 | 2:51.84 | 3:01.75 | 3:07.02 | 3:15.01 | 3:31.62 | 3:57.74 | 4:13.30 | 4:57.38 | 5:54.02 | ----- |
| 50 brst | 38.10 | 38.20 | 40.80 | 41.89 | 43.00 | 45.30 | 47.85 | 49.40 | 55.80 | 1:08.28 | 1:20.90 | ----- |
| 100 brst | 1:21.07 | 1:25.02 | 1:31.10 | 1:33.86 | 1:29.80 | 1:41.60 | 1:40.19 | 1:52.50 | 2:04.70 | 2:32.16 | 3:01.87 | ----- |
| 200 brst | 3:00.47 | 3:05.60 | 3:20.50 | 3:21.17 | 3:15.85 | 3:41.94 | 3:34.85 | 4:17.64 | 4:28.43 | 5:47.12 | 7:06.04 | ----- |
| 50 fly | 30.81 | 32.16 | 33.20 | 34.40 | 36.00 | 39.10 | 41.57 | 47.18 | 54.54 | 1:11.80 | 4:57.06 | ----- |
| 100 fly | 1:08.38 | 1:12.57 | 1:17.63 | 1:24.25 | 1:21.32 | 1:31.24 | 1:44.27 | 1:58.50 | 2:09.20 | 2:38.76 | ----- | ----- |
| 200 fly | 2:41.58 | 2:49.10 | 2:59.85 | 3:05.80 | 3:16.40 | 3:29.54 | 3:57.32 | 4:31.50 | 4:33.30 | 6:17.42 | ----- | ----- |
| 200 I.M. | 2:38.52 | 2:47.70 | 2:51.47 | 3:06.13 | 2:55.61 | 3:18.40 | 3:29.39 | 3:50.10 | 4:11.30 | 5:24.10 | ----- | ----- |
| 400 I.M. | 5:35.29 | 6:05.30 | 6:04.18 | 6:26.90 | 6:29.10 | 7:04.25 | 7:42.12 | 8:28.68 | 8:42.66 | 12:00.40 | ----- | ----- |
| 200 F.R. | 2:02.40 | | 2:13.46 | | 2:19.85 | | 2:40.81 | | 4:35.54 | | | |
| 200 M.R. | 2:18.50 | | 2:33.50 | | 2:46.82 | | 3:08.15 | | 5:13.44 | | | |
| 200 M.F.R. | 1:52.27 | | 1:57.17 | | 2:04.41 | | 2:15.26 | | 3:05.21 | | | |
| MEN | 25-29 | 30-34 | 35-39 | 40-44 | 45-49 | 50-54 | 55-59 | 60-64 | 65-69 | 70-74 | 75-79 | 80+ |
| 50 free | 24.79 | 25.45 | 25.56 | 26.47 | 26.25 | 28.75 | 28.56 | 30.20 | 30.30 | 35.10 | 35.95 | 49.16 |
| 100 free | 54.38 | 55.51 | 56.63 | 58.91 | 1:02.44 | 1:04.47 | 1:06.23 | 1:07.06 | 1:11.89 | 1:23.50 | 1:24.16 | 1:52.97 |
| 200 free | 2:05.49 | 2:02.11 | 2:08.57 | 2:09.08 | 2:15.33 | 2:26.40 | 2:29.71 | 2:34.64 | 2:49.10 | 3:17.60 | 3:13.40 | 4:15.10 |
| 400 free | 4:28.65 | 4:31.01 | 4:33.14 | 4:38.82 | 4:48.49 | 5:14.20 | 5:24.47 | 5:36.58 | 5:59.67 | 6:59.64 | 7:05.95 | 9:30.30 |
| 1500 free | 17:40.50 | 18:05.49 | 18:06.20 | 18:41.90 | 19:07.05 | 21:07.66 | 21:30.12 | 22:28.74 | 25:07.50 | 28:02.14 | 28:36.98 | 38:36.30 |
| 50 back | 28.76 | 29.21 | 28.04 | 32.63 | 33.30 | 34.95 | 34.61 | 37.60 | 39.42 | 41.45 | 48.66 | 59.54 |
| 100 back | 1:03.61 | 1:05.00 | 1:03.00 | 1:10.67 | 1:15.93 | 1:16.10 | 1:19.67 | 1:20.74 | 1:33.30 | 1:36.10 | 2:00.12 | 2:12.99 |
| 200 back | 2:21.99 | 2:19.85 | 2:19.40 | 2:40.18 | 2:40.81 | 2:46.52 | 2:56.55 | 3:11.25 | 3:28.40 | 3:30.10 | 4:28.65 | 5:05.23 |
| 50 brst | 32.20 | 32.31 | 33.96 | 35.22 | 33.91 | 38.00 | 39.90 | 39.96 | 43.10 | 47.40 | 54.30 | 58.81 |
| 100 brst | 1:06.87 | 1:09.30 | 1:15.62 | 1:18.79 | 1:15.47 | 1:24.19 | 1:29.00 | 1:31.77 | 1:39.54 | 1:49.43 | 2:10.15 | 2:26.30 |
| 200 brst | 2:33.04 | 2:33.51 | 2:51.00 | 2:59.57 | 2:54.31 | 3:08.36 | 3:25.09 | 3:21.95 | 3:39.59 | 4:04.63 | 4:57.35 | 5:40.12 |
| 50 fly | 26.70 | 26.70 | 28.00 | 28.50 | 29.50 | 31.50 | 33.30 | 35.03 | 42.70 | 45.60 | 53.50 | ----- |
| 100 fly | 58.56 | 59.07 | 1:03.67 | 1:09.08 | 1:14.43 | 1:15.55 | 1:22.05 | 1:30.90 | 1:43.30 | 1:55.75 | ----- | ----- |
| 200 fly | 2:13.14 | 2:14.24 | 2:30.27 | 2:49.20 | 3:01.02 | 3:12.06 | 3:30.54 | 3:37.44 | 4:04.80 | 4:47.13 | ----- | ----- |
| 200 I.M. | 2:15.55 | 2:18.78 | 2:29.63 | 2:29.70 | 2:37.60 | 2:47.55 | 3:01.52 | 3:08.46 | 3:32.30 | 3:55.81 | 5:43.79 | ----- |
| 400 I.M. | 5:07.69 | 5:01.43 | 5:24.26 | 5:41.96 | 5:37.40 | 6:15.10 | 6:31.18 | 6:57.10 | 8:16.85 | 8:26.15 | ----- | ----- |
| 200 F.R. | 1:40.61 | | 1:46.69 | | 1:54.59 | | 2:00.28 | | 2:27.99 | | | |
| 200 M.R. | 1:55.80 | | 2:02.60 | | 2:11.69 | | 2:24.42 | | 2:58.67 | | | |

MASTERS SWIMMING NOTES

STATEMENT BY TINK BOLSTER, JERSEY MASTERS - We swimmers sincerely appreciate those people (many of them swimmers themselves) who have the interest and time to put on a meet. It is a great deal of work. We definitely need the meets and do not want to discourage anyone from holding a meet. Therefore, it is with some trepidation that I voice my concern. I want my criticism to be constructive rather than destructive. It is terribly disappointing and frustrating to competitors to swim in a meet which states: "All times will be considered for National Masters Records and Ten Best Times" and then discover, too late, that the meet results were never submitted for consideration. The reason the Top Ten Times have been established is to recognize the swimmers' achievements. If meet directors fail to submit meet results, the entire Masters program suffers because the Top Ten Times become inaccurate. All of us owe a debt of gratitude to Enid Uhrich, Ted Haartz and Ed Reed Sr. who do such a fine job of compiling the Records and Top Ten Times. Most swimmers put a great deal of effort and pride into swimming. It seems to me many of them would choose to skip a meet which had gained the reputation for not submitting meet results. I appeal to all meet directors to please do a proper job of faithfully and accurately sending in your meet results. Your cooperation is crucial to Masters Swimming! Thank you! Mail 3 copies of Meet Results to: Enid Uhrich, 25 Lafayette Rd., Newton Lower Falls, MA 02162.....

SPEAKING OF MEET RESULTS - Unfortunately, many meet directors do not receive Swim-Master and don't even know about the Top Ten Times (unless told by a Masters Swimmer) and do not know the format to type up meet results. In going through the meet results sent to Swim-Master in the past several months, the following list was compiled of errors in meet results to reproduce in Swim-Master: 1) carbon copy of results; 2) lousy zerox copy of results; 3) results printed on both sides of page; 4) results in order of event instead of in age group order; 5) result copy is already reduced; 6) sent over six months after the meet; 7) too many spaces between age groups; 8) columns of type too wide; 9) results on colored paper; and 10) each column having a different # of spaces.....

NEWS FROM CANADA - There is a new chairman for Masters Swimming for Canada. Her name is Bonnie Pronk (a great breaststroker), RR # 1, Kingston, Nova Scotia, Canada BOP 1R0.....

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SOME GOOD NEWS FROM NEW JERSEY - Austin Newman, 63, member of Jersey Masters Swim Team created another first for the team in winning 3 National Masters Track & Field championships at Ann Arbor, MI, March 17-18. He was tops in the nation in the 2 mile, 1 mile and the 1000 yard run. In 1974 he was a member of Jersey Masters 1000 mtr 10 man Hawaiian relay team which swim the distance in 13:13.37 which still stands unchallenged. In 1976 he also created a new national record in the 500 yd free swim in the time of 6:46.77. Also swam on 7 relays in the 55-64 age group in the 2nd annual Hawaiian postal relays last year in which JM won the team title. Austin also competes in JMST's two aqua-terra Biathlon meets held yearly.....

MAN SWIMS 1,700 MILES IN BASEMENT - Ernie Borchart of Holdrege, NE, is 84 yrs old. He also has a bad leg, which prohibits him from jogging, or walking, so he has devised a unique way to stay in shape. He built a miniature pool in his basement: 10' x 4' and 2-3' deep. With an elastic harness which he clips to the wall, Ernie swims about 800 strokes each morning - in one place. He was a long-distance swimmer in his younger days, so Ernie figures that 800 strokes is about 1/2 mile. Since 1962, Ernie has swum 1,672 miles, and is looking forward to his 2000th mile. Ernie chuckles, "Then my ambition is to go for 5,000 miles, or live to be 100. Hopefull both." (Unmatched Propaganda)....

NEW CEREAL - We have invented a new breakfast cereal called "Masters Flakes". You pour warm milk over them, and they roll over and go back to sleep. (from Old Sternwheeler).....

DISCONTINUATION - The "I Made It In Swim Master" T-Shirt has been discontinued due to business problems. All outstanding orders are being filled and other potential customers are being notified of the discontinuation.....

PATCHES - The newly designed AAU Masters Swimming Patches are still being sold for \$2.00. Just send your orders to June Krauser, 2308 N.E. 19th Avenue, Fort Lauderdale, FL 33305.....

Continued on back page

June Krauser, Editor
2308 N.E. 19th Avenue
Ft. Lauderdale, FL 33305

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LIFETIME VIGOROUS SWIMMING FOR FUN, SPORT AND HEALTH

SWIM CALENDAR

VOL VIII-No4 MAY 1979

| | | |
|---|-------|---|
| MAY | 4-7 | SC NATIONALS - DON Smith, 22961 Luciana, Mission Viejo, CA 92691 |
| | 5-6 | Lubbock Y - Gene M. Hildreth, 3102 36th St., Lubbock, TX 79413 |
| | 5-6 | SC - Bill Kloppe, 213 Osceola Ave., Nashville, TN 37209 |
| | 6 | HI - CDR Bill Earley, 9A Kamakani Pl., Honolulu, HI 96818 |
| | 18-20 | Region XII Championships - Spokane, WA |
| | 24-28 | Virginia Masters Swim Camp - U.S. Camps, PO Box 6546, Charlottesville, VA 22906 |
| | 25-27 | St. Pete LC - Joe Biondi, 216 Elizabeth St., Clearwater, FL 33519 |
| APR | 2-3 | PNA SC - Enumclaw, WA |
| | 8-10 | YMCA Nationals - Western YMCA, 850 S. Rolling Rd., Baltimore, MD 21228 |
| | 8-10 | CANADIAN NATIONALS - Tom Brady, 265 Vance Dr., Oakville, Ont. Canada L6L 3K9 |
| | 9-10 | SC - U of Montana, Missoula, MT |
| JUL | 8 | 1500 Mtr - Dave McAfee, 510 Broad St., Falls Church, VA 22046 |
| | 13-15 | LC - Nat Clement, 5632 Granada Dr., #138, Sarasota, FL 33581 |
| | 14-15 | LC - Jamie Stewart & Fran Woolsey, 4630 Woolridge Rd., Corpus Christi, TX 78413 |
| AUG | 4-5 | DC LC - Dave McAfee, 510 Broad St., Falls Church, VA 22046 |
| | 18 | Powel Crosley Y - Ed Hunter, 423 Flemridge Ct., Cincinnati, OH 45231 |
| | 24-27 | Jack Dunworth, 22227 Long Blvd., Dearborn, MI |
| MASTERS DIVING - Bill McAlister, 14407 Road 23-1/2, Madera, CA 93637 | | |
| MAY 25-27 (Nationals), JUN 16, JUL 8, AUG 24-27 (Nationals), SEP 8-9, SEP 24, OCT 13 | | |
| CORONADO MASTERS - Alicia Horst, 571 Marina Ave., Coronado, CA 92118 MAY 27, JUL 29 | | |
| MAY 16-18 1980 SC NATIONALS - June Krauser, 2308 NE 19 Ave., Ft. Lauderdale, FL 33305 | | |
| *Mail 3 copies of meet results to: Enid Uhrich, 25 Lafayette Rd., Newton Lwr Fls, MA 02162* | | |
| OCT | 7 | Leatherstocking Open - Jane Johngren, % ACC Gym, Cooperstown, NY 13326 |

WRITING A BOOK - As a result of Phillip Whitten's article in Family Health, he has been asked to write a book on swimming and health, focusing largely on Masters swimming and Masters swimmers. In connection with this book, which probably will be published some time next year, Phil would welcome hearing from Masters swimmers from throughout the country (and from other countries) with material he could use in the book. Specifically, he would like name, occupation, address, phone number, and age of those responding. Next he needs to know of their swimming experience prior to Masters swimming, and their major accomplishment in Masters swimming. Why you participate, what have been the most important effects of the sport on your lives - personal, psychological, physical, health, etc. Particularly, those that overcame one or another physical disability. Any related anecdotes, photos (black & white glossy), etc. Please send to

Dr. Phillip Whitten, 7 Lawrence Dr., Marblehead, MA 01945.....
SKWIM SWIMMING '79 - July 30 - August 12 will be a four day to two week swim forum experience for men and women Master Swimmers age 25 and over. If interested, write to SKWIM SWIMMING, Great Valley, NY 14741. Teachers and coaches so far will be Harry Rawstrom, Univeristy of Delaware swim coach and Jim Fulton, a specialist in exercise physiology.....
ALL KNOWING OLD STERNWHEELER SAYS - Part of the "lifetime Program" is knowing the balance between working hard enough to maintain fitness, and yet not going so often "to the well" that you exhaust your motivation after 24 months of swimming. Don't be afraid to swim an easy workout now and then to preserve your high state of excitement and dedication.....
TIME TO RENEW? - Check your number above. If it is 479 this is your last issue! No 4 of 1979...