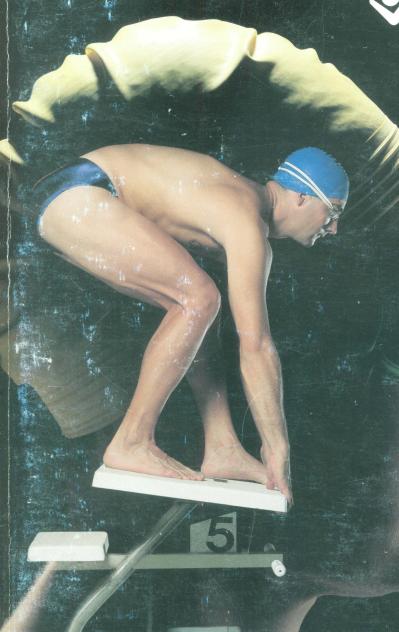
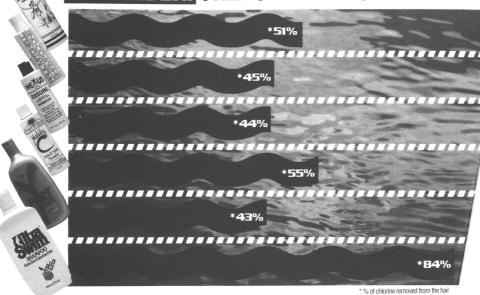
993 RULES

United States Masters Swimming





NO MATTER HOW MUCH YOU SWIM, REMEMBER ONLY ONE LANE CAN WIN.



TitraSwim® the best shampoo to remove chlorine

Only UltraSwim Shampoo with its patented ingredient really Gets The Chlorine Out. In a laboratory study against leading brands of shampoos including Nexous* Assure*, Pert* Plus, Flex*, Malibu* C, The Finals* and others – UltraSwim removed over 50% more chlorine from the hair. That's a proven fact.

Only **UltraSwim** works by converting the chlorine on your hair into a water-soluble chloride. Other leading brands of shampoos can't remove chlorine because they can't break down the chlorine's bond.

Not only is **UltraSwim** superior at removing chlorine, it also cleans as effectively as regular shampoo while leaving your hair soft and manageable. Plus **UltraSwim** is gentle enough to use everyday.

UltraSwim's superiority is recognized by many of the United States swimming organizations and is the official supplier to the U.S. National Teams, American Swimming Coaches Assoc., College Swimming Coaches Assoc., U.S. Synchronized Swimming and others.

Try **UltraSwim** and see for yourself why **UltraSwim** is the best shampoo to remove chlorine.





1993

UNITED STATES MASTERS SWIMMING CODE OF REGULATIONS AND

RULES OF COMPETITION

Published by
United States Masters Swimming, Inc.
Two Peter Avenue
Rutland, MA 01543

Telephone: (508) 886-6631 FAX: (508) 886-6265

Edited by Julie M. Paque with assistance from the Rule Book Editorial Board.

This is an official publication of United States Masters Swimming, Inc., the National Governing Body for Masters Swimming in the United States. Additional copies of this book may be purchased at a cost of \$6.00 (\$7.00 for first class delivery) from the USMS National Office at the above address.

Copyright 1993 by United States Masters Swimming, Inc. Portions of this book are reprinted with permission from United States Swimming Rules and Regulations (Copyright 1989, 1990, 1991, 1992, 1993).

Cover design by Kathy Keffer-Sharpe of Oklahoma Masters and Stephen Hogan of DC Masters. The cover photograph features a swimmer on a starting block superimposed over the profile of a female swimmer. Photography © by Kathy Keffer-Sharpe 1992.

Dedication

The 1993 United States Masters Swimming Code of Regulations and Rules of Competition is dedicated to Kathrine J. Casey and Gail M. Dummer in recognition of the dedication, time, and effort they have put forth in producing the USMS Rule Book over the past four years.

UNITED STATES MASTERS SWIMMING, INC.

EXECUTIVE COMMITTEE:

President - Daniel Gruender, 3329 N. Valencia Lane, Phoenix, AZ 85018

Vice-President - Nancy Ridout, 580 Sunset Parkway, Novato, CA 94947

Secretary - Mel Goldstein, 6456 Broadway, Indianapolis, IN 46220

Treasurer - Suzanne Rague, 21 Deeringwood Lane, Babylon, NY 11702

Past President - Thomas D. Boak, 15 Sawmill Grove Lane, The Woodlands, TX 77380

Legal Counsel - Jack Geoghegan, 155 Osborn Road, Rye, NY 10580

Chairman, Zone Committee - Betsy Durrant, 211-66th Street, Virginia Beach, VA 23451

NATIONAL OFFICE:

Executive Secretary - Dorothy Donnelly, 2 Peter Avenue, Rutland, MA 01543, (508) 886-6631

National Registrar - Diane and Bill Black, P.O. Box 88863, Atlanta GA 30356-8863, (404) 698-8020.

MAJOR CHANGES FOR 1993

- **Age groups:** Age groups for individual, relay, and long distance/open water events shall be added as necessary to accommodate older swimmers. (Articles 102.3, 304.7, 305.2.2B)
- Warm-up/warm-down: Swimmers must enter the pool feet first in a cautious manner, with at least one hand in contact with the pool deck or gutter. (Article 102.4.2)
- Entry fees: Entry fees for local Masters events shall be set by the LMSC. (Article 102.7)
- Timing: Article 103 of the USMS Code of Regulations and Rules of Competition has been amended to reflect recent changes by USS concerning Timers, Timing Equipment, and Official Time. (Articles 103.6, 103.7, 103.8)
- Team Divisions for National Championships: The number of entrants from a club which will constitute a Division I (Large) or Division II (Small) team will be determined after the meet entry deadline by the Championship Committee. (Article 104.5.6C)
- Liability Release: The sentence "In addition, I agree to abide by and be governed by the rules of USMS" must be included with the liability release. (Articles 201.1.2B, 202.1.1G(4), 202.2.1F, 203.1, 301.3)
- Escorted Swims: In open water events with escort craft, all swimmers must be accompanied. If the escort becomes disabled, the swimmer must either stay in the water next to the escort craft until a replacement arrives, or exit the water. Another swimmer's escort craft may assume responsibility for the swimmer, subject to certain constraints. (Article 303.2)
- Contract for Long Distance Championships: Successful bidders of Long Distance Championship Events shall sign a written contract with USMS, specifying the responsibilities of the meet host and of USMS, Inc. (Article 305.4)

TABLE OF CONTENTS

Preamb	le	11
Goals a	and C	Objectives of United States Masters Swimming11
Glossa	ry	12
		PART ONE: Swimming Rules
Article	101:	Starts, Strokes, and Relays15
101	.1	Starts
101	.2	Breaststroke16
101	.3	Butterfly16
101	.4	Backstroke17
101	.5	Freestyle17
101	.6	Individual Medley18
101	.7	Relays18
Articla	102.	Swimming Competition19
102		Eligibility19
102		Age Determining Date20
102		Age Groups
102		Warm-Up/Warm-Down20
102		Events
102		Event Limit
102		Entry Fees21
102		Scratch Procedures
102		Relays21
102		Lane Assignments - Seeding - Counters
102		Awards
102		Scoring
102		Change of Program and Postponement26
102		Costume
102		Disqualifications27
102		Protests
102		Required Officials29
102		Meet Director
102		Meet Committee29
102	.20	Smoking
Article	103:	Officials and Their Duties30
103	.1	Referee30
103	.2	Starter31
103	.3	Recall Starter33
103	.4	Recall Rope Operator33
103	.5	Judges33

103.	6 7	Timers	.34
103.		Timing Equipment	
103.		Official Time	
103.		Clerk of Course	
103.		Marshals	
103.		Announcer	
103.		Recorder of Records	
103.	13 F	Press Steward	.40
Autinia d	104. h	National Championship Meets	A -t
Article i			
104.		Meet Categories	
104.		Vleet Name	
104.	3 <i>F</i>	Awarding of a National Championship Meet	.41
104.		JSMS Assistance and Agreements	
104.	5 (Conduct of National Championship Meets	.43
Article 1	105: F	Records, Top Ten Times, and All-American	
	F	Recognition	.50
105.	1 5	Requirements for Records and Top Ten Times	50
105.		Top Ten Times	
105.		JSMS National Records	
105.4		All-American Recognition	
105.4	4 1-	All-American Recognition	.02
400			
105.		World Records	.52
	5 V	Norld Records	
Article 1	5 V 106: H	Norld Records	.52
Article 1	5 V 106: H 1 N	Norld Records	.52 .52
Article 1	5 V 106: H 1 N	Norld Records	.52 .52
Article 1 106.: 106.:	5 V 106: H 1 N 2 N	Norld Records Health and Safety Regulations for Competition Medical Examination Medical Equipment	.52 .52 .53
Article 1 106. 106.: Article 1	5 V 106: F 1 N 2 N	Norld Records	.52 .52 .53
Article 1 106.: 106.:	5 V 106: H 1 N 2 N 107: F	Norld Records Health and Safety Regulations for Competition Medical Examination Medical Equipment Facilities Standards Definitions	.52 .52 .53
Article 1 106. 106.: Article 1	5 V 106: H 1 N 2 N 107: F	Norld Records Health and Safety Regulations for Competition Medical Examination Medical Equipment Facilities Standards	.52 .52 .53
Article 1 106.: 106.: Article 1	5 V 106: H 1 N 2 N 107: F 1 E 2 F	Norld Records Health and Safety Regulations for Competition Medical Examination Medical Equipment Facilities Standards Definitions	.52 .52 .53 .53
Article 1 106.7 106.7 Article 1 107.7	5 V 106: II 1 M 2 M 107: F 1 E 2 F 3 F	Norld Records Health and Safety Regulations for Competition Medical Examination Medical Equipment Facilities Standards Definitions Racing Course Dimensions	.52 .52 .53 .53
Article 1 106.: 106.: Article 1 107.: 107.:	5 V 106: H 1 N 2 N 107: F 1 C 2 F 3 F 4 F	Norld Records Health and Safety Regulations for Competition Medical Examination Medical Equipment Facilities Standards Definitions Racing Course Dimensions Racing Course Walls	.52 .53 .53 .53 .54
Article 1 106.: 106.: Article 1 107.: 107.: 107.:	5 V 106: H 1 N 2 N 107: F 1 E 2 F 3 F 4 F 5 C	Norld Records Health and Safety Regulations for Competition Medical Examination Medical Equipment Facilities Standards Definitions Racing Course Dimensions Racing Course Walls Pool and Bulkhead Markings	.52 .52 .53 .53 .54 .54
Article 1 106.: 106.: Article 1 107.: 107.: 107.: 107.: 107.:	5 V 106: H 1 N 2 N 107: F 1 E 2 F 3 F 4 F 5 C 6 V	Norld Records Health and Safety Regulations for Competition Medical Examination Medical Equipment Facilities Standards Definitions Racing Course Dimensions Racing Course Walls Pool and Bulkhead Markings Deverflow Recirculation System Nater Temperature	.52 .53 .53 .53 .54 .54
Article 1 106.: 106.: Article 1 107.: 107.: 107.: 107.:	5 V 106: H 1 N 2 N 107: F 1 E 2 F 3 F 4 F 5 C 6 V 7 L	Norld Records Health and Safety Regulations for Competition Medical Examination Medical Equipment Facilities Standards Definitions Racing Course Dimensions Racing Course Walls Pool and Bulkhead Markings Diverflow Recirculation System Nater Temperature Ladders	.52 .53 .53 .53 .54 .54 .55
Article 1 106.: 106.: Article 1 107.: 107.: 107.: 107.: 107.: 107.: 107.: 107.:	5 V 106: H 1 N 2 N 107: F 1 E 2 F 3 F 4 F 5 C 6 V 7 L 8 C	World Records Health and Safety Regulations for Competition Medical Examination Medical Equipment Facilities Standards Definitions Racing Course Dimensions Racing Course Walls Pool and Bulkhead Markings Diverflow Recirculation System Water Temperature Ladders Other Deck Equipment	.52 .53 .53 .53 .54 .54 .55 .55
Article 1 106.5 106.5 Article 1 107.5 107.6 107.6 107.6 107.6 107.7 107.6	5 V 106: H 1 N 2 N 107: F 1 E 2 F 3 F 4 F 5 C 6 V 7 L 8 C	Norld Records Health and Safety Regulations for Competition Medical Examination Medical Equipment Facilities Standards Definitions Racing Course Dimensions Racing Course Walls Pool and Bulkhead Markings Diverflow Recirculation System Nater Temperature Ladders Other Deck Equipment	.52 .53 .53 .53 .54 .54 .55 .55
Article 1 106.5 106.5 Article 1 107.5 107.6 107.6 107.6 107.6 107.7 107.8	5 V 106: H 1 N 2 N 107: F 1 E 2 F 3 F 4 F 5 C 6 V 7 L 8 C 9 L	Norld Records Health and Safety Regulations for Competition Medical Examination Medical Equipment Facilities Standards Definitions Racing Course Dimensions Racing Course Walls Pool and Bulkhead Markings Diverflow Recirculation System Nater Temperature Ladders Other Deck Equipment Lighting No Smoking Signs	.52 .52 .53 .53 .54 .54 .55 .55 .55
Article 1 106.5 106.5 Article 1 107.5 107.5 107.6 107.5 107.6 107.6 107.7 107.7	5 V 106: H 1 N 2 N 107: F 1 E 2 F 3 F 4 F 5 C 6 V 7 L 8 C 9 L 10 N 11 S	Norld Records Health and Safety Regulations for Competition Medical Examination Medical Equipment Facilities Standards Definitions Racing Course Dimensions Racing Course Walls Pool and Bulkhead Markings Diverflow Recirculation System Nater Temperature Ladders Dither Deck Equipment Lighting No Smoking Signs Starting Platform	.52 .52 .53 .53 .54 .54 .55 .55 .55
Article 1 106.5 106.5 Article 1 107.5 107.5 107.5 107.5 107.5 107.5 107.5 107.5 107.5	5 V 106: H 1 N 2 N 107: F 1 E 2 F 3 F 4 F 5 C 6 V 10 N 11 S 11 S	Norld Records Health and Safety Regulations for Competition Medical Examination Medical Equipment Facilities Standards Definitions Racing Course Dimensions Racing Course Walls Pool and Bulkhead Markings Diverflow Recirculation System Nater Temperature Ladders Dither Deck Equipment Lighting No Smoking Signs Starting Platform Floating Lane Lines	.52 .53 .53 .53 .54 .54 .55 .55 .55 .55
Article 1 106.5 106.5 Article 1 107.5 107.5 107.5 107.5 107.5 107.5 107.5 107.5 107.5 107.5	5 V 106: H 1 N 2 N 107: F 1 E 2 F 3 F 4 F 5 C 7 L 8 C 11 0 N 11 1 S 11 2 F 11 3 E	Norld Records Health and Safety Regulations for Competition Medical Examination Medical Equipment Facilities Standards Definitions Racing Course Dimensions Racing Course Walls Pool and Bulkhead Markings Diverflow Recirculation System Nater Temperature Ladders Dither Deck Equipment Lighting No Smoking Signs Starting Platform Floating Lane Lines Backstroke Flags and Lines	.52 .53 .53 .54 .54 .55 .55 .55 .55 .55
Article 1 106.5 106.5 Article 1 107.5 107.5 107.6 107.6 107.7 107.7 107.7 107.7 107.7 107.7 107.7 107.7	5 V 106: H 1 N 2 N 107: F 1	Norld Records Health and Safety Regulations for Competition Medical Examination Medical Equipment Facilities Standards Definitions Racing Course Dimensions Racing Course Walls Pool and Bulkhead Markings Diverflow Recirculation System Nater Temperature Ladders Dither Deck Equipment Lighting No Smoking Signs Starting Platform Floating Lane Lines Backstroke Flags and Lines Loudspeaker Start System	.52 .53 .53 .53 .54 .55 .55 .55 .55 .55 .55
Article 1 106.5 106.5 Article 1 107.5 107.5 107.5 107.5 107.5 107.5 107.5 107.5 107.5 107.5 107.5 107.5	5 V V 106: H N 12 N 107: F 1 12 F 12 F 14 F 15 F 11 11 11 11 11 11 11 11 11 11 11 11 1	Norld Records Health and Safety Regulations for Competition Medical Examination Medical Equipment Facilities Standards Definitions Racing Course Dimensions Racing Course Walls Pool and Bulkhead Markings Diverflow Recirculation System Nater Temperature Ladders Other Deck Equipment Lighting No Smoking Signs Starting Platform Floating Lane Lines Backstroke Flags and Lines Loudspeaker Start System False Start Recall Rope	.52 .53 .53 .53 .54 .55 .55 .55 .55 .55 .55

	'.17 '.18	Automatic Timing Equipment	
		TWO: Administrative Regulations of Competition	
		Athlete Registration and Representation	
201		Membership of Athletes	
201 201		Representation	
Article	202:	Sanction/Approval	60
202 202		Sanctions	
Article	203:	Liability Release	62
PA	RT T	HREE: Long Distance/Open Water Swimming Rules	
Article	301:	Administration	63
301	. 1	Organization	
301		Registration and Sanctions	
301	.3	Liability Release	53
Article	302:	Events	63
302	.1	Definition	63
302	.2	Events	63
Article	303:	Safety Precautions	66
303	.1	Safety Standards	66
303	.2	Escorted Swims	67
Article	304:	Conduct of the Competition	67
304		Starts	
304		Seeding	
304 304		Finishes Costume	
304		Officials	
304		Disqualifications	
304		Age Groups	
Article	305:	National Long Distance/Open Water Championship Meets	69
305	.1	Eliaibility	69

305.2	Events	69
305.3	Site Selection	70
305.4	Contract	
305.5	Financial	
305.6	Entry Fees	
305.7	Rules of Conduct	
305.8	Results	
305.9	Club Scoring	72
305.10	Awards	
Article 306:	All-American Recognition and Records	73
	-	
306.1	All-American Recognition	
306.2	Records	/3
PART	FOUR: Athletes' Rights, Hearings, and Appeals	
Article 401:	Athletes' Bill of Rights	74
	-	
401.1	Protection	
401.2	Equal Opportunity	
401.3	Reporting	
401.4	Investigation	/4
Article 400.	Daview Costion	77.4
Article 402:	Review Section	/4
402.1	Composition of the Review Section	74
402.2	Jurisdiction and Authority of the Review Section	
402.3	Procedures	75
Article 403:	Appeal	76
400 1	Appeal Procedures	70
403.1	Appeal Procedures	/0
DAD	RT FIVE: USMS, Inc.: Organization and Bylaws	
Article 501:	Membership	77
501.1	Membership Categories	77
	Mandatory Memberships	
501.2	,	
301.3	Equal Opportunity	//
Article Eng.	Local Mactore Swimming Committee / MCC	
MILICIE 3UZ:	Local Masters Swimming Committee (LMSC)	//
502.1	LMSC Membership	77
502.2	Bylaws	77
502.3	Annual Meeting	
502.4	Election of Officers	

502.	. 5	Filing of Bylaws	77
502.	.6	Boundary Descriptions	
502.	.7	Reports	
Article	503:	House of Delegates	78
503.	-1	Membership	70
503.		Powers	
503.		Meetings of the House of Delegates	
200	. •	recentlys of the flouse of Delegates	, 5
Article	504-	Officers	70
A1 (1010			
504.		Positions	
504.		Elections and Term of Office	
504.		Vacancies	
504.	. 4	Duties of Officers	79
Article	505:	Board of Directors	80
505.	. 1	Membership	80
505	. 2	Term of Office	80
505.	. 3	Membership Requirements	81
505	. 4	Vacancies	81
505	. 5	Powers	81
505	. 6	Meetings	81
505	.7	Quorum	81
505	.8	Voting Privileges	81
Article	506:	Committees	81
506.	1	Executive Committee	81
506		Standing Committees	
506		Ad Hoc Committees	
Article	507:	Financial Policy	85
		•	
507		Fiscal Year	
507. 507.	-	Controller Fees	
507	. ა	rees	00
Articlo	50Q.	Indemnification and Dissolution	86
AITICIE	JUO.		
508.	.1	Indemnification	
508	.2	Dissolution	87
		DAME OIV. Amondment Burnellung	
		PART SIX: Amendment Procedures	
Article	601:	Amendments	88
£0.1	1	Committee Jurisdiction	88

601.2 601.3 601.4 601.5	Submission of Proposed Amendments	88 89
	APPENDICES	
Appendix A:	Records	91
	Records	
	Records	
	cords	
Long Dist	tance Records	113
	Information for Meet Directors and Officials	
	on of Meet Results	
	es Between USS and USMS Rules	
USMS a	nd World Record Applications	118
Annendiy C:	National and International Masters Swimmin	na
Appendix C.	Schedule	
USMS Na	ational Conventions	122
	ational Championship Meets	
	ong Distance National Championship Meets	
	I Championship Meets	
	•	
	Zone and LMSC Boundaries	
	umeric Codes and Abbreviations	
	one and LMSC Boundaries	
LMSC B	Boundaries	126
	USMS Directory	
	recutive Committee	
	National Office	
	presentatives and LMSC Chairmen	
	Committees	
	Appointments and Liaisons	
Alphabeti	ical Directory	134
Annandiz C.	USMS History	140
	-	
	ts of the Ransom J. Arthur Award	
	is of the USMS Coach-of-the-Year Awardational Championship Meets	
	nnual Meetings and National Officers	
USIVIS AI	mod meanings and reduction Officers	142
Appendix G:	USMS Adapted Swimming Guidelines	143
Index		147

Preamble

United States Masters Swimming (USMS) is an organization of sportswomen and sportsmen founded in 1970 and dedicated to the premise that the lives of participants will be enhanced through aquatic physical conditioning. USMS supports and encourages competitions among its members and those of other nations. This book establishes certain rules and regulations for the conduct of the organization, the participants, and the competitors in the spirit of good sportsmanship.

GOALS AND OBJECTIVES OF UNITED STATES MASTERS SWIMMING

- A To offer the opportunity to continue or initiate conditioning, competition, and camaraderie for those adults who are swimming enthusiasts.
- B To encourage and promote physical fitness and improvements in health in those older individuals not previously involved in competitive or recreational programs.
- C To offer encouragement to individuals, clubs, organizations, and communities in organizing and conducting life-long physical, recreational, and competitive Masters Swimming programs.
- D To enhance fellowship among participants in Masters Swimming programs.
- E To stimulate participation in Masters Swimming programs at all possible levels of involvement by physical educators, recreation personnel, clubs, businesses, communities, and other organizations.
- F To stimulate research in the sociology, psychology, and physiology of Masters Swimming at basic and clinical research levels.
- G To investigate the benefits of continued exercise on lifestyle, cardiopulmonary status, musculoskeletal status, and neuropsychological status, and to understand its role in aging and debilitating processes.

GLOSSARY

Aggregate (Composite) Time - times achieved by four individuals in separate starts which are added together to arrive at a relay time for entry purposes.

Anchored (Starting Platform) - stable at all times without human aid.

Approved Meet - a designated meet conducted by organizations other than USMS from which swimmers may have their times accepted for recording purposes by USMS. An observer designated by USMS must be present to attest that the conduct of competition conforms to all relevant USMS rules and meet standards.

Body - the torso, including shoulders and hips.

Calm State or Surface - normal level surface of water without turbulence.

Closed Competition - competition open only to the members of one organization or group.

Club - an organization or group of permanent character that is registered with the Corporation through its LMSC and that actively promotes and/or participates in Masters Swimming.

Corporation - United States Masters Swimming, Inc. (USMS).

Course - designated distance over which the competition is conducted.

- * Long Course 50 meters (55 yards to be recorded as 50 meters).
- * Short Course 25 yards or 25 meters.

Deck Entered - all entries are accepted on the first or later day of that meet and subsequently seeded into events.

Dual Meet - competition between two clubs.

End of Course - designated wall for turns or finishes.

Event - any race or series of races in a given stroke and distance.

FINA - Federation Internationale de Natation Amateur (International Federation of Amateur Swimming).

First Day of Meet - day on which first competitive swimming event is conducted.

Foreign Swimmer - athlete member of a country or swimming federation, other than the Corporation, who competes in USMS sanctioned events.

Heat - a division of an event.

His - generic term of reference designating female and male equally.

Horizontal - parallel to the surface level of the water.

IOC - International Olympic Committee.

Initial Distance - that first portion of a race for which an official time may be recorded but which is not itself a completed event. Lane - the specific area in which the swimmer is assigned to swim.

Lane Line - continuous floating markers attached to a line stretched from the starting end to the turning end for the purpose of separating adjacent lanes.

Lane Markings - the guide lines on the bottom of the pool and in the center of the lanes running from the starting end to the turning end.

Last Day of the Meet - day on which last competitive swimming event is conducted.

Leg - the part of the relay event that is swum by a single team member.

Length - extent of the course from end to end.

LMSC - Local Masters Swimming Committee, a division of the Corporation, with supervisory responsibilities within a specified geographic territory.

Malfunction - a mechanical or electronic equipment failure.

Manual Start - the start of any timing device by an individual in response to the same starting signal given to the swimmers.

Mark - (take your) starting position.

Masters - word to be used in that form only; not to be used as a descriptive word; to be used with a capital "M".

May - permissive, not mandatory.

Meet - an event or series of events held under a single sanction or approval and conducted within ten consecutive days, except for postal meets.

Member - an individual, club, or organization registered with the Corporation.

MSI - Masters Swimming International.

Open Competition - competition which any qualified individual, club, or organization may enter.

Pool - the physical facility in which the competition is conducted.

Propulsive - having the power to propel.

Registered - enrolled as a member of the Corporation and the LMSC.

Reinstatement - return of all or limited rights of membership in the Corporation.

Sanction/Approval - the written authorization of an LMSC to permit members to participate in a specific competition, demonstration, clinic, exhibition, or Swim-A-Thon ®.

Scissor - use of the top of the instep of one foot and the bottom of the other foot in the propulsive part of the kick.

Scratch - withdraw an entry from an event or fail to report to the assigned lane in the assigned heat.

- Seed distribute swimmers among the required number of heats and/or lanes, based on submitted times.
 - * Deck-seeded all events are seeded at the meet with entries received prior to or at the meet.
 - * Pre-seeded all events are seeded prior to the day of competition according to submitted times.

Shall - mandatory.

Simultaneously - at the same instant.

Split Time - time recorded from official start to completion of an initial distance within a longer event.

Still Water - water contained within four walls or landlocked, having no perceptible current or movement other than that caused by wind or by swimmers.

Submitted Times - those filed with an entry as having been previously achieved or reasonably estimated.

Suspension - deprivation of all rights of membership in the Corporation.

Team - a group of swimmers representing the same club in a competition.

Timed Finals - competition in which only heats are swum and final placings are determined by the times performed in the heats.

Unattached - an individual member who does not represent a club of the Corporation.

USAS - United States Aquatic Sports, Inc.

USMS - United States Masters Swimming, Inc.

USS - United States Swimming, Inc.

Wall - the vertical portion of the pool wall, the contiguous surface of the deck and overflow gutters, the front portion of the starting block or platform, or the touch pad at the end of the course.

Zone - a geographic section of the country that includes all LMSCs within that section.

PART ONE: SWIMMING RULES

All provisions under *Part One: Swimming Rules*, unless otherwise specified, are effective beginning January 1, 1993, and until changed. Rules in effect on the first day of a meet shall govern throughout the meet.

Part One: Swimming Rules is based upon Articles 101, "Individual Strokes and Relays," and 102, "Conduct and Officiating of all Swimming Competition," of the U.S. Swimming Technical Rules which, as amended, will govern all Masters competitions.

All competitive swimming events held under Corporate sanction shall be conducted in accordance with the following rules which are designed to provide fair and equitable conditions of competition and promote uniformity in the sport so that no swimmer shall obtain unfair advantage over another.

It is not the purpose of the Code of Regulations and Rules of Competition of United States Masters Swimming (the national governing body) contained herein to set standards of care for the safety of the swimmer. Safety considerations should be addressed by the swimmer, the swim coach, and the local public entity or pool owner where events are held.

ARTICLE 101: STARTS, STROKES, AND RELAYS

101.1. STARTS

.1 Forward Start - The forward start may be taken from the starting block, the pool deck, or a push from the wall. On receiving clearance from the Referee (for all events except backstroke and medley relay) the Starter shall direct the swimmers to assume a position with at least one foot at the front of the block, the edge of the deck, or on the wall before the command, "Take your mark." Those starting in the water must have at least one hand in contact with the wall or starting block.

.2 Backstroke Start

- A Short course yards The swimmers shall line up in the water facing the starting end with both hands placed on the gutter or on the starting grips. The feet may be placed in any position on the wall or on the gutter of the pool, and the swimmer may assume any desired starting position which does not remove either foot completely from the water, or either hand from the starting grips or the pool edge. Standing in or on the gutter is not permitted at any time before the start. A backstroke starting block may not be used.
- **B** Short course meters and long course meters The swimmers shall line up in the water facing the starting end with both hands placed on

Page 16 PART ONE

the gutter or on the starting grips. Prior to the command, "Take your mark," and until the feet leave the wall at the starting signal, the swimmer's feet including the toes shall be placed under the surface of the water. Standing in or on the gutter is not permitted at any time before the start. A backstroke starting block may not be used.

101.2. BREASTSTROKE

- . 1 Start The forward start shall be used.
- .2 Stroke From the beginning of the first armstroke after the start and after each turn, the body shall be kept on the breast and both shoulders shall be in line with the water surface. The arms shall move simultaneously and in the same horizontal plane without any alternating movement. The hands shall be pushed forward together from the breast on, under, or over the surface of the water and shall be brought back on or under the surface of the water. The hands shall not be brought beyond the hip line, except during the first stroke after the start and each turn. Some part of the swimmer's head shall break the surface of the water at least once during each complete cycle of one arm stroke and one leg kick, in that order, except after the start and each turn the swimmer may take one arm stroke completely back to the legs and one leg kick while wholly submerged. The head must break the surface of the water before the hands turn inward at the widest part of the second stroke.
- .3 Kick All vertical and lateral movements of the legs shall be simultaneous. The feet must be turned outward during the propulsive part of the kick movement. A scissors, flutter, or downward butterfly kick is not permitted. Breaking the surface with the feet shall not merit disqualification unless followed by a downward butterfly kick.
- .4 Turns At each turn, the touch shall be made with both hands simultaneously at, above, or below the water surface, and the shoulders shall be in line with the water surface. The head may be submerged after the last arm pull prior to the touch, provided it breaks the surface of the water at some point during any part of the last complete or incomplete stroke cycle preceding the touch. Once a touch has been made, the swimmer may turn in any manner desired. The shoulders must be at or past the vertical toward the breast when the feet leave the wall and the form prescribed in Article 101.2.2 must be attained from the beginning of the first arm stroke.
- .5 Finish At the finish the touch shall be made with both hands simultaneously at, above, or below the water surface. The body shall be on the breast and the shoulders in line with the water surface. The head may be submerged after the last arm pull prior to the touch, provided it breaks the surface of the water at some point during any part of the last complete or incomplete stroke cycle preceding the touch.

101.3. BUTTERFLY

Start - The forward start shall be used.

- .2 Stroke After the start and after each turn, the swimmer's shoulders must be at or past the vertical toward the breast. The swimmer is permitted one or more leg kicks, but only one arm pull under water, which must bring him to the surface. From the beginning of the first arm pull, the swimmer's shoulders shall be in line with the water surface. Both arms must be brought forward over the water and pulled back simultaneously.
- .3 Kick All up and down movements of the legs and feet must be simultaneous. The position of the legs and feet need not be on the same level, but they shall not alternate in relation to each other. The breaststroke or whip kick may be used exclusively or interchangeably with the dolphin kick while doing the butterfly stroke at any time during the race. However, when the breaststroke or whip kick is used, the arms must be recovered over the top of the water at least once per breaststroke kick, except after the last such kick before the turn or finish. A scissors kicking movement is not permitted.
- .4 Turns At each turn the body shall be on the breast and the shoulders in line with the water surface. The touch shall be made with both hands simultaneously at, above, or below the water surface. Once a touch has been made, the swimmer may turn in any manner desired. The swimmer's shoulders must be at or past the vertical toward the breast when the feet leave the wall.
- .5 Finish At the finish the touch shall be made with both hands simultaneously at, above, or below the water surface. The body shall be on the breast and the shoulders in line with the water surface.

101.4. BACKSTROKE

- .1 Start The backstroke start shall be used.
- .2 Stroke Standing in or on the gutter (all courses) or curling the toes over the lip of the gutter (short course meters or long course meters) is not permitted immediately after the start. The swimmer shall push off on his back and continue swimming on his back throughout the race. Some part of the swimmer must break the surface of the water throughout the race, except it shall be permissible for the swimmer to be completely submerged during the turn and for a distance of not more than 15 meters (16.4 yards) after the start and after each turn. By that point, the head must have broken the surface of the water.
- .3 Turns Upon completion of each length, some part of the swimmer must touch the wall. During the turn the shoulders may turn past the vertical toward the breast. If the swimmer turns past vertical, such motion must be part of a continuous turning action, and the swimmer must return to a position on the back before the feet leave the wall.
- .4 Finish The swimmer shall have finished the race when any part of the swimmer touches the wall.

101.5. FREESTYLE

. 1 Start - The forward start shall be used.

Page 18 PART ONE

- .2 Stroke Freestyle means that in an event so designated the swimmer may swim any style, except that in a medley relay or individual medley event, freestyle means any style other than butterfly, breaststroke, or backstroke.
- .3 Turns Upon completion of each length, the swimmer must touch the wall.
- .4 Finish The swimmer shall have finished the race when any part of the swimmer touches the wall after completing the prescribed distance.
- 101.6. INDIVIDUAL MEDLEY The swimmer shall swim the prescribed distance in the following order: the first one-fourth, butterfly; the second onefourth, backstroke; the third one-fourth, breaststroke; and the last one-fourth, freestyle.
- .1 Start The forward start shall be used.
- .2 Stroke The stroke for each one-fourth of the designated distance shall follow the prescribed rules for each stroke.

.3 Turns

- A Intermediate turns within each stroke shall conform to the turn rules for that stroke.
- B The turns when changing from one stroke to another shall conform to the finish rules for the stroke just completed, and shall be as follows:
 - Butterfly to backstroke The swimmer must touch as described in Article 101.3.5. Once a legal touch has been made, the swimmer may turn in any manner, but the shoulders must be at or past the vertical toward the back when the feet leave the wall.
 - 2. Backstroke to breaststroke The swimmer must touch the wall while on the back. Once a legal touch has been made, the swimmer may turn in any manner, but the shoulders must be at or past the vertical toward the breast when the feet leave the wall and the prescribed breaststroke form must be attained prior to the first armstroke.
 - Breaststroke to freestyle The swimmer must touch as described in Article 101.2.5. Once a legal touch has been made, the swimmer may turn in any manner.
- .4 Finish The swimmer shall have finished the race when any part of the swimmer touches the wall after completion of the prescribed distance.

101.7. RELAYS

- .1 Freestyle Relay Four swimmers on each team, each to swim one-fourth of the prescribed distance using any desired stroke(s). Freestyle finish rules apply.
- .2 Medley Relay Four swimmers on each team, each to swim one-fourth of the prescribed distance continuously in the following order: first, backstroke; second, breaststroke; third, butterfly; and fourth, freestyle. Rules pertaining

to each stroke used shall govern where applicable. At the end of each leg, the finish rule for each stroke applies in each case.

.3 Rules Pertaining to Relay Races

- A No swimmer shall swim more than one leg in any relay event.
- B When automatic relay take-off judging is used, each swimmer must touch the touchplate or pad in his lane at the end of the course to have finished his leg of the relay race.
- C A swimmer other than the first swimmer shall not start until his teammate has concluded his leg.
- D Any relay team member and his relay team shall be disqualified from a race if a team member other than the swimmer designated to swim that leg jumps into or enters the pool in the area where the race is being conducted and before all swimmers of all teams have finished the race.

Note: An exception may be granted to a relay team member who wishes to enter the water to start from the water; this swimmer shall notify the Starter and be careful not to disturb or interfere with another swimmer or the timing system pad when in use.

E Each relay team member shall leave the water immediately upon finishing his leg.

Note: Swimmers who cannot exit the water quickly enough to prevent interference with automatic officiating equipment may be allowed to hold on to the lane line until all relays have finished, allowing them to exit the pool more slowly or via the ladders at the conclusion of the race.

- F Mixed relays shall consist of two men and two women who may swim in any order.
- G Competitors shall be allowed to swim only once per meet in each of the following relays: men's/women's 200 medley, 400 medley, 200 freestyle, 400 freestyle, and 800 freestyle; mixed 200 medley and 400 medley, 200 freestyle, 400 freestyle, and 800 freestyle.
- H The team of a swimmer whose feet have lost touch with the starting platform (ground, deck, or wall) before his preceding teammate touches the wall shall be disqualified.

ARTICLE 102: SWIMMING COMPETITION

102.1. ELIGIBILITY

- .1 Swimmers 19 years of age and over may register with USMS.
- .2 Those swimmers registered for Masters meets may participate in non-USMS aquatic activities, meetings, exhibitions, demonstrations, etc., without jeopardy to their eligibility to swim in USMS competition. However, any times achieved in non-sanctioned or non-approved activities will not be recorded for

Page 20 PART ONE

official purposes and cannot be used for LMSC rankings or National Top Ten Times, All-American status, or qualification times for USMS National Championship Meets.

102.2. AGE DETERMINING DATE - The eligibility of a participant for a particular age group will be determined by his age as of the last day of the meet.

102.3. AGE GROUPS

.1 Individual Events - 19-24, 25-29, 30-34, 35-39, 40-44, 45-49, 50-54, 55-59, 60-64, 65-69, 70-74, 75-79, 80-84, 85-89, 90-94, 95-99 ... (five year age groups as high as is necessary).

.2 Relay Events

- A Short course (25 yard) 19+, 25+, 35+, 45+, 55+, 65+, 75+, 85+ ... (ten year increments as high as is necessary). The age of the youngest relay team member shall determine the age group. Relay teams must swim in the oldest age group for which they are eligible.
- B Short course (25 meter) and long course (50 meter) 76-99, 100-119, 120-159, 160-199, 200-239, 240-279, 280-319 ... (forty year increments as high as is necessary). The aggregate age of the four relay team members shall determine the age group.

102.4 WARM-UP/WARM-DOWN

- .1 Availability If there is no other warm-up/warm-down area available in pools of five lanes or more, one lane shall be set aside for warm-up/warm-down during the conduct of the meet. If there is no other warm-up/warm-down area available in pools of four or fewer lanes, swimmers shall be allowed to swim to the other end of the pool at the end of each heat, and a warm-up/warm-down period shall be offered at least once during each half-hour of competition.
- .2 Procedure Swimmers must enter the pool feet first in a cautious manner, with at least one hand in contact with the pool deck or gutter. Diving shall be permitted only from the blocks in the designated lanes.
- 102.5. EVENTS In planning any meet, careful consideration must be given the demands to be made upon swimmers, officials, and spectators, in that order. Meets should be planned to terminate within a reasonable period of time on each day. Planning should provide for adequate meal and rest breaks and sheltered rest areas.

The following events may be conducted for each age group:

.1 Short Course (25 yards)

50-100-200-500-1000-1650 yards Freestyle

50-100-200 yards Backstroke

50-100-200 yards Breaststroke

50-100-200 yards Butterfly

100-200-400 yards Individual Medley

200-400-800 yards Freestyle Relay

200-400-800 yards Mixed Freestyle Relay (2 female and 2 male)

200-400 yards Medley Relay

200-400 vards Mixed Medlev Relay (2 female and 2 male)

.2 Long Course (50 meters) and Short Course (25 meters)

50-100-200-400-800-1500 meters Freestyle

50-100-200 meters Backstroke

50-100-200 meters Breaststroke

50-100-200 meters Butterfly

100*-200-400 meters Individual Medley

200-400-800 meters Freestyle Relay

200-400-800 meters Mixed Freestyle Relay (2 female and 2 male)

200-400 meters Medlev Relay

200-400 meters Mixed Medley Relay (2 female and 2 male)

* Short Course only

Note: It is not necessary to conduct all of the above events in each meet.

Note: For long distance events, see Article 302.2.

- 102.6. EVENT LIMIT No swimmer shall be permitted to compete in more than five events per day, exclusive of relays.
- 102.7. ENTRY FEES Entry fees for local Masters events shall be set by the LMSC.
- 102.8. SCRATCH PROCEDURES Each swimmer shall inform himself of the meet starting time and shall report to the proper meet authorities promptly upon call. Meet announcements and advance information shall specify check-in and scratch procedures for individual and relay events.
- .1 Penalties Any swimmer or relay team not reporting for or competing in an event shall not be penalized.

102.9. RELAYS

- .1 Relay teams may not compete unattached. In all cases, relay teams must be composed of USMS members of the same club, which is a member of the Corporation.
- .2 Clubs entering two or more relay teams in an event shall designate them on the entry blank as Team A, Team B, etc.
- .3 The best time or aggregate time of each relay team shall be entered on the entry blank for seeding purposes, and no change in time shall be permitted.
- .4 On the relay card, relay teams must list the name of the registered swim club, the full name (as it appears on the USMS registration card), the age, and for mixed relays the sex of each relay member. The name of the lead-off swimmer must be clearly designated.

Page 22 PART ONE

- .5 First and last names of competing relay swimmers, their ages, and their order of swimming shall be declared to the clerk of course (if used) or to the head lane timer immediately prior to the start of the relay heat in which such team is entered. No changes will be permitted thereafter.
- .6 The competing teams, first and last names of members, and their ages must be listed in the meet results.

102,10. LANE ASSIGNMENTS - SEEDING - COUNTERS

- .1 Seeding Principles for Masters Competition
 - A All Masters events shall be conducted on a timed final basis.
 - B Age groups, sexes, and events of the same distance 200 yards or longer may be combined so that no swimmer has to swim alone and lanes may be filled.
 - C It is recommended that when swimmers are seeded by time and not by age groups, the fastest two swimmers in each age group should not be seeded into outside lanes. It is recommended that they be moved inward one lane or given the center lane in the next slowest heat, whichever is the more appropriate placement.
 - D Seeding at meets other than National Championship Meets may be either fast-to-slow or slow-to-fast. Seeding may differ for sprint and distance events (events 400 yards or longer) within a meet. Women's and men's heats may be alternated in the distance events. The meet announcement shall state the seeding for all events.
 - E Heat and lane assignments for events of 200 meters or less shall be available to all competitors at least five minutes prior to the start of the event.

.2 Heat and Lane Assignments

A Seeding within heats - Within each heat, lanes shall be assigned in order of submitted times (fastest to slowest) in accordance with the following pattern:

Ten Lanes: 5-6-4-7-3-8-2-9-1-10
Nine Lanes: 5-4-6-3-7-2-8-1-9
Eight Lanes: 4-5-3-6-2-7-1-8
Seven Lanes: 4-3-5-2-6-1-7
Six Lanes: 3-4-2-5-1-6
Five Lanes: 3-2-4-1-5
Four Lanes: 2-3-1-4

B Minimum number of swimmers per heat - There shall be a minimum of three swimmers per heat whenever three or more swimmers have entered an event. The fastest heat shall be filled first, then the next fastest heat, etc.

- C Fast-to-slow seeding The first heat of each event shall be composed of the swimmers with the fastest submitted times, the second heat composed of the next fastest swimmers, etc.
- D Slow-to-fast seeding The last heat of each event shall be composed of the swimmers with the fastest submitted times, the next-tolast heat composed of the next fastest swimmers, etc.

.3 Seeding of Events in a 50-Meter Course

- A Lane numbers Lanes shall be numbered at the starting end of the pool in accordance with Article 107.4.3. If the event is started at the turning end of the course, no change in the lane numbering shall be made; i.e., the lanes shall be numbered the same on both ends of the course.
- B Starting 50-meter events from the turning end of the course When the course depth permits, 50-meter events may be started from the turning end of the course.
- C Starting men's and women's events from alternate ends of the course - If only one course is available and pool depth is adequate at both ends of the course, the meet director may choose to start men's events at one end of the course and women's events at the alternate end of the course.
 - 1. Men's and women's heats shall alternate.
 - 2. In 50-meter events, the in-the-water heat may be instructed to wait in the water after the finish until the next heat has been started.
 - 3. In events 100 meters and longer, the next heat may be started when the in-the-water heat is within a half-length of the finish.

.4 Two-to-a-Lane Seeding in Distance Freestyle Events

A General principles of seeding two-to-a-lane

1. Options to swim two-to-a-lane

- a. At the discretion of the meet director, competitors in the freestyle events over 200 meters may be required to swim twoto-a-lane when only one course is available for the event. The meet announcement shall state the criteria under which such events are to be swum two-to-a-lane.
- b. When competitors have an option of swimming two-to-a-lane, the heats with two competitors per lane will be completed before the heats with a single competitor per lane.
- c. If, in the slowest/fastest heat, there are not enough swimmers to fill the lanes with two swimmers each, those swimmers may be seeded one-to-a-lane.

2. Men's/Women's events

- If men and women compete under the same event number, they shall be seeded by time without regard to sex.
- b. If men and women compete under different event numbers, they shall be seeded separately by time.
- c. If men and women compete under different event numbers, men's and women's heats should be alternated.
- 3. Heat designations Heats shall be numbered consecutively without using alphabetical characters (i.e., no "A" and "B" heats). Heats shall be referred to as "odd" or "even" numbered heats. Odd and even heats shall be paired when seeding two-to-a-lane.
- 4. Reporting to the clerk of course Swimmers in both odd and even heats shall be asked to report to the clerk of course (or to the starting area) at the same time.
- 5. Starting procedure The Starter shall call the odd heat to the starting block first. As soon as the odd heat is underway, swimmers in the even heat shall be called to the starting blocks. The even heat shall be started as soon as practical after the odd heat.

6. Lane etiquette

- The Starter shall instruct the swimmers to swim on one side of the lane during the entire race (i.e., no "circle" swimming).
- b. Obstructing another swimmer by swimming across or otherwise interfering shall disqualify the offender, subject to the discretion of the Referee, and the disqualified offender shall immediately be removed from the lane.
- 7. Timing Separate timing will be required for each swimmer.
- B Methods of seeding two-to-a-lane (either method is recommended)
 - 1. Swimmers of similar speed in the same heat
 - Heat and lane assignments Lanes shall be assigned as in Article 102.10.2.
 - b. Pairing of heats After lanes are assigned, heats shall be arranged in pairs beginning with either the slowest or fastest heats at the meet director's discretion. The fastest heat within each pair shall be designated as the odd heat and the nextfastest heat as the even heat.
 - In the following example, for a 6-lane pool, "1" refers to the fastest swimmer, "2" to the next-fastest swimmer, etc.

	Lane					
Heat	L1	L2	L3	L4	L5	L6
Odd heat	5	3	1	2	4	6
Even heat	11	9	7	8	10	12

2. Swimmers of similar speed in the same lane - Create groups of swimmers equal in number to twice the number of lanes of the pool (e.g., groups of 12 swimmers for a 6-lane pool). Each group of swimmers shall be divided into odd and even heats. The fastest swimmer in each group shall be assigned to a middle lane in the odd heat. The second-fastest swimmer shall be assigned to a middle lane in the even heat. The remaining swimmers shall be assigned to lanes in accordance with Article 102 10.2A.

In the following example, for a 6-lane pool, "1" refers to the fastest swimmer, "2" to the next-fastest swimmer, etc.

	Lane					
Heat	L1	L2	L3	L4	L5	L6
Odd heat	9	5	1	3	7	11
Even heat	10	6	2	4	8	12

.5 Places - Places shall be determined on a time basis, subject to the order of finish within each heat. Any ties resulting from the procedure used shall be declared officially tied for awards and points, with no further attempt at resolution.

.6 Counters

- A swimmer in any individual swimming event of 400 yards or meters or more, except the individual medley, may appoint one counter to call lengths or indicate lengths by visual sign.
- B Verbal counters shall be limited to one per swimmer and shall be stationed at the end of the course opposite the starting end. They may use watches and signal intermediate times to the swimmer.
- C If visual counters are used, they may be stationed at the end or either side of the pool, beyond the halfway point toward the end of the course opposite the starting end. Visual counters may be lowered into the water at the end of the swimmer's lane, provided that, in the opinion of the Referee, they neither physically aid the swimmer or interfere with another competitor or present any safety hazard.
- D The count may be in ascending or descending order.
- E In the event of official or counter error, it is the responsibility of the swimmer to complete the prescribed distance.

Page 26 PART ONE

- 102.11. AWARDS When two or more swimmers tie for any place, duplicate awards shall be given to each swimmer. In such cases, no awards shall be given for the place or places immediately following the tied positions. If two tie for 1st place, no award for 2nd place; if three tie for 1st place, no awards for 2nd and 3rd, and so on.
- 102.12. SCORING Article 102.12 is recommended for all Masters Swimming competition.
- .1 Dual Meets

Individual events: 5-3-1-0

Relay events: 7-0

.2 Triangular Meets

Individual events: 6-4-3-2-1-0

Relay events: 8-4-0

.3 Other Meets

Individual events:

4-lane pools: 5-3-2-1

5-lane pools: 6-4-3-2-1 6-lane pools: 7-5-4-3-2-1 7-lane pools: 8-6-5-4-3-2-1

8-lane pools: 9-7-6-5-4-3-2-1 9-lane pools: 10-8-7-6-5-4-3-2-1 10-lane pools: 11-9-8-7-6-5-4-3-2-1

Individual point values shall be doubled for relays.

- .4 Ties Where two or more swimmers tie for any place in any event, the points credited to such place or places, if any, shall be equally divided among the swimmers; i.e., if two tie for first place, the points to be credited to first and second place shall be added and divided by two. Each tying swimmer will receive half of the total points for first and second places. If three tie for first place, the points credited to first, second, and third places shall be added and divided by three, and so on for four or more tying for first place. The same is true for those tying for second place, third place, and whatever places there may be.
- .5 Disqualifications When a relay team or individual swimmer is disqualified, the following places will move up accordingly and points awarded to conform to the new places.

102.13. CHANGE OF PROGRAM AND POSTPONEMENT

.1 The order of events, as laid down in the official program, shall not be changed. The announced arrangement of heats in any event shall not be added to or altered, except by the authority of the Referee to the extent of consolidating the heats. .2 The entry provisions and starting time of any event, meet, or portion thereof shall stand as stated on the entry blank (except as permitted in Article 102.13.3) and may not be changed to an earlier time or date unless written notice of such change is delivered to each affected swimmer or his coach. If mailed, such notice must be postmarked no later than the entry deadline date stated on the entry blank, and if lack of time prohibits mail notification, each affected swimmer must voluntarily agree in writing that he has been notified and is in accord with such change. Any affected swimmer or his coach may and should file a written protest with the Referee prior to the running of the event or the meet if the swimmer or his coach does not agree to such change in time or date.

.3 Postponement or Cancellation

- A If, prior to the start of a meet or event, unusual or severe weather or other conditions preclude the possibility of safely and effectively conducting a meet or event, the meet committee may cancel or postpone it.
- B Should a meet or event have actually commenced, and in the judgment of the Referee cannot safely and effectively continue because of weather conditions or for some other compelling reason, the Referee, at his sole discretion, may suspend the meet or event until conditions warrant continuance. If conditions do not warrant continuance, the Referee may cancel the meet or postpone it to a future date or time, with the approval of the meet committee.
- C A decision to cancel or postpone shall be final.
- Should an event have actually commenced but be terminated prior to an official finish, and be postponed to another time or date, it shall then be conducted among the swimmers who were officially competing in the event at the time of termination.
- Entry fees for teams or swimmers may be refunded, in whole or part, at the discretion of the meet committee, upon cancellation of a meet or particular event. The decision of the meet committee on refunding may be appealed to the Officers of the LMSC (local or regional meets) or the USMS Championship Committee (National Championship Meets).

102.14. COSTUME

- .1 Design Swimmers' costumes must be non-transparent and conform to the current concept of the appropriate. The Referee shall have authority to bar offenders from competition under this rule until they appear properly costumed.
- .2 Advertising Products involving tobacco, alcohol, or pharmaceuticals containing drugs banned under IOC or FINA rules may not be advertised, but the advertiser's name only may be used.

102.15. DISQUALIFICATIONS

.1 A disqualification can be made only by the official within whose jurisdiction the infraction has been committed.

Page 28 PART ONE

- .2 Any swimmer who acts in an unsportsmanlike or unsafe manner within the swimming venue may be considered for appropriate action or penalty at the discretion of the Referee.
- .3 A swimmer must start and finish the race in his assigned lane.
- . 4 Standing on the bottom during a freestyle race shall not disqualify a swimmer, but he must not leave the pool, or walk, or spring from the bottom. Standing on the bottom during any other stroke shall result in disqualification.
- .5 Obstructing another swimmer by swimming across or otherwise interfering shall disqualify the offender, subject to the discretion of the Referee.
- .6 Dipping goggles in the water or splashing water on the competitor's face or body prior to his next event shall not be considered as entering the pool unless the Referee finds that such action is interfering with the competition.
- .7 Should a foul endanger the chance of success of a swimmer, the Referee may allow him to swim in a later heat or he may order the heat reswum. In the case of collusion to foul another swimmer, the Referee may, at his discretion, disqualify the swimmer for whose aid the foul was committed, as well as the swimmer doing the fouling.
- .8 No swimmer is permitted to wear or use any device or substance to help his speed or buoyancy during a race. Goggles may be worn and rubdown oil applied if not considered excessive by the Referee.
- . 9 Grasping the lane line to assist forward motion is not permitted.
- .10 For relay disqualifications, refer to Article 101.7.3.
- .11 The time, place, and/or initial splits of any swimmer or relay team disqualified either during or following an event shall not be recorded in the results of that event. If awards have been made prior to the decision to disqualify, they shall be returned and made to the proper recipient(s), and if points have been scored by those disqualifed the event shall be rescored.
- .12 Time and/or place officially recorded for a swimmer shall not be nullified for violations occurring subsequent to such performance.

102.16. PROTESTS

- .1 Until final action is determined, results of any race conducted under protest, or of any protested race, shall not be announced and no awards for that race shall be presented or scoring of points allowed unless the protest is officially withdrawn.
- .2 Protests affecting the eligibility of any swimmer to compete or to represent an organization in any race shall be made in writing to the meet director or Referee before the race is held, and if the meet committee deems it advisable, the swimmer may compete under protest and it shall be so announced before the race. The meet committee shall immediately refer such protest to the LMSC officers (local meets) or Championship Meet Protest Committee (National)

- Championship Meets; see Article 104.5.9B) having jurisdiction for adjudication at the earliest possible time.
- .3 Protests against judgment decisions of Starters, stroke, turn, and relay takeoff judges can only be considered by the Referee of the meet.
- .4 Any other protest arising from the competition itself shall be made within 30 minutes after the race in which the alleged infraction took place. If the protest is not resolved immediately, the protester shall at that time file a written protest with the chairman of the LMSC or his representative having jurisdiction over the event. If the LMSC does not satisfactorily resolve the protest within ten (10) days, the protestor may appeal in writing to the USMS Rules Committee Chairman within the next five (5) days for final adjudication, whose decision shall then be binding on all parties.

102.17. REQUIRED OFFICIALS

- .1 All officials accepting an invitation to officiate at a swimming meet should arrive promptly and report immediately to the meet director or meet referee.
- .2 The minimum number of officials at USMS sanctioned or approved Masters Swimming meets shall include the following:
 - 1 Referee
 - 1 Starter
 - 2 Stroke and Turn Judges
 - 2 Timers per lane (if automatic timing is not being used)

The Referee and Starter may double as stroke and turn judges, but the Referee and Starter may not be the same person. One of the officials shall be a Referee, Starter, or stroke and turn judge certified by USS, YMCA, or any other USMS-approved certifying body.

- .3 When automatic officiating equipment is used in any competition, the placings and times so determined shall have precedence over the decisions of human judges and timers, as outlined in Article 103.7.4. In case of malfunction, secondary information from a semi-automatic timing and judging device with one or more officials per lane shall be used and integrated with primary information.
- 102.18. MEET DIRECTOR Appointed by the meet sponsor. Responsibilities include, but are not limited to: ordering awards; obtaining sanction; preparation of facility; arranging for personnel, equipment, and supplies necessary for meet operation; processing of entries; printing of programs; arranging for appropriate publicity and media coverage; preparing and distributing summary of results 14 days after meet; and filing of LMSC report.
- 102.19. MEET COMMITTEE The committee consists of a minimum of the Meet Director, Referee or Starter, and a participating athlete as appointed by the Meet Director prior to the start of the meet.

102.20. SMOKING - Smoking and use of other tobacco products are prohibited on the pool deck, in the locker rooms, in spectator seating and standing areas, and in all areas used by swimmers during the meet and during the warm-up periods in connection with the meet.

ARTICLE 103: OFFICIALS AND THEIR DUTIES

103:1. REFEREE

- .1 Shall have full authority over all officials and shall assign and instruct them; shall enforce all applicable rules and shall decide all questions relating to the actual conduct of the meet, the final settlement of which is not otherwise assigned by said rules; can overrule any meet official on a point of rule interpretation or on a judgment decision pertaining to an action which he has personally observed; shall also disqualify a swimmer(s) for any violations of the rules that he personally observes and shall at the same time raise one hand overhead with open palm. If he does not make such a signal there shall be no penalty. The Referee or designated official making a disqualification shall make every reasonable effort to seek out the swimmer and/or the swimmer's coach and inform them of the reason for the disqualification.
- .2 Shall signal the Starter before each race that all officials are in position, that the course is clear, and that the competition can begin; shall assign marshals with specific instructions.
- .3 Shall give a decision on any point where the opinions of the judges differ; shall have authority to intercede in a competition at any stage to ensure that the racing conditions are observed.
- .4 When automatic or semi-automatic officiating equipment is used and an apparent malfunction occurs, it shall be his responsibility to make an immediate investigation to determine whether the swimmer finished in accordance with the rules and/or if there was an actual equipment malfunction.
- .5 May at his discretion prohibit the use of any bell, siren, horn, or other artificial noisemaker during the meet.
- .6 May modify any rule for a swimmer who has a disability identified in Appendix G, USMS Adapted Swimming Guidelines. Such modification shall be based on recommendations of the National Sports Organizations for the identified disability. It shall be the responsibility of the swimmer or representative to notify the Referee of the disability prior to competition.
- .7 When the meet sanction allows conducting events from alternate ends of a 50-meter course or conducting freestyle events longer than 200 meters two-to-a-lane, the Referee shall establish the necessary administrative and officiating procedures to conform to Article 102.10.
- .8 Refer to Article 102.16 concerning protests.

103.2. STARTER

.1 Preparation

- A An electronic starting horn, with or without an underwater recall device, and an electronic strobe signal is the preferred starting device. A gun of at least .22 caliber may be used.
- B The Starter shall station himself within ten (10) feet of the starting end of the pool. The gun flash shall be clearly visible to all timers and the starting horn(s) or gun report shall be audible to all the starting positions.
- C Upon signal from the Referee, the Starter assumes full control of swimmers until a fair start has been achieved.
- D The Starter notifies the swimmers of the distance and the event.
- E Optional instructions
 - 1. Stroke(s) to be used and the order of swimming them.
 - 2. Number of pool lengths to be swum.
 - Advise heat when a swimmer is attempting a time at an initial distance.
 - 4. For backstroke starts, the command, "Place your feet."
 - 5. Notify relay swimmers that all but the last swimmer must leave the pool immediately upon completion of their legs. Swimmers who cannot exit the water quickly enough to prevent interference with automatic officiating equipment may be allowed to hold on to the lane line until all relays have finished, allowing them to exit the pool more slowly or via the ladders at the conclusion of the race.

.2 Starts (see Article 101.1)

.3 Starting Commands

- A After the Referee's whistle, the Starter directs swimmers to "Take your mark," to which they must respond at once by assuming a starting position. Sufficient time should follow the direction, "Take your mark," to enable swimmers to assume a starting position, but no swimmer shall be in motion immediately before the starting signal is given.
- B When all swimmers are motionless in the starting position, the Starter gives the starting signal.
- .4 Warning Signal In all events 500 yards or longer except relays, the Starter or a designee shall sound a warning signal over the water at the finish end of the lane of the leading swimmer when that swimmer has two lengths plus five yards (or meters) to swim.

.5 False Starts

A When a swimmer does not respond promptly to the command, "Take your mark" or false starts before the starting signal is given, the Starter shall

Page 32 PART ONE

immediately release all swimmers with the command, "Stand up," upon which the swimmers may stand up or step off the blocks. Any swimmer who enters the water or any backstroker who leaves the starting area shall be charged with a false start, except that a swimmer who would otherwise be charged with the false start may be relieved of the charge if the false start was caused by the swimmer's reaction to the command.

- B All swimmers leaving their marks before the starting signal is given shall be charged with a false start, except that a swimmer who has false started because of the action or movement of another competitor may be relieved of the responsibility for the false start and a false start may be charged only to the offender. (Note exception for deliberate delay or misconduct in Article 103.2.6.)
- C In backstroke or medley relay events, a false start may be charged to any swimmer who fails to maintain his feet and/or hands in a legal position after the first warning.
- D When the starting signal is given and one or more swimmers have obtained an unfair advantage, all swimmers shall be recalled at once by a second signal.
- E A swimmer can be charged with a false start by the Starter or recall starter only if the Referee or an officially designated Assistant Referee has observed the violation and confirms that the violation occurred.
- F The Starter shall indicate the swimmer or swimmers, if any, who are charged with a false start.
- G Any swimmer who is charged with committing or causing a false start shall be disqualified and shall not be permitted to swim the event. This rule shall not apply to USMS international events, the Pan Pacific Aquatic Games, or FINA World Championships, where current FINA false start rules shall apply.
- H A swimmer shall not be disqualified for an illegal starting position at the start or charged with a false start if the race is permitted to proceed without recall. Enforcement of the correct starting position is the responsibility of the Starter, who may impose the appropriate penalty for violation before the starting signal is given.

.6 Deliberate Delay or Misconduct

- A Any swimmer who delays the start by entering the water or by willfully or deliberately disobeying a Starter's command to step on the blocks or to take a starting position, or takes part in any other misconduct at the start, can be disqualified from the event by the Starter with concurrence of the Referee.
- B A swimmer who fails to appear at the starting platform ready to swim in time for the initial start of his heat shall be disqualified by the Referee.

- 103.3. RECALL STARTER A recall starter may be assigned to immediately discharge a gun or other sound device if the automatic equipment is not properly functioning on the starting signal or if a false start has been observed. The position of the recall starter shall be made known to the swimmers. He may also be assigned to assist the Starter in any desired manner.
- 103.4 RECALL ROPE OPERATOR The duty of the Recall Rope Operator shall be to immediately, upon sounding of the false start signal, activate the quick release mechanism of the recall rope so that the recall rope drops across the course before any swimmer has swum approximately 11 meters (36 feet) from the starting end in short course and 15 meters (49 feet) in long course. If the recall rope is equipped in such a way as to allow the Recall Starter to operate the quick release mechanism from his position immediately upon sounding of the false start signal (see 107.15), the duties of the Recall Rope Operator and the Recall Starter may be combined.
- 103.5. JUDGES Shall have jurisdiction over the swimmers immediately after the race has begun.
- .1 Chief An overall "Chief Judge" may assign and supervise the activities of all stroke, turn, and take-off judges and may report their decisions, or, if desired, any judging category may have a designated "Chief." Any "Chief" may act as liaison for his judges and may himself serve simultaneously in one of the judging positions, and he shall assign those judges within his category.
- .2 Stroke Judges Shall operate on both sides of the pool, preferably walking abreast of the swimmers during all strokes except freestyle, during which events they may leave poolside, at the Referee's discretion; shall ensure that the rules relating to the style of swimming designated for the event are being observed; and shall report any violations to the Referee on signed slips detailing the event, the heat number, the lane number, the swimmer's name, and the infraction observed.
- .3 Turn Judges Shall operate on both ends of the pool; shall ensure that when turning or finishing the swimmer complies with the turning and finishing rules applicable to the stroke used; and shall report any violations to the Referee on signed slips detailing the event, the heat number, the lane number, the swimmer's name, and the infraction observed.
- .4 Jurisdiction of Stroke and Turn Judges Before the competition begins, the Referee shall determine the respective areas of stroke and turn responsibility and jurisdiction, which may include joint, concurrent, and coordinated responsibility and jurisdiction. The Referee shall insure that all swimmers shall have fair, equitable, and uniform conditions of judging.

.5 Relay Take-Off Judges

A After the start of the race, relay take-off judges shall stand beside the starting block of each lane so that they can clearly see both the touch of the incoming swimmer and the feet of the departing swimmer as they leave the starting platform in that lane, and shall judge whether the

Page 34 PART ONE

swimmer is in contact with the platform when the incoming swimmer touches the end of the pool.

- B Additional relay take-off judges may be assigned to each side of the course to observe two assigned lanes each, in which case a relay will be disqualified only if the lane take-off judge has reported an infraction and the assigned poolside take-off judge has confirmed the same infraction. If dual relay take-off judging is used, the lane and poolside take-off judges shall independently report infractions in writing without the use of infraction hand signal. If poolside relay take-off judges are used, they shall be assigned for all relay races throughout the meet.
- When automatic relay take-off judging equipment is available and in use, take-off judges will be assigned to each lane and stationed as described above. A team will be disqualified only when there is dual confirmation of an illegal take-off (i.e., visual and automatic equipment).
- .6 Infraction Signal Upon observing an infraction within his jurisdiction, the Referee, stroke, turn, or relay take-off judge shall immediately raise one hand overhead with open palm. If the official does not do so, there shall be no disqualification.

Exception: Relay take-off judges as outlined in Article 103.5.5B.

103.6. TIMERS

- . 1 Chief Timer The Chief Timer shall:
 - A Assure the assignment of Lane Timers to lanes and the designation of one timer on each lane to be the Head Lane Timer.
 - B On the starting signal, start a watch(es) on every race. The time of this watch shall be used if a Lane Timer's watch fails.
 - C Be responsible for delivering all manual watch times, including those of disqualified swimmers, to the Timing Judge.
- . 2 Head Lane Timer The Head Lane Timer shall:
 - A Determine whether the swimmer or relay team is present and in the correct lane, heat, and event, and that relay swimmers are swimming in the order listed.
 - B Determine and record manual watch times or the absence of a swimmer or the relay team seeded in that lane.
 - C Assign one timer to take relay splits and initial distance times if requested by the Chief Timer.
 - D Determine and report if the swimmer has delayed in touching or has missed the touch pad at the finish.
- .3 Lane Timers Officials assigned as Lane Timers may simultaneously operate two dissimilar devices (one watch and one button) but not two similar devices (two watches or two buttons). It is not within a Lane Timer's

jurisdiction to judge if the swimmer's touch conforms to the applicable finish rules or if a relay take-off infraction has occurred unless assigned concurrent responsibility as a Lane Timer and Turn Judge or Relay Take-off Judge. Each timer shall:

- A Be in position at the start to have an unobstructed view of the electronic strobe or gun flash and shall start the watch at the instant of observing the electronic strobe light or the starter's gun smoke. If neither is observed, the watch shall be started upon hearing the sound of the horn or gun.
- B Stand directly over the assigned lane at the finish to observe a touch above, at, or below the surface of the water and stop the watch and/or push the semi-automatic system button when any part of the swimmer's body touches the wall.
- C Report the watch time to the Head Lane Timer or the designated recorder; report if a late or missed pad touch is observed; and, if requested, present the watch for inspection. Lane Timers shall not clear their watches until a command to "clear watches" is given or the Referee signals that the next heat is ready to start.
- .4 Timing Equipment Operator The Timing Equipment Operator shall be responsible for the automatic or semi-automatic timing equipment, including the electronic starting system and scoreboard (if used), and shall advise the Referee of any system problems that might affect the accuracy of times or whenever the touchpad is observed to have failed to record the finish when the swimmer completed the race.
- .5 Timing Judge Under the direction of the Referee, the Timing Judge shall determine the official time for each swimmer as follows:
 - A Receive and review the automatic and/or semi-automatic timing results from the Timing Equipment Operator and compare primary timing results with the back-up timing results to determine their validity.
 - B Receive the times recorded by the Head Lane Timers from the Chief Timer and use those times to the extent needed to determine the official time for each swimmer.
 - C Notify the Referee whenever a time obtained by the primary timing system cannot be used as the Offical Time.
 - D Record disqualifications approved by the Referee. A written record of all disqualifications signed by the Referee shall be given to the Recorder.
- .6 Recorder There shall be two recorders and the number of assistants deemed necessary to receive and record all times and all disqualifications for each event and to furnish all pertinent information to the recorder of records, scorers, press, TV, announcer, and meet secretary. The Recorder shall:
 - A Record the Offical Times and disqualifications.
 - B Determine the offical order of finish.

Page 36 PART ONE

- C Results of each event by sex and USMS age group shall be posted or otherwise made available to the competitors as promptly as possible after the completion of each event.
- D Determine the score of the meet (optional).

103.7. TIMING EQUIPMENT

.1 Timing Systems

- A Automatic A timing system that is started by an electric impulse generated by a starting device or a transducer capable of detecting a gun report and is stopped at the finish by the swimmer touching the touchpad.
 - B Semi-Automatic A timing system that is started by an electric impulse generated by a starting device or transducer capable of detecting a gun report and is stopped by buttons pushed by timers at the finish touch of the swimmer.
 - C Manual A timing system consisting of individual lane timers, each of whom operates a manual watch that is both started and stopped by the timer as described in Article 103.6.3. Only digital read-out type hand-held battery powered watches designed for timing purposes shall be used.
- .2 Timing System Designation Timing systems shall be designated in the order in which results are used as follows:
 - A Primary System The primary system shall determine the official time of each swimmer unless a comparison of the primary with secondary and/or tertiary system times indicates a malfunction of the primary system. A primary system shall always be in place and shall consist of one of the following, listed in their preferred order of use:
 - 1. Automatic Timing
 - Semi-Automatic, with three or two buttons per lane, each operated by a separate timer.
 - Manual, with three or two watches per lane, each operated by a separate timer.
 - B Secondary System If manually operated watches are not the primary system, a secondary system of precedence equal to or lower than the primary system shall be used. The secondary system may be:
 - Semi-automatic with one, two, or three buttons, each operated by a separate timer.
 - Manual with one, two, or three watches per lane, each operated by a separate timer.
 - C Tertiary System Unless the primary system consists of manual watches or the secondary system includes at least one manual watch per lane, a tertiary system of at least one manual watch per lane shall be provided.

.3 Timing Resolution (Timing Accuracy) - All timing systems, including manual watches, shall have a resolution of one one-hundredth of a second (0.01 second). Times from all systems shall be recorded to hundredths of a second. The digits representing thousandths shall be dropped with no rounding.

4 Determination of Official Time

- A Automatic Timing When recorded by properly operating automatic timing equipment, the pad time shall be the official time.
- B Semi-Automatic and Manual Timing Whenever semi-automatic or manual timing is used, the times shall be determined as follows:
 - If two of the three button or watch times agree, that shall be the time for that timing system.
 - If all three buttons or watches disagree, the time of the intermediate button or watch shall be the time for that timing system.
 - If only two button or watch times are available, the time shall be the average of those two button or watch times. The digits representing thousandths of a second shall be dropped with no rounding.
 - 4. If only one button or watch time is available, the time of that button or watch shall be the time for that timing system.
- C Primary Timing System Malfunction A primary timing system malfunction may have occurred if:
 - The difference between the time obtained by the primary system and the back-up system(s) is more than 0.30 second.
 - 2. A late or missed touch is reported by an official observing the finish.
- D Adjustment for the Timing System Difference When the Referee determines that there is a malfunction of the primary timing system, the back-up time(s) shall be adjusted for the timing system difference prior to integrating them with accurate primary times in establishing the official times and determining the order of finish. The adjustment for timing system difference may be incorporated into the automatic or semi-automatic system by design or may be determined by calculating the consistent average difference between the primary and back-up systems used at that meet.
- E Adjustment for Malfunction on a Lane When a malfunction is confirmed on a lane, the back-up times for that lane shall be adjusted by calculating the average difference between valid primary and valid back-up times of the other lanes in that heat. This shall be done by adding, or subtracting when appropriate, that average difference to the valid back-up time of the lane where the malfunction occurred.

Page 38 PART ONE

EXAMPLE (LANE MALFUNCTION):

Systems used:

Primary - Automatic

Secondary - Semi-automatic, three buttons (intermediate button time shown in **bold**)

Tertiary - Manual, one watch

LANE	PRIMARY	BUTTON	BUTTON	BUTTON	WATCH	PAD MINUS	OFFICIAL
-	PAD TIME	A	В	C	TIME	MIDDLE	TIME
						BUTTON	
1	52.21	52.07	52.12	52.14	52.04	.09	52.21
2	52.18	52.01	51.91	52.06	51.95	.17	52.18
3	51.05	51.01	50.97	51.00	50.95	.05	51.05
4	51.04	50.78	50.88	50.93	50.84	.16	51.04
5	51.96	51.30	51.35	51.38	51.27	.61*	51.46**
6	51.65	51.57	51.56	51.59	51.55	.08	51.65
7	52.27	52.13	52.18	52.13	52.10	.14	52.27
8	51.87	51.58	51.75	51.89	51.65	.12	51.87

^{*}More than .30 of a second difference, late touch confirmed.

F Adjustment for Malfunction Equally Affecting an Entire Heat - When, because of an early or late start, or other equipment or operator malfunction, the time of the automatic or semi-automatic primary timing system is equally incorrect for all lanes in a heat, but the order of finish and thus the absolute difference of time between the swimmers is accurate, the average difference between the primary times and the valid back-up times is added, or subtracted when appropriate, to the primary times of every lane in that heat.

EXAMPLE (HEAT MALFUNCTION):

Systems used:

Primary - Automatic (late manual start confirmed)

Secondary - Semi-automatic, three buttons (button times not valid)

Tertiary - Manual, one watch (valid)

^{**}Adjustment calculation: Add the differences between pad and intermediate buttom time, excluding the malfunctioning lane (total = .81). Divide total by the number of valid lanes to determine the average (.81 divided by 7 = .11571). The digits after hundredths are dropped (leaving a timing system difference of .11 for the above example). Add the timing system difference to the valid back-up time for the malfunctioning lane (51.35 + .11 = 51.46, the official time for Lane 5).

LANE	PRIMARY	WATCH	WATCH TIME	HEAT	OFFICIAL
	PAD TIME	TIME	LESS PAD	ADJUSTMENT	TIME
			TIME		
1	52.12	55.14	3.02	+ 3.06	55.18
2	51.56	54.61	3.05	+ 3.06	54.62
3	51.09	54.18	3.09	+ 3.06	54.15
4	50.12	53.18	3.06	+ 3.06	53.18
5	49.78	52.90	3.12	+ 3.06	52.84
6	49.06	52.06	3.00	+ 3.06	52.12
7	52.21	55.30	3.09	+ 3.06	55.27
8	52.92	55.99	3.07	+ 3.06	55.98

Adjustment calculation: Add the differences between the pad and watch times (total = 24.50). Divide the total by the number of lanes to determine an average (24.50 divided by 8 = 3.0625). The digits after hundredths are dropped (leaving a heat adjustment of 3.06). Add the adjustment factor for the late start of the primary system to each pad time to obtain the official time for that lane (e.g, Lane 1: 52.12 + 3.06 = 55.18).

103.8. OFFICIAL TIME

- .1 An official time shall be achieved in a USMS sanctioned or USMS approved competition in accordance with all applicable rules. It may be achieved in:
 - A A timed final heat.
 - B A split time recorded for an initial distance within a longer event, provided the swimmer completes the event without being disqualified.
- .2 An official time for any swimming event can be achieved only in the relevant stroke/event (e.g., backstroke time must be achieved in a backstroke event). A time achieved in a freestyle event can only be recorded as a freestyle time regardless of the stroke used.
- .3 The official time to establish records and Top Ten Times can be achieved only in accordance with the following timing methods:

Timing Method	Official Time Level
Automatic timing	 World Records, USMS National Records, and USMS Top Ten Times Initial splits for all purposes Relay lead-off times for World Records only
Three watches or semi-automatic with three buttons	 World Records, USMS National Records Initial splits and relay lead-off times for World records only
Two watches or semi- automatic with two buttons	- USMS Top Ten Times

Page 40 PART ONE

- . 4 World records may be established when timed by three watches.
- .5 Except when the primary system consists of watches, backup timing shall be provided for all competitors. No swimmer shall be required to reswim a race due to equipment failure which results in unrecorded or inaccurate time or place. It is the meet director's responsibility to provide the proper timing systems so that swimmers can expect to achieve official times that will satisfy the above requirements.
- .6 A backup time adjusted for system timing errors in accordance with the methods described in Article 103.10.4 may be used as an official time equal to the level of the timing system to which it has been adjusted.
- .7 Secondary and tertiary times shall be recorded but shall not be used except to corroborate or correct missing or inaccurate primary/secondary results.

103.9. CLERK OF COURSE

- .1 The clerk of course shall be provided with an area clearly marked "Clerk of Course" where all swimmers must report as soon as their event is called.
- .2 The clerk of course shall be provided with a list of the names of all swimmers in all events including relay swimmers in the order in which they will swim.
- .3 All scratches which have occurred after the printing of the heat sheet shall be reported to the clerk of course. The clerk of course shall notify the Referee and scoring desk of any changes to the seeding of an event.
- .4 The clerk of course shall instruct the swimmers to wait behind or adjacent to the starting area until the Starter takes over control of the race, and if they leave the area it will be their responsibility to return in time for their heat or event.
- 103.10. MARSHALS Shall enforce warm-up procedures and maintain order in the swimming venue. The marshal shall have full authority to warn or order to cease and desist, and, with the concurrence of the Referee, to remove, or have removed from the swimming venue anyone behaving in an unsafe manner or using profane or abusive language, or whose actions are disrupting the orderly conduct of the meet.
- 103.11. ANNOUNCER Before the start of each event he shall announce the event name and number of heats. At the start of each heat he may also announce the lane, the name of each swimmer, and club affiliation or if unattached. He shall make any other announcements as requested by the Referee, the clerk, or the management.
- 103.12. RECORDER OF RECORDS Shall obtain from the official recorder all times made in each event, shall have proper application forms, and shall duly process all record claims as set forth in Article 105.
- 103.13. PRESS STEWARD Shall obtain from the clerk of course and the recorders the names of all swimmers in each event and the results of each

finish with times or record performances, and he shall keep the press and TV personnel thoroughly informed on all details of the competition during the meet.

ARTICLE 104: NATIONAL CHAMPIONSHIP MEETS

(Recommended for all Championship Meets when possible)

- 104.1. MEET CATEGORIES USMS National Championship Meets shall be awarded in the following categories:
- .1 Short Course National Championship Meet Dates Men's and women's short course (25 yards) National Championship Meet, which shall be held between April 15 and May 31.
- .2 Long Course National Championship Meet Dates Men's and women's long course (50 meters) National Championship Meet, which shall be held between August 1 and September 15.
- 104.2. MEET NAME The official name shall be <u>(insert year)</u> United States Masters Swimming National <u>(insert Short or Long)</u> Course Championships.

104.3. AWARDING OF A NATIONAL CHAMPIONSHIP MEET

.1 Meet Rotation System - National Championship Meets shall be awarded using the three-area system as set forth below.

Year	Area 1 West	Area 2 Central	Area 3 East	
1993	SC	LC	-	
1994		SC	LC	
1995	LC		SC	
1996	SC	LC		
1997		SC	LC	
1998	LC		SC	

- A Area 1 Area 1 shall be composed of the following LMSCs: Alaska, Hawaii, Inland Empire, Montana, Oregon, Pacific, Pacific Northwest, San Diego-Imperial, Snake River, Southern Pacific, and Wyoming.
- B Area 2 Area 2 shall be composed of the following LMSCs: Arizona, Arkansas, Border, Central, Colorado, Gulf, Indiana, Iowa, Kentucky, Lake Erie, Michigan, Midwestern, Minnesota, Missouri Valley, New Mexico, North Dakota, North Texas, Ohio, Oklahoma, Ozark, South Dakota, South Texas, Southeastern, Southern, Utah, West Texas, and Wisconsin.
- C Area 3 Area 3 shall be composed of the following LMSCs: Adirondack, Allegheny Mountain, Connecticut, Delaware Valley, Florida, Florida Gold Coast, Georgia, Maryland, Metropolitan, New England, New Jersey,

Page 42 PART ONE

Niagara, North Carolina, Potomac Valley, South Carolina, Virginia, and West Virginia.

.2 Bidding Procedures

- A Solicitation of bids The USMS Championship Committee shall be responsible for the solicitation of bids in accordance with the area rotation system in Article 104.3.1, and shall present a list of all certified bidders for each short and long course championship to the House of Delegates at the annual meeting held at least two years prior to the meet being awarded.
- B Eligible bidders A National Championship Meet shall be awarded only to an LMSC or a club with the endorsement of its LMSC. In either event, the facility to be used must be in accordance with the facility standards which have been adopted by USMS, Inc.
- C Bid information The Championship Committee shall provide a bidder with the appropriate bid documents, financial statements from previous championships, and all other information pertaining to the policies and procedures of running a National Championship Meet.
- D Bid deadline All bids for a National Championship Meet shall be returned to the Chairman of the Championship Committee no less than 30 days prior to the annual meeting.
- **E** Failure to receive bid Failure of the Championship Committee to receive a suitable bid from the proper area shall negate the rotation system for that meet only and shall not affect the future normal rotation.
- F Out-of-area bids In the event that suitable bids are not received from the designated area 30 days prior to the annual meeting, then the Chairman of the Championship Committee shall notify all Zone Representatives that bidding is open to all areas, provided the bids comply with Article 104.3.2B, and are received prior to the start of the annual meeting of USMS, Inc.
- G Certification of bids Prior to the annual meeting, the Championship Committee shall certify each bid for compliance with its policies and procedures, including facility standards (Article 107).
- H Awarding of bids At the annual meeting of the House of Delegates, those bids which are certified shall be presented. The awarding of the bid shall be made by majority vote of the House of Delegates.
- Out-of-rotation meet While the procedures for awarding National Championship Meets need to be clarified and followed whenever possible, it is in the best interest of Masters Swimming to rotate the awarding of National Championship Meets. The Championship Committee shall have the right to override the procedures set forth above with the concurrence of the House of Delegates.

104.4. USMS ASSISTANCE AND AGREEMENTS

- .1 Contract Successful bidders of National Championship Meets shall sign a written contract with USMS specifying the responsibilities of the meet host and of USMS.
- .2 Payments Successful bidders of National Championship Meets shall pay to United States Masters Swimming, Inc., no later than ten days prior to the beginning of the meet, a fee of \$5.00 per individual entrant in the meet. Upon compliance with the conditions set forth in the Meet Contract, the sum of \$3.00 per entrant shall be returned as stipulated in the Contract. Noncompliance with said conditions, as determined by the meet evaluation committee within 30 days of the receipt of the final meet report, shall result in forfeiture of part or all of this amount.
- .3 Assistance to Meet Host The Championship Committee shall provide such assistance and guidance necessary to provide for uniformity in National Championship Meet production. Out-of-pocket expenses for services shall be reimbursed by USMS, Inc.
- .4 Meet Evaluation Committee A five-member meet evaluation committee shall be composed of the Chairman of the USMS Records and Tabulation Committee, if present, plus Championship Committee members present who are not serving on the protest committee. If the above designated composition does not have five members, then elected USMS officers present at the meet may be asked to serve. A written evaluation shall be submitted to the meet host.
- .5 Meet Report The Meet Director of each National Championship Meet shall submit a written report to the Chairman of the Championship Committee within 60 days of the end of competition. This report shall include a complete financial report, copies of meet information, entry forms, heat sheets, and final results, and any other information which may be helpful to future Meet Directors.
- 104.5 CONDUCT OF NATIONAL CHAMPIONSHIP MEETS Conduct of National Championship Meets shall be governed under the swimming rules of USMS, Inc.

.1 Information for Participants

- A General meeting A general meeting of the House of Delegates, members of the Championship Committee, organizing personnel, interested officials, coaches, and swimmers shall be held the evening prior to the first day of the meet.
 - The meeting date, time, and location shall be included in the official meet information.
 - The Chairman of this meeting shall be the President of USMS, Inc., or his designee, and the governing body shall be the USMS, Inc., House of Delegates.

Page 44 PART ONE

- Business pertinent to the operation of National Championship Meets and the conduct of the events shall be considered and finalized at this meeting. Changes may be effected in the conduct of the meet to fit the situation.
- 4. Since changes can be made, it is the obligation of every swimmer or his representative to arrive with enough time to complete his registration and to apprise himself of any changes which have been made.
- 5. It shall be the Meet Director's responsibility to post notices of changes in conspicuous places at the pool, registration area, and headquarters area prior to the start of the first day's competition.
- B Warm-up schedule A list of times when the competition pool and other facilities will be available for warm-up will be provided in the premeet information.
- C Heat sheets Heat sheets listing name, age, club, seed time, and heat and lane assignments for pre-seeded events and entry list by time for deck-seeded events, except relays, shall be made available to all swimmers at the time of registration.
- .2 Program A four-day program for National Championship Meets will be used.

A Meet schedules (1992-1994)

Schedule 1	Schedule 2	Schedule 3
1992 Long Course	1993 Short Course	1992 Short Course
1994 Short Course	1994 Long Course	1993 Long Course
		Para de la calencia de la conferencia de 1904 d
1st Day	1st Day	1st Day
200 backstroke	200 freestyle	100 IM*
100 breaststroke	50 breaststroke	200 butterfly
50 freestyle	100 butterfly	50 freestyle
200 butterfly	50 backstroke	200 backstroke
100 IM*	200 free relay	50 breaststroke
200 medley relay	200 mxd medley relay	200 free relay
400/500 freestyle	400 IM	400/500 freestyle
2nd Day	2nd Day	2nd Day
200 breaststroke	100 IM*	100 breaststroke
100 butterfly	200 breaststroke	200 freestyle
50 backstroke	50 butterfly	50 backstroke
100 freestyle	200 backstroke	200 IM
200 IM	100 freestyle	100 butterfly
200 free relay	200 medley relay	200 medley relay
200 mxd medley relay	400/500 free (women)	200 mxd free relay

3rd Day	3rd Day	3rd Day
200 freestyle 50 breaststroke 100 backstroke 50 butterfly 200 mxd free relay 400 IM	100 backstroke 200 IM 50 freestyle 100 breaststroke 200 butterfly 200 mxd free relay 400/500 free (men)	100 freestyle 400 lM 50 butterfly 200 breaststroke 100 backstroke 200 mxd medley relay
4th Day**	4th Day**	4th Day**
800/1000 freestyle 1500/1650 freestyle	800/1000 freestyle 1500/1650 freestyle	800/1000 freestyle 1500/1650 freestyle

- * The 100 IM is swum in short course nationals only.
- ** A swimmer may enter only one of the two longest freestyle events at the meet.
- B Rotation of meet formats The particular format shall be rotated in order (1, 2, and 3) among three basic schedules without regard to course.
 - 1. In each schedule, women's events shall precede men's events.
 - In each schedule, at the option of the Meet Director and with the approval of the Championship Committee, the 800/1000 freestyle and the 1500/1650 freestyle may be swum as either the first day program or the last day program.
 - Full days on the schedule may be interchanged so that the 400/500 free and the 1500/1650 freestyle shall not be swum on consecutive days.
 - 4. The three basic schedules shall be chosen every four (4) years, starting in 1990, by a vote of the House of Delegates, from at least four (4) alternatives presented by the Championship Committee.

.3 Event Limit

- A Individual events Competitors may enter and swim in a maximum of six individual events (or five individual events, if deemed necessary by the Championship Committee) in a four day National Championship Meet, with a maximum of three individual events per day.
- Relays Competitors shall be allowed to swim in only one freestyle relay, one medley relay, one mixed freestyle relay, and one mixed medley relay per meet.
- C National qualifying times There shall be qualifying times at National Championship Meets when deemed necessary by the

Page 46 PART ONE

Championship Committee. The Championship Committee shall make that decision prior to the publication of the meet entry form for that meet.

- Determination of qualifying times. Qualifying times shall be based on the slowest tenth best time in each event from the previous three years' National Championship Meets. There shall be no qualifying times when there is no tenth best time for that age group in that event.
 - Note: Until such time that the 19-24 year age group has swum in National Championship Meets for three years, qualifying times for the 19-24 year age group shall be determined using the following sources of information: (a) the tenth best time from the 19-24 year age group at National Championship Meets; (b) the tenth best time from the USMS Top Ten list for the 19-24 year age group; and (c) the tenth best time from the 25-29 year age group at National Championship Meets.
- 2. Event limit When qualifying times are in effect, competitors may enter and swim in a maximum of three individual events without meeting the established standards. Competitors may enter up to three additional events (or two if the maximum event limit is five) in which they have in the past two years swum a time equal to or better than the qualifying time for those events.
- 3. Verification of times Any competitor who does not perform to the qualifying time in his designated time standard events will be required to show verification of the time unless he is listed on the USMS Top Ten list or the official results of the pertinent National Championship Meets.

.4 Entry Procedures

A Eligibility/Affiliation

- USMS registration USMS individual and club registration numbers must be submitted on all entry forms together with entry times. "No time" for swimming events and "Pending" for registration number will not be permitted. A copy of the swimmer's current USMS registration card must accompany his entry.
- Foreign swimmers National Championship Meets will include and welcome foreign swimmers on the same basis as U.S. swimmers except that they may not qualify for USMS Top Ten and All-American awards.
- Affiliation A swimmer's affiliation as stated on the entry form, if valid as of the first day of the meet, will apply throughout the meet, except that a swimmer may become unattached at any time.

B Entry form

 Approval of entry form - The entry form for both individual and relay events and meet information shall be prepared according to

- the direction of, and approved in advance of printing by, the Championship Committee. No other form may be used.
- 2. Distribution of entry form One copy each of the individual and relay entry forms and the meet information shall be sent to all LMSC Chairmen, all registered clubs, and the USMS Board of Directors as soon as the entry form and information are available and no later than five months prior to the first day of the meet.
- Completion of entry form All competitors including members of relay teams must fill out and sign the appropriate entry forms.
- 4. Relay entry cards On the relay card, relay teams must list the name of the registered swim club and the full name (as it appears on the USMS registration card), the age, and the meet ID number of each relay member. The age group of the relay team may be changed up to the relay check-in deadline.

C Entry deadline

- Individual entry deadline The deadline for receipt of entries for National Championship Meets shall be not more than 35 days prior to the first day of competition.
- 2. Relay entry deadline Relays may be entered the day before the meet starts. Participants therein must have entered the meet 35 days in advance. Relays entered after the original meet entry deadline and up through the day before the meet will pay 1.5 times the normal entry fee. Official USMS relay cards must be used.
- D Entry fees Entry fees for National Championship Meets shall be \$4.00 for individual events and \$8.00 for relays. A \$13.00 surcharge may be charged to be used by the meet sponsor to help pay meet expenses. A banquet or social event may be conducted for an additional fee. Participation in this event is optional.

.5 Seeding

- A General procedures for seeding (also see Article 102.10)
 - 1. All information regarding seeding must be stated on the entry form.
 - In order to assure seeded positions, the best competitive times of all entries must be submitted.
 - All events 200 yards/meters or less shall be pre-seeded, with oldest age groups first, slowest heats swum first within each age group.
 - 4. Events longer than 200 yards/meters, except for 1000/1650 yards or 800/1500 meters, may be pre-seeded per Article 104.5.5A (3), (5), (6), and (7), or may be deck-seeded by one of the following methods: (a) by entry time only, (b) by age group first, then by time, or (c) by a combination of (a) and (b). The USMS Championship Committee shall make all seeding decisions, including which events will be deck-seeded.

Page 48 PART ONE

- The last heat shall be composed of the swimmers with the fastest submitted times, the next to last heat composed of the next fastest swimmers, etc.
- After all full heats are seeded within each age group, the remaining swimmers shall be seeded with the next available age group of remaining swimmers.
- If, in any age group, there are not enough swimmers for a complete heat, all swimmers in that age group shall be seeded in adjacent lanes for pre-seeded events.
- On those occasions when only one pool is used for both men's and women's events, heats shall be apportioned and alternated by sex.
- 9. There will be no splitting of age groups into AM and PM sessions. However, at the Meet Director's discretion, swimmers whose seed times will inordinately delay the progress of the meet may be seeded individually in an outside lane with mechanical timing, thus allowing the continued sequence of the regularly scheduled heats.
- 10. At the option of the Meet Director, relays may be deck-seeded.

B Distance events

- The 1000/1650 yard or 800/1500 meter freestyle shall be deckseeded as in Article 104.5.5A(4).
- 2. Willing and able competitors in the freestyle events over 200 meters may swim two-to-a-lane when only one course (7, 8, 9, or 10 lanes) is available for the event. Heats with two swimmers to a lane shall be completed before the heats with a single swimmer per lane. (See Article 102.10.3 for principles of seeding two-to-a-lane).
- Multiple courses When the depths of the courses vary, male and female contestants shall share equal time in the deep end of the pool. Women's events shall be scheduled in the deeper course on days one and three in odd years, and on days two and four in even years. In the event that both courses are the same, the rotation shall not be affected.

.6 Club Scoring

- A Scoring All National Championship Meet scoring and awards shall be treated as if the meet is swum in a ten-lane pool, regardless of the actual number of lanes available. Points shall be awarded as in Article 102.12.3.
- B Categories Club scoring will be tabulated in three categories.
 - 1. Women's women's individual events and women's relay events.
 - 2. Men's men's individual events and men's relav events.
 - Combined women's individual events, women's relay events, men's individual events, men's relay events, and mixed relay events.

C Divisions - Two divisions shall be recognized for purposes of club scoring based upon the number of swimmers entered in the meet from each club. The number of entrants from a club which will constitute a Division I (Large) or Division II (Small) team will be determined after the meet entry deadline by the Championship Committee.

.7 Awards

- A Awards All top finishers in each race will be given awards regardless of the nationality of the swimmer. Duplicate awards will NOT be given except in the case of ties. Appropriate awards as determined by the Championship Committee will be awarded for places one through ten.
- B USMS championship patch Each individual who wins a short course or long course individual or relay championship shall be awarded a USMS championship patch. Swimmers winning more than one championship may purchase additional patches for each additional championship won.
- C Club awards The organization conducting the National Championship Meet will provide awards to the first, second, and third place winners in the women's, men's, and combined categories in both Division I and Division II.

.8 Results

- A Posting of meet results Photocopies of event/heat tapes must be posted for each heat and lane before or simultaneously with the posting of the results (see Article 103.6.6C).
- B Publication of meet results Meet results in the appropriate format (see Appendix B) and club scores shall be published within thirty days of the last day of the meet and distributed to members of the USMS Board of Directors, representatives of participating clubs, and the USMS Records and Tabulation Chairman.

.9 Protest Procedure

- A Protests against judgment decisions of Starters, stroke and turn, and relay take-off judges may only be considered by the Referee of the meet.
- B Protests affecting the eligibility of an individual or a team to compete, or protests arising from the competition itself, shall be handled by a panel of five persons comprised of one representative each from the Championship Committee, Registration Committee, and Rules Committee, plus two swimmers selected from other than the host team by the other three panel members. This panel shall be chaired by the representative from the Championship Committee. Protests shall be submitted in writing, heard by the panel, and decisions rendered no later than the last day of competition. Both the party lodging the protest and the party charged shall be afforded a chance to be heard. The decision of the panel shall be final.

Page 50 PART ONE

- C Any protests made following the close of competition shall be directed to the Chairman of the Championship Committee for resolution.
- .10 Personnel (Also see Articles 102.18 and 103)
 - A Meet Director The Meet Director shall follow the swimming rules of USMS, Inc., and the policies and procedures established by the Championship Committee with regard to the planning and execution of the requirements for a National Championship Meet.
 - B Officials The minimum number of officials at each session of a USMS National Championship Meet shall include the following:
 - 1 Meet Referee
 - 1 Deck Referee for each course
 - 1 Starter for each course
 - 1 Recall Starter for each course
 - 2 Stroke and Turn Judges for each course
 - 2 Timers per lane for each course
 - 1 Recall Rope Operator for each course

The Referees, Starters, and stroke and turn judges shall be certified by USS, YMCA, or any other USMS-approved certifying body. An official may serve in only one officiating position during any event. For freestyle events 400 meters and longer, the Referee and Starter may double as stroke and turn judges.

.11 Facilities and Equipment (Also see Article 107)

- A If more than one course is to be used in a National Championship Meet, then each course must have its own automatic timing system.
- B All courses must have electronic readout boards. For at least one course, the electronic readout board must have the capability of displaying times for all lanes simultaneously.
- C Automatic officiating equipment shall be provided for all courses during the competition.
- D The event number and heat number for each heat in the water must be displayed in a location easily visible to the participants for each course being used.
- E The organization conducting the National Championship Meet shall compile entry lists, heat sheets, entry cards, and final results by computer.

ARTICLE 105: RECORDS, TOP TEN TIMES, AND ALL-AMERICAN RECOGNITION

105.1. REQUIREMENTS FOR RECORDS AND TOP TEN TIMES

.1 All times must be made in USMS sanctioned and/or USMS approved competitive meets or events.

- .2 Times to be considered for Records and Top Ten Times must be made on or before May 31st for short course yard times, September 15th for long course meter times, and December 31st for short course meter times. These times shall be forwarded to the Records and Tabulation Chairman by July 15th, October 20th, and February 5th, respectively.
- .3 Each LMSC is responsible for reporting the Top Ten Times and USMS National Records achieved in its LMSC in the appropriate format (see Appendix B), including all times achieved by swimmers from other LMSCs.
- .4 To be considered for National Top Ten Times or for USMS National Records, all relay times must include the name of the registered swim club and the full name (as it appears on the USMS registration card), the age, and for mixed relays the sex of each swimmer. For all individual events, eligibility is based on current USMS registration as noted on the entry card, and the results must contain the full name and age of each swimmer.
- .5 USMS National Records shall be published in the USMS Code of Regulations and Rules of Competition.

105.2. TOP TEN TIMES

- .1 The ten best times nationally in each age division and for each sex shall be published annually for the events listed under Article 102.5.
- .2 Individual split times will be considered for Top Ten Times if recorded by fully automatic officiating equipment and provided such splits are brought to the attention, in writing, of the meet director. Such split times shall be included separately in the summary of results prepared by the meet director, and submitted to the LMSC Top Ten Recorder.
 - Note: Performances in this category require the swimmer(s) to complete the full distance of the scheduled event without being disqualified.
- .3 In order for a time to be valid for Top Ten Times consideration, a minimum timing quality of two hand-held watches, averaged per USMS rules (see Article 103.11.3), must be used.

105.3. USMS NATIONAL RECORDS

- .1 The fastest time by a USMS-registered swimmer in each event in USMS sanctioned or approved competition shall be designated as a USMS National Record.
- .2 Records shall be achieved only in recognized distances and strokes as listed in Article 102.5.
- .3 Records must be made in accordance with all pertinent rules of USMS.
- .4 Times may be submitted for Masters records only.
- . 5 A record can only be made in still water.
- .6 Records shall require three watches, semi-automatic timing, or automatic timing.

Page 52 PART ONE

.7 Records established by a swimmer's split time in an individual event shall be acceptable as an individual performance for all official purposes if recorded by fully automatic officiating equipment and provided such splits are brought to the attention, in writing, of the meet director. Such split times shall be included separately in the summary of results prepared by the meet director and submitted to the LMSC Top Ten Recorder. Relay lead-off split times will not be considered for Records or Top Ten times.

Note: Performances in this category require the swimmer(s) to complete the full distance of the scheduled event without being disqualified.

- .8 Records must be achieved in the relevant stroke/event (i.e., a backstroke record must be set in a backstroke event, etc.). Records set in freestyle events can be submitted only as freestyle records, regardless of the stroke or strokes used.
- .9 Record times shall be submitted in hundredths of a second (two decimal places). If times are tied to the hundredth of a second, the results shall be declared a tie and records shared by each swimmer thus tied.
- .10 When a record is claimed, an official record application form shall be filled out, signed by the designated officals, and transmitted immediately following performance with all supporting data, including official meet results, the primary printout tape, and/or copy of the entry card with timers' signatures to the Records and Tabulation Chairman. Responsibility for this lies with either the LMSC Records Chairman or the Official Scorer of the meet.
- .11 Records set outside the United States shall be applied for on official record application forms and are subject to all pertinent requirements.

105.4. ALL-AMERICAN RECOGNITION

- .1 Individual Recognition The registered USMS swimmer with the fastest listed time for an individual event for that season shall be declared the All-American in that event for the year.
- .2 Relay Recognition The registered USMS swimmers from each relay team with the fastest listed USMS Top Ten time for that season shall be declared the Relay All-Americans in that event for the year.
- 105.5. WORLD RECORDS Applications and documentation for world records (25 meters and 50 meters) shall be supplied to the USMS Records and Tabulation Chairman within thirty days of the date of the swim.

ARTICLE 106: HEALTH AND SAFETY REGULATIONS FOR COMPETITION

106.1. MEDICAL EXAMINATION - Each competitor is strongly encouraged to have a complete medical evaluation before beginning Masters training. In addition, it is also recommended that each competitor have a physical checkup immediately prior to Masters competition in order to insure his physical readiness for participation.

106.2. MEDICAL EQUIPMENT - Meet Directors are encouraged to investigate the use of appropriate Emergency Medical Technician equipment and personnel for all meets.

ARTICLE 107: FACILITIES STANDARDS

IMPORTANT: Swimmers are advised that United States Masters Swimming, Inc., accepts no responsibility or liability for injuries resulting from accidents occurring in facilities not owned by United States Masters Swimming, Inc., and strongly urges that all safety precautions be observed during sanctioned events.

107.1. DEFINITIONS

- .1 [M] Mandatory requirement for all competition.
- .2 [M*] Predicated upon facility availability, LMSCs may waive strict compliance with these requirements when sanctioning local competition.
- .3 [NC] Mandatory requirement for National Championship Meets and international competition.

107.2. RACING COURSE DIMENSIONS

- .1 Length
 - A Long course meters 50.00 meters (164 feet-1/2 inch). [M]
 - B Short course meters 25.00 meters (82 feet-1/4 inch). [M]
 - C Short course yards 25.00 yards. [M]
 - D Touch pads When automatic officiating equipment touch pads are used at one or both ends, the course shall be of such length that ensures the required distance between the two touch pads or between either pad and the opposite end of the course. [M]
 - E Movable bulkheads When the racing course is fixed by the use of movable bulkheads, such bulkheads shall be designed to resist lateral deflection due to tension exerted by the attachment of the lane dividers to ensure the required course distance in all lanes. [M]
- .2 Width Minimum lane width for competitive swimming shall be 2.13 meters (7 feet). [M*, NC]

.3 Water Depth

A Starting end - Minimum water depth for racing starts, as measured for a distance 1.0 meter (3 feet, 3-1/2 inches) to 5.0 meters (16 feet, 5 inches) from the end wall, during either competition or practice shall be as follows.

- In pools with water depth less than 1.07 meters (3 feet, 6 inches) at the starting end, the swimmer must start from the deck or from within the water. [M]
- In pools with water depth 1.07 meters (3 feet, 6 inches) to less than
 1.22 meters (4 feet) at the starting end, starting platforms shall be no more than 0.46 meters (18 inches) above the water surface. [M]
- In pools with water depth 1.22 meters (4 feet) or more at the starting end, platforms shall meet the height requirements of Article 107.11.1. [M]
- B Racing course Minimum water depth shall be 2 meters (6 feet, 7 inches) throughout the course. Based on facility availability, the Championship Meet Committee may waive this requirement for National Championship Meets. [NC]
- 107.3. RACING COURSE WALLS Walls enclosing the racing course shall be parallel and vertical. The end walls shall be at a right angle to the water surface and shall be constructed of solid material with a non-slip surface that extends no less than 0.8 meter (2 feet, 7-1/2 inches) below the water surface. It is recommended that a toe-rest ledge be provided at approximately 4 foot depth in the walls of the deep water race course. [M]

107.4. POOL AND BULKHEAD MARKINGS

- .1 Pool Bottom Lane Markers Minimum 25-cm (10-inch) wide lines of a dark contrasting color (preferably black) shall be provided in the middle of each racing lane on the bottom of the pool. The lines shall preferably be uninterrupted the length of the course and shall terminate 2.0 meters (6 feet, 7 inches) from each end wall with a distinctive cross line 1.0 meter (3 feet, 4 inches) long and the same width as the bottom marker. [M*, NC]
- .2 End Wall Targets Flush, non-slip targets in the shape of a "T" or a cross and the same width as the lane bottom markers shall be provided in the center of each lane on each end wall of the course and shall extend at least 1.0 meter (3 feet, 4 inches) below the level of the water surface. It is recommended that the top edge of the deck be of a contrasting color to provide a visual target above the water at the end of the course. [M*, NC]
- .3 Lane Numbers The lanes shall be numbered from right to left as the swimmers stand facing the course. Lane numbers shall clearly identify the lanes to officials stationed on each side of the course. [M]
- 107.5. OVERFLOW RECIRCULATION SYSTEM The pool water recirculation and overflow system shall maintain the water level in line with the overflow rim of the pool gutters without creating appreciable current or water turbulence and shall maintain a smooth and calm water surface during competition. The pool recirculation system shall be turned off if, in the opinion of the Referee, the water movement interferes with the conduct of competition.

- 107.6. WATER TEMPERATURE Water temperature between 78 and 80 degrees Fahrenheit shall be maintained for competition. [M*, NC]
- 107.7. LADDERS All ladders, steps, or stairs within the racing course should be recessed in the pool side walls or may be removed during competition. [M*, NC]

107.8. OTHER DECK EQUIPMENT

- .1 Unobstructed Deck Use of portable lifeguard chair stands and other deck fixtures is recommended. They should be removed from the competition area to allow free passage and unobstructed view for competitors and officials along all sides of the course. [M*, NC]
- .2 Diving Boards 1-meter diving boards which overhang the racing course shall be hinged out of the way or removed during competition. [M*] [NC]

107.9. LIGHTING

- .1 Illumination For indoor pools, one hundred (100) foot-candle illumination level is required at the water surface over the entire course. Overhead light fixtures shall be located to avoid the casting of shadows by the pool walls over the racing course. [M*, NC]
- .2 National Championship Meets At National Championship Meets the same type and level of illumination must be provided and maintained during the warm-up period and competition. [NC]
- 107.10. NO SMOKING SIGNS No smoking indoors or outdoors shall be permitted in any area designated for swimmers, and the facility shall be so posted. [M]

107.11. STARTING PLATFORM

.1 Height

- A Long course The front edge of the starting platform shall be no less than 0.50 meter (1 foot, 8 inches) nor more than 0.75 meter (2 feet, 5-1/2 inches) above the surface of the water. [M]
- B Short course The front edge of the starting platform shall be not higher than 0.762 meter (2 feet, 6 inches) above the surface of the water. IMI
- .2 Front Edge of Platform The front edge of the starting platform shall be flush with the face of the end walls. [M]
- .3 Size and Slope of Platform The top surface of the starting platform shall be not less than 0.50 by 0.50 meters (1 foot, 8 inches square) and shall slope not more than 10 degrees from the horizontal. The entire surface of the platform shall be faced with permanent non-slip material. [M]

Page 56 PART ONE

- .4 Backstroke Starting Grips Starting platforms shall be equipped with firm starting grips located between 0.3 meter (12 inches) and 0.6 meter (24 inches) above water surface. The front edge of the grips shall be parallel to and flush with the face of the end wall. [M]
- .5 Lane Numbers Starting platforms shall be clearly marked with lane numbers visible to competitors and officials. [M]
- .6 Stability of Platforms Starting platforms shall be anchored to the deck or bulkhead to remain stable at all times without human aid. [M]

107.12, FLOATING LANE LINES

- .1 Installation Lane lines shall extend the full length of the course and shall be attached at each end wall with recessed anchors so located that the center line of the cable securing the lane lines shall be on the surface of the water with the bottom half of the floats uniformly submerged for its entire length. They shall:
 - A Separate the racing lanes. [M]
 - B Be outside the outermost lanes being used. [M*]
- .2 Size, Color, and Safety Dividers shall consist of contiguous floats having a minimum diameter of 5 cm (2 inches) to a maximum of 11 cm (4-7/4 inches). The color of the floats extending from the walls the distance of 5 meters for long course and 15 feet for short course shall be distinct from the rest of the floats. Distinctive colored floats, or markers extending around the full circumference of the floats, shall be placed at 15 meters (49 feet, 2-1/2 inches) from each end wall in both short course and long course pools. There shall be no exposed cables accessible to swimmers within the length of the racing course, and the cable take-up spools and rachet mechanisms shall be completely concealed with durable flexible covers. Damaged or broken floats shall be removed and replaced. [M]
- .3 Number of Lane Lines A single lane line between racing lanes shall be used in long course competition. Multiple lane lines may be installed for short course competition, provided the width of open water between dividers is not reduced to less than 7 feet. [M*, NC]
- .4 National Championship Meets Minimum 11-centimeter diameter floats shall be required for National Championship Meets. [NC]

107.13. BACKSTROKE FLAGS AND LINES

.1 Design - At least three triangular pennants six (6) to twelve (12) inches in width at the base and twelve (12) to eighteen (18) inches in vertical length, of two or more alternating and contrasting colors shall be suspended over each lane for all backstroke, individual medley, and medley relay events. [M]

.2 Location

A Long course - 5 meters (16 feet, 5 inches) from each end of the course, 1.8 meters (5 feet, 11 inches) above the water surface. [M]

- B Short course 4.57 meters (15 feet) from each end of the course, 2.13 meters (7 feet) above the water surface. [M]
- C Measurement Height shall be measured to the horizontal line from which the pennants are suspended. [M]
- .3 Marking at Midpoint of Course For long course backstroke, individual medley, and medley relay events a firmly stretched 7 mm (1/4-inch) line without flags or pennants shall be suspended at the midpoint of the course. [M]
- 107.14. LOUDSPEAKER START SYSTEM An electronic sound-generating device shall be provided to give the starting and recall signal. Loudspeakers may be mounted underneath or on the side of each starting platform, between every two platforms, on each side of the racing course, or positioned behind the starting platforms in such a manner that equitable dispersion of sound to all lanes is assured. The device shall also activate a strobe light, or similar optical signal, located on the Starter's side of the course approximately 15 feet forward from the starting end, to indicate the start to manual timers and hearing-impaired swimmers. The start system may include an underwater recall speaker and gun lap signal option. [NC]
- 107.15. FALSE START RECALL ROPE A recall rope to be dropped across the course in case of a false start shall be provided approximately 11 meters (36 feet) from the starting end in short course and 15 meters (49 feet) in long course competition. The rope shall be attached to vertical stanchions with a quick release mechanism and shall be suspended at least 1.22 meters (4 feet) above the water surface at the lowest point. The rope shall be suspended in such a way that when the quick release mechanism is activated the rope immediately drops onto the surface of the water across all lanes of the course. [NC]
- 107.16. PACE CLOCKS There may be at least two large, accurate timing devices or clocks, preferably located one on each side of the course, clearly visible to all swimmers. Dial type clocks shall be at least 3 feet in diameter with sweep second and minute hands. If digital readout clocks are provided, minimum size of the digits shall be 6 inches. [M*, NC]

107.17. AUTOMATIC TIMING EQUIPMENT

- .1 Installation and Safety Equipment shall be installed so that it will not interfere with swimmers' starts, turns, or finishes, or the normal overflow functions of the pool water recirculation system. All deck-level wiring shall carry no more than 12 volts of current. [M]
- .2 Power Source See Article 103.10 for automatic and semi-automatic timing equipment types and performance requirements. Equipment powered directly from the utility line electrical service shall have the capability to automatically switch to standby battery power source in case of line power failure without affecting the continuity and accuracy of the timing system. [NC]

Page 58 PART ONE

.3 Touch Pads

- A Size and thickness Recommended pad size shall be 2 meters (6 feet, 6 inches) wide and not less than 0.6 meter (2 feet) deep. Minimum width of pads shall be 1.52 meters (5 feet). Thickness shall not exceed one centimeter (3/8-inch). [NC]
- **B** Markings Panel face markings shall conform to and superimpose on pool end wall markings as closely as possible. Perimeter edges of the panel shall have a one inch wide black border. [NC]
- C Sensitivity Panels shall stop the timing system instantaneously by a light hand touch anywhere on the flat surface facing the race course and the upper edge but shall not be activated by water turbulence. [NC]
- D Installation and safety Panels shall be installed and firmly anchored in the center of each lane and shall have no sharp edges, corners, or other protrusions on any exposed surfaces. [NC]
- .4 Optional Accessories Automatic timing equipment may provide relay judging capability, automatic lap counting, split time readouts for all lanes, correction of erroneous touch, and television equipment tie-in. Any corrections or impulses generated by the equipment operators shall be clearly identified on the results printout.
- .5 Time Display Board An automatic display board visible to all swimmers shall give a digital time readout to two decimal places, displaying split times, final times, and places for all lanes. In the event of a tie, the place shall be displayed as a tie. A separate line of display for each lane meeting the above requirements shall be provided for National Championship Meets on at least one course. A one-line board is the minimum requirement for a second course. [NC]
- 107.18. ELECTRICAL SAFETY All permanent or temporary electrical connections to the electronic loudspeaker start system, automatic timing equipment, and other electrical or electronic devices operating on line voltages in the vicinity of the racing course shall be made only from ground-fault circuit interrupter (GFI) protected convenience receptacles or circuits. In the event such receptacles or circuits are not available in the facility used for competition, portable UL-approved self-contained GFI outlet fittings shall be provided (furnished and installed) at the nonprotected convenience receptacles by the meet management, meet director, or the equipment operator(s) whenever such equipment is connected and in use. [M]

PART TWO: ADMINISTRATIVE REGULATIONS OF COMPETITION

ARTICLE 201: ATHLETE REGISTRATION AND REPRESENTATION

- 201.1. MEMBERSHIP OF ATHLETES. All swimmers competing in events sanctioned by Masters Swimming must be registered with USMS or their nation's recognized Masters swimming governing organization.
- .1 Registration Year Athlete registration is for the period January 1 through December 31 of each year. Swimmers applying for registration on or after November 1 will be issued a registration card valid through December 31 of the following year.

.2 Registration Forms

- A Registration forms Athlete registration forms may be obtained from the Registration Chairman of the LMSC. The form, fully completed, shall be submitted with the applicable fee to the Registration Chairman of the LMSC, who shall issue a registration card.
- B Liability release All registration forms shall contain the exact language of the liability release according to Article 203.1. The language may not be further modified in any way.
- .3 Registration Fee The annual registration fee is composed of the following elements:
 - A national fee established by the Board of Directors or the House of Delegates.
 - B A local fee established by the LMSC.

201.2. REPRESENTATION

- .1 In order for a swimmer to compete as a representative of a club or other organization, that organization must be a member in good standing of the LMSC and United States Masters Swimming, Inc.
- .2 A swimmer need not reside in the LMSC territory in which the club he represents is located but must be registered in that LMSC.
- .3 To transfer representation from one club/organization to another, a swimmer must serve sixty (60) consecutive days without having represented any club/organization in competition, regardless of his residency, unless this transfer takes place at the time of annual registration/reregistration.

Page 60 PART TWO

- .4 A club wishing to change its LMSC affiliation must approve such change by a majority vote of its general membership at a regular club meeting or at a special meeting called for that purpose, with the vote duly certified by the club's president and secretary. The transfer also must be approved by a majority vote of the officers of the club's current and proposed LMSCs. If approved, the transfer shall be effective sixty days after receipt of written notice by the National Registrar.
- . 5 An unattached competitor is a registered swimmer who represents no club.
- .6 All applications for changes of registration (including transfers) must be accompanied by a reasonable fee to be determined by the local registration committee in the LMSC in which the swimmer will be registered after the change of registration.
- .7 There shall be only one USMS registration per individual swimmer permitted at any one time.

201.3. TRAVEL PERMITS

- .1 A current USMS registration card shall serve as a valid travel permit.
- .2 Any competitor touring in a foreign country may also obtain from the national Masters Swimming registration chairman or his designee a written authoritative permission to compete in such country.

ARTICLE 202: SANCTION/APPROVAL

202.1. SANCTIONS - All Masters Swimming and Long Distance Swimming competitions must be sanctioned through the LMSC within whose territorial limits the event is held. An LMSC may also approve competitions, benefits, exhibitions, clinics, or entertainment held within its geographical boundaries subject to Article 202.2. Sanction or Approval is required if Masters times are to be considered for USMS National records or Top Ten considerations.

.1 Sanction Requirements

- A The conduct of a sanctioned event must be in strict compliance with applicable administrative and swimming rules of USMS, Inc.
- B No sanction of any event will be granted with the word "Olympic" or any derivative thereof used in any manner in connection with said event unless consent is obtained from USS.
- C All sanctions must be signed by the LMSC's authorized representative, and a record thereof must be retained in a book kept for such purpose.
- D Application for sanction must be accompanied by a copy of the entry blank and applicable fee.
- E The sanction fee shall be as established by the LMSC.

- F A further sanction may be denied to any organization which has failed to conduct such meet in accordance with applicable administrative and swimming rules of USMS, Inc., or as stated on the entry blank.
- G All sanctioned events are subject to the following conditions:
 - No swimmer's entry will be accepted unless he is registered with USMS, has a valid travel permit or its equivalent, or has other acceptable proof of current Masters Swimming registration.
 - 2. A copy of the current registration card, travel permit, or other acceptable proof of current Masters Swimming registration of each swimmer must accompany the entry, except that, at the discretion of the Meet Director and exclusive of National Championship Meets, a swimmer may enter indicating "number pending," so long as proof of valid registration is presented prior to the swimmer's participation in the meet.
 - Entry blanks and programs must bear the statement, "Sanctioned by (LMSC name) for USMS, Inc. Sanction number: _____."
 - 4. The entry forms shall contain the exact language of the liability release according to Article 203.1. The language shall not be modified in any way, except that the names of additional insureds may be inserted in the second to last sentence of the release.
 - Closed competition in which all swimmers are registered with USMS may be sanctioned.
 - A swimmer's valid affiliation must be displayed after his name on the heat sheet or in the program.

202.2. APPROVALS

- .1 Approval Requirements Approvals will be issued, withheld, or withdrawn in accordance with the following:
 - A No event may be approved unless the conduct of the event conforms to the relevant USMS, Inc., swimming and administrative rules and meet standards. Closed competition in which not all swimmers are registered with USMS may only receive an approval.
 - B USMS swimmers may use the times obtained in approved meets for USMS records or National Top Ten consideration provided a designated USMS observer is present and verifies in writing that the conduct of the competition conforms to the relevant USMS swimming and administrative rules and meet standards.
 - No approval may be issued to any organization whose interest in sports and games is purely commercial, or where the event is to be promoted solely for the profit or the advertising value to be derived therefrom. Any income derived from approved events must be used for the general welfare of the promoting organization as a whole.

Page 62 PART TWO

- D Approvals issued to one organization cannot be transferred to another. Any approval so transferred shall be void for all purposes, and the LMSC may deny further approval to any organization violating this provision.
- E All approvals must be signed by a designated member of the LMSC, and a record thereof must be retained in a book kept for such purpose.
- F The entry forms shall contain the exact language of the liability release according to Article 203.1. The language shall not be modified in any way except that the names of additional insureds may be inserted in the second to last sentence of the release.
- G Application for approvals must be accompanied by a copy of the entry blank and any applicable fee.
- H An approval fee may be established by the LMSC.
- I A further approval may be denied to any organization which has failed to conduct said competition in accordance with USMS, Inc., standards or in accordance with its own entry blank.
- J Foreign meets sanctioned by FINA, MSI, or Swimming Canada Natation (CASA) shall be automatically approved and do not require a USMS observer. All other foreign approvals shall be obtained from the USMS Registration Committee Chairman.
- K Entry blanks and programs shall bear the statement, "Approved by (LMSC name) for USMS, Inc. Approval Number _____."

ARTICLE 203: LIABILITY RELEASE

203.1. All registration forms, sanctioned entry forms, and approved entry forms must include a liability release. The liability release must be signed by the person registering or entering. The language of the release must be:

"I, the undersigned participant, intending to be legally bound, hereby certify that I am physically fit and have not been otherwise informed by a physician. I acknowledge that I am aware of all of the risks inherent in Masters Swimming (training and competition) including possible permanent disability or death, and agree to assume all of those risks. I hereby waive any and all rights to claims for loss or damages arising out of my participation in the Masters Swimming program or any activities incident thereto against United States Masters Swimming, Inc., the Local Masters Swimming Committees, the clubs, host facilities, meet sponsors, meet committees, or any individuals officiating at the meets or supervising such activities, as a condition of my participation in Masters Swimming. In addition, I agree to abide by and be governed by the rules of USMS."

PART THREE: LONG DISTANCE/OPEN WATER SWIMMING RULES

ARTICLE 301: ADMINISTRATION

301.1. ORGANIZATION - The conduct and organization of Long Distance/Open Water Swimming for Masters shall be governed exclusively by USMS through its Long Distance Committee and LMSCs. The Chairman and committee members shall be appointed as provided in Article 506.2.9.

301.2. REGISTRATION AND SANCTIONS

- .1 All swimmers competing in long distance/open water events sanctioned by USMS must be registered with USMS or their nation's recognized Masters Swimming governing organization.
- .2 Sanctions or approvals shall be required for all long distance/open water events. LMSCs are responsible for issuing sanctions or approvals for events involving USMS athletes. If the event is to be swum in more than one LMSC, the LMSC where the event will originate will have jurisdiction in issuing the sanction or approval. This does not prohibit the other LMSC from issuing a sanction or approval for the event.
- .3 A long distance/open water competition may include both USMS and USS events, with the USMS events sanctioned or approved by USS. Under no circumstances shall a USMS athlete and a USS athlete be considered part of the same event. Athletes holding both USMS and USS registrations must declare their race affiliation, in writing, prior to the start of the event.
- 301.3. LIABILITY RELEASE Entry forms shall contain the exact language of the liability release according to Article 203.1. The following statement shall be added to the end of the release: "In addition, I specifically acknowledge that I am aware of all the risks inherent in open water swimming and agree to assume those risks." The language shall not be modified in any way except that the names of additional insureds may be inserted. The liability release must be signed by each person entering the meet.

ARTICLE 302: EVENTS

302.1. DEFINITIONS

.1 A long distance event is any swimming event over 1650 yards (1508.8 meters) in length. The event may be conducted in any body of water, either natural or man-made.

Page 64 PART THREE

- . 2 An open water event is a swimming event of any distance conducted in an open body of water, either natural or man-made.
- 302.2. EVENTS Long distance events shall consist of individual or team competition as follows:
- .1 Quarter-mile Straightaway The course shall be set in stationary open water and shall be a quarter of a mile (440 yards) straightaway using a cable with floats stretched between two fixed and stationary markers in the water. The distance between the anchoring points of the cable shall be maintained within plus or minus six inches, measured to the outer edge of the turning markers. A stationary water start and an in-the-water finish shall be used.
- .2 Open Water As surf, beach, tide, temperature, and other physical factors vary, the Meet Director shall determine the course for open water events. The course shall be measured as accurately as possible. The Meet Director shall determine the type of start to be used. As course distances and conditions are different, no records will be maintained; however, meet managers are encouraged to keep meet results. The distances shall be the same for both men and women and may be contested at the same time with separate results tabulated. Age groups and other classifications may also be swum at the same time, but again tabulated separately.
- .3 Time/Distance The object of the event is to determine who can swim the greatest distance in a given time period. The person swimming the farthest shall be declared the winner. The person swimming the second greatest distance shall be awarded second place, etc. In the event that two or more swimmers swim the same distance, a tie shall be declared. The events shall be swum in a pool at least 25 yards in length. The distance shall be computed by multiplying the total lengths swum by the length of the pool and adding the last completed five-yard increment; if the event is swum in a metric pool, the distance shall be determined in meters and converted to yards by multiplying 1.0936 times the number of meters completed and rounding off the distance to the last completed five-yard increment. All distances shall be reported in yards.

There shall be an adult acting in the capacity of a Starter/head timer/Referee (may be one person) present at all times, having no other responsibilities during the period of the swim. For each swimmer, there shall be a separate lap counter who shall record split times for every lap during the swim. A stop watch or electronic timing system shall be used to time the event. Drafting shall not be permitted in time/distance events. In pools that are 50 meters or longer, the Referee shall establish procedures to prevent drafting if more than one swimmer is competing per lane. In pools that are less than 50 meters, no more than two swimmers shall share a lane. When two swimmers are sharing the same lane, they shall conform to Article 102.10.3A(6)a and b.

.4 Individual Long Distance Swims - Swims must be sanctioned by the LMSC in which the swim originates and conducted in accordance with all pertinent rules and regulations. If more than one swimmer is attempting to swim, only one sanction need be issued. All times achieved in long distance individual attempts should be duly certified and made a matter of record by the sanctioning LMSC. The certification should include:

- A Each swimmer's name, age, sex, and registration number.
- B Governing body sanctioning the event.
- C Course: to include the name of the body of water, the starting and finishing points, and the measured distance.
- D Verification and documentation that all rules were observed and the swimmer(s) either completed or failed to complete or attain the distance.

.5 Postal

- A A postal event is a competition in which swimmers swim the event at a place of their choosing and send the time or distance to a central location for tabulation.
- B Each entrant in a postal event will be responsible for the validity of the figures and the distance submitted.
- Postal events conducted in pools must comply with all rules of USMS and Article 302.2.3. The Meet Director shall have the discretion to designate the size(s) of the pools in which the event is swum.
- D The Meet Director shall have the discretion to request additional verification of completion from any entrant, and may refuse to accept any entry that appears to contain erroneous information.
- .6 Team A team event may be contested on a total time/distance or pointsystem basis and may consist of any number of members.
 - A Time/distance basis A specified number of contestants on each team shall be considered in the computations for team scoring. The team whose top specified number of swimmers have the lowest cumulative time or the greatest cumulative total yards shall be declared the winner. A similar method will be used to determine second, third, and subsequent places. In the event of ties, the team whose individual member finished nearest to first place shall be declared the winner or awarded the place.
 - B Point basis Points are awarded on the basis of overall finishing position, with one point for first place, two points for second place, etc. The points of specified team members are added and the lowest cumulative score determines the winning team; the second lowest score, the second place, etc. In the event that two or more teams score the same number of points, the team that has the swimmer who won or finished closest to the first place shall be declared the winning team.
 - No individual entries can be accepted in the team events. All entries must be made by registered USMS clubs and signed by an authorized official of the club making the entry.
 - D Mixed sex teams may be entered, provided at least one swimmer of each sex is represented as follows:

Total number of team members	Females	Males
2	1	1
3 .	minimum 1	minimum 1
4	2	2
5	minimum 2	minimum 2
6	3	3

.7 Relays - Relay teams shall consist of two or more swimmers as specified on the entry form. The team members shall rotate in the same order throughout the event. The time or distance each swimmer is required to spend in the water shall be specified on the entry form. The changeover to the new swimmer will be made as soon as is practically possible after the previous swimmer has completed his leg. In the exchange in open water events, physical contact must be made between the two swimmers. In pool events, the exchange is governed by Article 101.7.3C and H.

ARTICLE 303: SAFETY PRECAUTIONS

- 303.1. SAFETY STANDARDS As conditions and courses vary, it is the responsibility of each swimmer to know and follow the safety standards necessary to protect himself from as many dangers as possible. The Meet Director can assist this endeavor by:
- .1 Obtaining necessary permits/approvals from the U.S. Coast Guard, park authorities, lifeguard associations, etc.
- .2 Providing accurate maps with course descriptions and other pertinent information with entry forms and meet information packets.
- . 3 Planning for possible medical evacuations.
- . 4 Assigning rescue/aid personnel and craft.
- . 5 Planning for escort paddlers or craft. Personal escorts should be considered for open water swims.
- .6 Making provisions for controlling escort craft and access of nonrace craft into the race area.
- . 7 Briefing all contestants, coaches, managers, trainers, and meet officials.
- .8 Planning for possible cancellation, postponement, and/or modification of the event.
- . 9 Considering use of fluorescent orange and other brightly colored caps to assist in identification and visibility of swimmers in open water events.

Note: LMSCs are encouraged to develop their own safety guidelines and precautions for the conduct of long distance/open water events, provided they are not in conflict with USMS rules, policies, or procedures.

303.2. ESCORTED SWIMS

- .1 In any event for which it has been arranged that an escort craft or paddler will accompany each swimmer throughout the event, all swimmers must be accompanied by such an escort paddler or craft. If the escort paddler or craft becomes disabled or cannot continue to accompany the swimmer, the swimmer must either stay in the water next to the escort craft until a replacement arrives, or exit the water.
- .2 If a swimmer's escort paddler or craft becomes unable to accompany its swimmer as per Article 303.2.1, a paddler or craft escorting another swimmer may assume responsibility for the swimmer with the disabled escort, subject to the following conditions:
 - A Any one paddler or craft may escort no more than two swimmers.
 - B The two swimers must stay within five meters of each other. Failure to stay within five meters shall result in immediate disqualification of the second swimmer and the immediate removal of that person from the water.

ARTICLE 304: CONDUCT OF THE COMPETITION

304.1. STARTS

.1 Types

- A Stationary Swimmers start from a platform or in the water with no forward motion.
- B Running Swimmers line up a short distance from the water behind a marked line. At the starting signal, the swimmers run into the water and swim the prescribed course.
- .2 Starting Signal The starting signal will be by gun, horn, whistle, siren, etc., audible to all contestants or if necessary by voice audible to all contestants.

304.2. SEEDING

- .1 When practical, swimmers shall be seeded by their 1500 meters/1650 yards times. The manner of seeding "no times" will be at the discretion of the Meet Director as stated in the meet entry sheet.
- .2 The fastest swimmers in quarter-mile straightaway course events shall be seeded in order of time with the fastest swimmer receiving the preferred position. If subsequent rows are needed, they will be seeded in a similar method behind the first row of swimmers.

Page 68 PART THREE

.3 Events for different age groups and sexes may be combined to allow the swimmers to compete at the same time. Separate starts are preferable in quarter-mile straightaway events.

304.3. FINISHES

- .1 In the Water Swimmers shall touch a vertical surface or swim across a defined finish line. Place judges and timers shall position themselves accordingly.
- .2 Out of the Water Swimmers shall leave the water, as defined by the course, and run up the beach to a marked finish.
- .3 Incomplete Race The Referee shall determine if the start of a race is to be postponed or canceled, or if a race in progress is to be stopped. If a race is stopped and swimmers are removed from the water for their safety, the Referee shall determine if the race is to be restarted, canceled, or considered official.

304.4. COSTUME - For non-National Championship events

- .1 Swimmer's costumes must be non-transparent and conform to the current concept of the appropriate. The Referee shall have the authority to ban offenders from competition until they appear properly costumed. Goggles, ear plugs, and grease shall be allowed. The suit shall be made of a porous material.
- .2 Swim cap(s), including those made of neoprene, may be permitted. Swim caps shall be defined as head gear conforming to a traditional swim cap design and shall not extend to protect the neck or shoulders.
- .3 Wet suits may be allowed at the discretion of the Meet Director. As wet suits generally provide a competitive advantage, prizes shall be awarded separately to non-wet suit and wet suit competitors. Any published results or records must clearly indicate which swimmers wore wet suits.
- .4 Devices used to maintain body heat are illegal, except for those listed in Articles 304.4.1, 304.4.2 and 304.4.3.
- . 5 Apart from Articles 304.4.2 and 304.4.3, flotation and propulsive devices are not permitted, except in designated events where all swimmers are using similar devices.
- .6 Products involving tobacco, alcohol, or pharmaceuticals containing drugs banned under IOC or FINA rules may not be advertised, but the advertiser's name only may be used.

304.5. OFFICIALS

- .1 There shall be a Meet Director, Referee, safety coordinator, scorer, announcer, clerk of course, Starter, and a sufficient number of judges, inspectors, timers, and medical personnel.
- .2 The clerk of course shall ensure that all entrants in open water events are visibly marked with their entrant numbers.

.3 Official craft shall be placed in a position in open water events to best observe yet not physically hinder the swimmers.

304.6. DISQUALIFICATIONS - Swimmers shall be disqualified if they:

- .1 Or their personal escort willfully or intentionally delay the progress of another swimmer. Accidental contact, especially at the start, shall not be considered a disqualification. However, the flagrant disregard of another swimmer's rights shall result in disqualification.
- .2 Fail to complete the prescribed distance or course, within the pre-announced time.
- .3 Fail to follow race rules.
- .4 Receive assistance by pulling on the cable or buoys at the turn or on the course.
- .5 Receive propulsive aid from anyone in boats, on surfboards, etc.
- .6 Receive unauthorized assistance at the start or finish.
- .7 Violate costume rules.
- . 8 Draft off another swimmer in time/distance pool events.
- .9 Are swimming in a manner in which their personal safety is jeopardized.
- 304.7. AGE GROUPS Age groups in individual events for men and women shall be 19-24, 25-29, and five year increments as high as is necessary to include all entrants.

ARTICLE 305:

NATIONAL LONG DISTANCE/OPEN WATER CHAMPIONSHIP MEETS

305.1. ELIGIBILITY

- .1 All swimmers competing in National Long Distance/Open Water Championship events shall be registered with USMS or their nation's recognized Masters Swimming governing organization.
- **305.2. EVENTS** The Long Distance Committee shall award National Long Distance/Open Water Championship Meets.
- .1 National Championship Meets will be recognized in the following events:
 - A One Mile (quarter-mile straightaway or open water course)
 - B Quarter-mile Straightaway (2 miles)
 - C Open Water (1.5-3 miles)
 - D Open Water (3.5-5 miles)
 - E Open Water (6+ miles)

Page 70 PART THREE

- F Postal One Hour
- G Postal 10 Kilometer (in a 50 meter pool)
- H Postal 6000 yard (in a 25 yard pool)
- .2 Team events (as defined in Article 302.2.6).
 - A Team events shall be recognized in the Quarter-mile Straightaway (2 mile), Postal One Hour, and Postal 6000 Yard.
 - B Team events shall be recognized in the following age groups, as determined by the age of the youngest swimmer: 19+, 25+, 35+, and ten year increments as high as is necessary to include all entrants.
 - C Team events shall be determined by the Long Distance Committee.
- .3 Individual age groups for National Long Distance/Open Water Championship Meets shall be the same as Article 304.7.

305.3. SITE SELECTION

- .1 Bids shall be due, in writing, to the Long Distance Chairman, at or before the first Long Distance Committee meeting of the annual meeting.
- .2 Championships shall be awarded by the Long Distance Committee at the annual meeting.
- .3 Events not awarded at the annual meeting shall be awarded by the Long Distance Chairman.
- .4 Suitable bids shall comply with all applicable USMS swimming and long distance rules, policies, and procedures.
- .5 The following area award system will be followed for the bidding of Long Distance Championships. Area definitions shall be the same as those in Article 104.3.1. Bids will be received up to two years in advance of the year bid. If suitable bids are not received from a qualifying area, bidding shall be opened to all areas.

	Area 1 West	Area 2 Central	Area 3 East
1994	2 mile cable 6000 yd postal	1 mile Open wtr 3.5-5 mi 1 hour postal	Open wtr 1.5-3 mi Marathon 6+ mi 10K postal
1995	Open wtr 1.5-3 mi Marathon 6+ mi 10K postal	2 mile cable 6000 yd postal	1 mile Open wtr 3.5-5 mi 1 hour postal
1996	1 mile Open wtr 3.5-5 mi 1 hour postal	Open wtr 1.5-3 mi Marathon 6+ mi 10K postal	2 mile cable 6000 yd postal

- 305.4 CONTRACT Successful bidders of Long Distance Championship Events shall sign a written contract with USMS, specifying the responsibilities of the meet host and of USMS, Inc.
- 305.5. FINANCIAL The sponsoring organization must agree to underwrite the full meet expenses including but not limited to the following:
- .1 Costs associated with the meet (setting up course, supplies, and equipment, etc.).
- .2 Cost of National Championship Meet awards (medals and patches) and other supplemental awards.
- .3 A fee of \$3.00 per individual entrant in the meet, to be paid within seven days of the last day of acceptance of entries. Upon compliance with the conditions set forth in the Meet Contract, the sum of \$2.00 per entrant shall be returned as stipulated in the Contract. Noncompliance with said conditions, as determined by the meet evaluation committee within 30 days of the receipt of the final meet report, shall result in forfeiture of part or all of this amount.
- . 4 Costs reflected in National Championship Meet contracts.
- .5 Complete financial statements, which shall be forwarded to the Long Distance Committee Chairman within 60 days of the completion of the event.
- 305.6. ENTRY FEES The entry fees for Long Distance/Open Water National Championship Meets shall not exceed \$20.00 for individual events and \$5.00 per team member in team events. A surcharge may be added for swimmers in individual events, subject to the approval of the Chairman of the Long Distance Committee.

305.7. RULES OF CONDUCT

- .1 Meet Director The Meet Director shall follow the applicable swimming and long distance rules of USMS and the policies and procedures established by the Long Distance Committee with regard to the planning and execution of the requirements for a National Championship.
- .2 Entry Forms Entry forms shall be reviewed by the Long Distance Committee Chairman and the LMSC for content and sanctioning prior to distribution. Acceptable entry sheets shall be sent to the Long Distance Chairman, all LMSCs, and the USMS National Office at least ninety (90) days prior to the first day of the meet.
- .3 Officials The Long Distance Committee shall appoint a Meet Advisor to aid the Meet Director and insure that all rules are observed.

.4 Costume

A Swimmers' costumes must be non-transparent and conform to the current concept of the appropriate. The Referee shall have the authority to bar offenders from competition until they appear properly costumed. One

Page 72 PART THREE

- suit, goggles, ear plugs, and grease will be allowed. The suit shall be made of a porous material.
- B Swim cap(s), including those made of neoprene, may be permitted. Swim caps shall be defined as head gear conforming to a traditional swim cap design and shall not extend to protect the neck or shoulders.
- C Flotation aids and any devices used to maintain body heat are not allowed, except for those listed in Articles 305.7.4A and 305.7.4B. Wet suits or any similar costumes are not allowed.
- D Propulsive devices are not permitted.
- E Products involving tobacco, alcohol, or pharmaceuticals containing drugs banned under IOC or FINA rules may not be advertised, but the advertiser's name only may be used.

.5 Assistance During the Race

- A Feeding is permissible, but use of alcohol or illegal drugs is forbidden.
- **B** Paddlers and escort boats are authorized if approved by Meet Director.
- 305.8. RESULTS Individual and team results and records shall be kept and submitted to the Long Distance Committee Chairman.
- .1 Results submitted to the committee must include the following information: finish places, times/distances, and each swimmer's full name as it appears on the USMS registration card, age, sex, verified USMS registration number, LMSC of registry, and club affiliation.
- .2 Results shall also be mailed to the clubs represented at the National Championship Meet and shall include the following information: places, times/distances, swimmers' names, ages, and club affiliations.
- 305.9. CLUB SCORING No club scores shall be officially tallied or recognized for National Long Distance/Open Water Championship events.

305.10. AWARDS

- .1 National Championship Meet medals, or other appropriate awards, approved by the Long Distance Committee chairman, shall be awarded at least to the first through third place winners of individual championships in each age group.
- .2 Scoring contestants on at least the first, second, and third place teams shall receive National Championship Meet medals.
- .3 Trophies may be awarded to individuals and teams at the discretion of the Meet Director.
- .4 A USMS championship patch will be awarded to the individual champions and each scoring member of a championship team. An individual will receive only one patch per meet.

ARTICLE 306: ALL-AMERICAN RECOGNITION AND RECORDS

306.1. ALL-AMERICAN RECOGNITION - The national champion in each age group of each individual National Long Distance/Open Water Championship event shall qualify as a member of the USMS All-American Long Distance Swimming team for the calendar year in which the event was conducted.

306.2. RECORDS

- .1 National records will be maintained in the quarter-mile straightaway events (1-mile and 2-mile events) and time/distance events (1-hour, 6000-yard, and 10K postal pool events).
- .2 Record times must be swum in a sanctioned event and must be routed through the sanctioning body to the Long Distance Committee Chairman.
- .3 No national records will be maintained in open water events because of differences in courses, currents, and other physical factors.
- .4 When a record attempt has been timed to the nearest second, 99 hundredths of a second shall be added to the time submitted. When a record attempt has been timed to the nearest tenth of asecond, 9 hundredths of a second shall be added to the time submitted.

PART FOUR: ATHLETES' RIGHTS, HEARINGS, AND APPEALS

ARTICLE 401: ATHLETES' BILL OF RIGHTS

- 401.1. PROTECTION USMS and its LMSCs shall respect and protect the right of every individual who is eligible and qualified to participate in events conducted in compliance with reasonable national and applicable international requirements, rules, and regulations.
- **401.2. EQUAL OPPORTUNITY** No member of USMS, nor any organization affiliated with USMS, may deny or threaten to deny any eligible individual the opportunity to participate in events sanctioned/approved by USMS.
- 401.3. REPORTING Any individual who alleges that he has been denied or is about to be denied, by a person or organization affiliated with USMS, a right as set forth in Article 401.2 shall immediately inform the Executive Secretary of USMS, who shall promptly cause an investigation to be made and steps to be taken to settle the controversy without unnecessary delay.

401.4. INVESTIGATION

- .1 Role of the Executive Secretary Whenever an individual, or party acting on his behalf, informs the Executive Secretary of USMS of an alleged violation of his rights as set forth in Article 401.2, the Executive Secretary, or any member of the Executive Committee of USMS appointed for this purpose by the President, shall review all the related evidence of the case and make a report, with a preliminary recommendation, to the Review Section within thirty (30) days or sooner if the situation requires.
- .2 Role of the Review Section The Review Section shall review the case and preliminary recommendation and take whatever action it deems appropriate. Any of the parties involved who are dissatisfied with the decision of the Review Section may appeal said decision under the provisions set forth in Article 403.1.

ARTICLE 402: REVIEW SECTION

402.1. COMPOSITION OF THE REVIEW SECTION

- .1 Members The Review Section shall be comprised of the Legal Counsel of USMS and each Zone Representative.
- .2 Chairman The President of USMS shall appoint the Chairman of the Review Section from among its members and shall designate a panel of no fewer than three members, one of whom shall be the Zone Representative in whose Zone

the alleged violation occurred, to hear and decide any case before the Review Section.

402.2. JURISDICTION AND AUTHORITY OF THE REVIEW SECTION

- .1 General Jurisdiction As hereinafter set forth, USMS, through the Review Section or any body assigned exclusive jurisdiction, has the authority to:
 - A Determine the eligiblity and right of any athlete to compete.
 - B Impose and enforce penalties, including censure, suspension, or expulsion from membership, for any violation of the rules and regulations of USMS or for actions which bring disrepute upon USMS or upon the sport of swimming.
 - C Interpret any provision of the rules and regulations of USMS with the exception of the swimming and long distance swimming rules.
 - D Vacate, modify, sustain, stay, or reverse any decision or order properly submitted for review, or remand the matter for further action.
 - E Investigate any election impropriety or cause for removal of a national committeeman or national officer and take corrective action.
 - F Issue such interim orders as may be necessary pending a final decision of any body granted exclusive jurisdiction.
 - G Review any exercise of the powers by another committee as provided in Article 402.2.2.

.2 Exclusive Jurisdiction

- A Upon a majority vote of the Review Section Panel assigned to a case, or upon a majority vote of the Review Section, an appropriate body within the LMSC in which the matter occurred may be assigned exclusive jurisdiction of any matter within the purview of Article 402, when the best interest of Masters Swimming will be served thereby.
- B Upon a majority vote of the USMS Board of Directors, or upon a two-thirds vote of the USMS House of Delegates, the USMS House of Delegates may be assigned exclusive jurisdiction of any matter within the purview of this Article, when the best interests of Masters Swimming will be served thereby.
- **402.3. PROCEDURES** The procedures to be taken in reference to all hearings shall be as follows:

.1 Formal Hearing

- A The respondent shall be given notice in writing by certified mail, return receipt requested, to his last known address or by personal service, of the charges against him in detail or of the circumstances which are believed to require answers, explanation, or clarification.
- B The written statement of charges shall also contain:

Page 76 PART FOUR

- 1. The penalties which may ensue if such charges are proved.
- A date at which time a hearing will be held, with the request that the person charged appear before the Review Section Panel, with the right to have counsel of his own choice represent him at the hearing.
- A stated date of not less than thirty (30) days nor more than sixty (60) days after the date of mailing of such notification.
- 4. A request that the person charged answer in writing to the chairman of the Review Section Panel all the charges set forth in such written statement.
- A request that this written answer be delivered by certified mail, return receipt requested, no later than ten (10) days prior to the date of the hearing.
- C The decision shall be rendered at the time of the hearing, or within twentyfour (24) hours thereafter.

ARTICLE 403: APPEAL

403.1. APPEAL PROCEDURES - The decision of the Review Section shall be final in all cases, subject only to appeal to the Board of Directors of USMS, and thereafter to the USMS House of Delegates. An appeal to either body must be taken within twenty (20) days after mailing of written notice of the decision to be appealed. Upon timely petition to the President of USMS, and upon showing of good cause therefore, the time for appeal from a decision may be extended. The chairman of the body to which a decision is appealed shall set a date for appellate hearing not less than thirty (30) days after receipt of the notice of appeal, nor after the next regularly scheduled meeting of that body that occurs thirty days or more after said receipt. The appeal decision, including findings of fact, shall be reduced to writing and mailed by certified or registered mail to all parties within ten (10) days of hearing. Any person representing a real party in interest in the case may appeal.

PART FIVE: UNITED STATES MASTERS SWIMMING, INC. ORGANIZATION AND BYLAWS

ARTICLE 501: MEMBERSHIP

- 501.1. MEMBERSHIP CATEGORIES The membership of United States Masters Swimming, Inc., hereinafter sometimes referred to as the Corporation, shall consist of:
- .1 Club members, which are swimming clubs for Masters swimmers. Every swimming club which competes in Masters Swimming competition sponsored by the Corporation shall register with the Corporation through its respective LMSC.
- .2 Individual members, who register with the Corporation through an LMSC.
- .3 Any organization which is interested in swimming on either the national or local level. The House of Delegates may establish classes for such membership.
- **501.2. MANDATORY MEMBERSHIPS** All members of the House of Delegates and Board of Directors and all members of any committee of the Corporation must hold an individual membership in the Corporation.
- 501.3. EQUAL OPPORTUNITY Membership in the Corporation shall not be denied by virtue of race, creed, sex, religion, political affiliation, disability, or national origin.

ARTICLE 502: LOCAL MASTERS SWIMMING COMMITTEE (LMSC)

- **502.1. LMSC MEMBERSHIP** Each LMSC shall consist of individual members and club members currently registered through that LMSC.
- **502.2. BYLAWS** Each LMSC shall be governed by bylaws which are consistent with USMS objectives and goals.
- **502.3. ANNUAL MEETING** Each LMSC shall hold an annual meeting open to all individual members registered with USMS through the LMSC.
- **502.4. ELECTION OF OFFICERS** Each LMSC shall provide for periodic election of officers in its bylaws.
- **502.5. FILING OF BYLAWS** Each LMSC shall file a copy of its current bylaws with the USMS National Office.

Page 78 PART FIVE

- 502.6. BOUNDARY DESCRIPTIONS Appendix D contains official boundary descriptions for each LMSC.
- 502.7. REPORTS The secretary shall forward to the USMS National Office a copy of the minutes of the annual meeting and a copy of the LMSC's annual financial reports.

ARTICLE 503: HOUSE OF DELEGATES

- 503.1. MEMBERSHIP The House of Delegates of the Corporation shall consist of the following:
- .1 One member from each LMSC. If the LMSC has a registration of over 300 swimmers, it is entitled to one additional member. For each additional 500 registered swimmers, the LMSC is entitled to one more member in the House of Delegates. Figures shall be determined by the records of the Registrar for the previous year or June 15th of the current year, whichever is the greater.
- .2 All members of the Executive Committee.
- . 3 All members of the Zone Committee.
- .4 All members of the Rules and Legislation Committees, the Controller, and the Chairmen of all standing committees appointed by the President shall be atlarge members, if not already members.
- .5 The President of the Corporation shall be empowered to appoint up to ten percent of the total membership of the House of Delegates as at-large members of the House of Delegates.
- .6 All members of the House of Delegates shall remain until their successors are selected, except that membership may be terminated by resignation filed with the Secretary.
- **503.2.** POWERS The powers of the House of Delegates shall be as follows:
- .1 To admit to group membership or individual membership any organization or person eligible under this Code and who applies.
- . 2 To prescribe and amend the Code for the government of the Corporation.
- .3 To impose and enforce penalties for any violation of the Code of the Corporation.
- .4 To call regular and special meetings of the Corporation and to fix the time and place for holding all meetings not fixed by this Code.
- . 5 To collect the dues and/or funds of the Corporation and to expend the same.
- . 6 To institute, locate, conduct, and manage all National Championship Meets.
- .7 To explain, define, and interpret any provisions of this Code or other rules of the Corporation, including the rules of competition.

503.3. MEETINGS OF THE HOUSE OF DELEGATES

- .1 The annual meeting of the House of Delegates shall be held at such time and place, within or without the State of Ohio, as may be fixed in the notice of such meeting.
- .2 Special meetings of the House of Delegates may be held at any time, pursuant to a resolution of either the Board of Directors or the House of Delegates.
- .3 A written notice of all annual and special meetings of the House of Delegates, stating the time, place, and preliminary agenda, shall be given to each member of the House of Delegates by mailing the same to each member's last known address at least three (3) weeks prior to the meeting date.
- .4 Each member of the House of Delegates shall have one vote on each matter submitted to the House of Delegates of the Corporation for his vote, consent, waiver, release, or other action. There shall be no voting by proxy.
- .5 A quorum shall consist of those members of the House of Delegates present and voting.

ARTICLE 504: OFFICERS

504.1. POSITIONS - The elected officers of the Corporation shall be a President, a Vice-President, a Secretary, and a Treasurer. No person may concurrently hold more than one such office.

504.2. ELECTIONS AND TERM OF OFFICE

- .1 All officers of the Corporation shall be elected by the members of the House of Delegates at annual meetings held in odd-numbered years. Elected officers shall hold office for two years or until their successors are elected and qualified.
- .2 Each officer is eligible for election to the same office for two terms. No person so elected for two successive terms is eligible for re-election to the same office until after the lapse of two years following the terms of office to which that person was last elected.
- 504.3. VACANCIES Vacancies in any office of the Corporation may be filled for the unexpired term by the Board of Directors at any meeting of the Board of Directors.
- **504.4. DUTIES OF OFFICERS** The duties of the officers shall be as follows:
- .1 The President orders meetings of the Corporation as provided in the Code and presides at all meetings of the Corporation. He has the right to exercise all the duties pertaining to this office in accordance with the Code. He is an ex-officio member of all committees. He shall appoint Legal Counsel who shall serve at the pleasure of the President.

Page 80 PART FIVE

- .2 The Vice-President has duties as assigned to him by the President and has all the powers and performs the duties of the President should the President be unable or incapable of performing such duties.
- . 3 The Secretary shall make proper arrangements for:
 - A Keeping the records of the Corporation and the House of Delegates.
 - B Conducting all official correspondence of the Corporation.
 - C Issuing all official notices of all meetings of the House of Delegates and Board of Directors.
 - D Serving as Secretary of the House of Delegates and the Board of Directors.
- . 4 The Treasurer shall:
 - A Be the custodian of all Corporate funds.
 - B Receive all funds of the Corporation and deposit to the accounts of the Corporation.
 - C Disburse funds as directed by the Controller, or by the House of Delegates.
 - D Invest funds of the Corporation in a prudent manner for the benefit of the Corporation, in accordance with the investment policies established by the Finance Committee.
 - E Maintain adequate and accurate financial records which document the income and disbursement of the Corporation's funds.
 - F Submit all financial records to the Internal Audit Committee annually within one month following the end of the Corporation's fiscal year.

ARTICLE 505: BOARD OF DIRECTORS

- **505.1. MEMBERSHIP** The Board of Directors of this Corporation shall consist of:
- . 1 The President, the Vice-President, the Secretary, and the Treasurer.
- .2 Each member of the Zone Committee.
- .3 Past Presidents not already on the Board.
- . 4 The Chairmen of all Standing Committees.
- .5 The Legal Counsel.
- . 6 The Controller.
- . 7 An ex-officio member from United States Swimming.
- **505.2. TERM OF OFFICE** Directors shall be elected or appointed for a two year term.

- 505.3. MEMBERSHIP REQUIREMENTS The Board of Directors of the Corporation shall at all times be composed of individuals, of whom at least 80 percent are active Masters swimmers in the United States.
- 505.4. VACANCIES Any vacancies that may occur on the Board of Directors, except vacancies in the Officers, caused by death, resignation, or otherwise, shall be filled for the unexpired term by someone appointed by the President from among the members of the House of Delegates.
- **505.5. POWERS** The Board of Directors shall have the authority to act for the Corporation between meetings of the House of Delegates.
- 505.6. MEETINGS Meetings of the Board of Directors shall be held at any time or place, within or without the State of Ohio, pursuant to a resolution of the Board of Directors or to a call signed by the President or any three Directors. Two (2) weeks' written notice of such meeting shall be given to each Director. Notice of any meeting may be waived in writing before such meeting. Special matters may be voted upon by the Board of Directors by mail, but no action can thus be taken without the endorsement of a majority of all Directors.
- 505.7. QUORUM The presence of a majority of the Directors shall constitute a quorum at any meeting of the Board of Directors.
 - 505.8. VOTING PRIVILEGES Each member of the Board of Directors shall have one vote with the exception of the Past Presidents. The Immediate Past President shall have one vote and all other Past Presidents shall be ex-officio members. Ex-officio members shall have voice but no vote.

ARTICLE 506: COMMITTEES

506.1. EXECUTIVE COMMITTEE

- . 1 The Executive Committee of this Corporation shall consist of:
 - A The President, the Vice-President, the Secretary, and the Treasurer.
 - B The Zone Chairman.
 - C The Legal Counsel.
 - D The immediate Past President.
- .2 The Executive Committee shall have the authority to act for the Corporation between meetings of the Board of Directors.
- **506.2. STANDING COMMITTEES** Whenever possible, each committee shall have representation from each zone. The terms of all committee chairmen shall coincide with that of the President.
- .1 Championship Committee The Championship Committee shall consist of the Chairman appointed by the President for a two year term and one member

Page 82 PART FIVE

from each zone, a representative of the Sports Medicine Committee, and any other members the Chairman shall deem necessary to carry out the work of the Committee. At least two members of the Committee shall not have experience in the direction of National Championship Meets. Duties of the Committee include receiving bid proposals for National Championship Meets, coordinating the date and site with other national swimming championships, reviewing the bids, and making recommendations to the House of Delegates to assist the selection process. In addition, the Championship Committee shall serve in an advisory capacity to the winners of the bids for each championship and shall endeavor to maintain a consistent approach to the running of all National Championship Meets, including the production of pre-meet and post-meet literature and results.

- .2 Coaches Committee The Coaches Committee shall consist of a Chairman appointed by the President for a two year term and as many members as the Chairman shall deem necessary to carry out the duties of the Committee, including appropriate activities at National Championship Meets. These members shall be appointed by the Chairman with the concurrence of the President. The standing purpose of the Committee is to promote Masters Swimming from an organizational standpoint in the conduct of Masters Swimming workouts as well as to assist in the organizational aspects of National Championship Meets by providing leadership and personnel for approved programs and projects. The Coaches Committee may serve in an advisory capacity to the Executive Committee and to other committees concerning those items that would affect the coaching of Masters Swimming and the promotion of organized programs for Masters Swimming.
- .3 Convention Committee The Convention Committee shall consist of the Chairman appointed by the President for a two year term. The Chairman shall choose, with the concurrence of the President, as many members as needed to carry out the duties of the Committee. The Committee shall coordinate with United States Aquatic Sports, Inc., in the preparation of each year's national convention and carry out the operational needs of the House of Delegates and its committees at that convention.
- .4 Finance Committee The Finance Committee shall consist of the Chairman appointed by the President for a two year term. The Chairman shall choose from the House of Delegates nine members, with at least one from each zone. The Treasurer, the Chairman of the Internal Audit Committee, and the Controller shall serve as ex-officio members of the Committee.

A The Finance Committee shall:

- Develop policies pertaining to the financial affairs of the Corporation.
- Receive and review the annual reports of the Internal Audit Committee, Treasurer, and Controller.
- Prepare or cause to be prepared a summary of the above reports to be presented to the House of Delegates at each annual convention.

- Annually receive and compile all budget requests from each Officer and Committee for the next fiscal year.
- At each annual convention, prepare the Corporation's budget for the next fiscal period and, after approval of the Budget by the Committee, submit same to the House of Delegates for approval.
- 6. Report to the Board of Directors.
- B Committee requests for budget items or requests for funding that are disapproved by the Finance Committee (or those not submitted to the Finance Committee) may be approved by the House of Delegates by a two-thirds vote.
- .5 Insurance Committee The Insurance Committee shall consist of the Chairman appointed by the President for a two year term and other members selected by the Chairman as may be necessary to carry out the duties of the Committee. The Committee shall study and review the insurance needs of USMS and shall recommend policies, procedures, and appropriate insurance coverage for USMS, its participants, and its programs.
- .6 Internal Audit Committee The Internal Audit Committee shall consist of at least two members of the Corporation appointed by the President with the concurrence of the Board of Directors, one of whom shall be designated by the President as Chairman. The members of the Committee shall serve at the pleasure of the President and shall make their reports to the House of Delegates through the Finance Committee. The Internal Audit Committee shall:
 - A Receive the financial records of the Corporation from the Treasurer and the Controller.
 - B Examine at least annually all financial records received pursuant to Article 506.2.6A to determine the accuracy and validity of the records maintained by the Treasurer and Controller.
 - C Prepare and audit the annual income statement and balance sheet of the Corporation, along with any other appropriate financial statements as of the close of the Corporation's fiscal year.
 - D Present the financial statements listed in Article 506.2.6C to the Finance Committee as soon as practical after the close of the fiscal year with a statement as to the Internal Audit Committee's position regarding the accuracy and validity of those documents.
 - E Submit to the Finance Committee recommendations for the improvement of the financial management of the Corporation.
 - F Receive reimbursement for expenses incurred in the performance of its duties, following authorization by an Officer or the Chairman of the Finance Committee.
- .7 International Committee The International Committee shall consist of the Chairman appointed by the President for a two year term and other members as may be appropriate. The Committee will encourage, promote, and

- coordinate Masters Swimming on an international basis, and shall be empowered to bid for international championship meets.
- .8 Legislation Committee The Legislation Committee Chairman shall be appointed by the President for a two year term. The Chairman shall choose from the House of Delegates two members from each zone. The Legislation Committee is charged with considering all Code change proposals of an administrative or organizational nature and maintaining consistency within the Code of Regulations. The Legislation Committee may initiate and shall consider proposed amendments to the Preamble; Goals and Objectives; Glossary; Part Two; Part Four; Part Five; Part Six; and Appendix D (LMSC and Zone Boundaries) of the Code, and shall present them to the annual meeting of the House of Delegates with recommendations.
- .9 Long Distance Committee The Long Distance Committee Chairman shall be appointed by the President for a two year term. The Chairman shall choose from the House of Delegates twelve members, with at least one member from each zone. The Chairman will be the USMS liaison to the USS Long Distance Committee. The Long Distance Committee may initiate and shall consider proposed amendments to Part Three of the Rules of Competition and shall present them to the House of Delegates with recommendations.
- .10 Marketing/Publications Committee The Marketing/Publications Committee shall consist of a Chairman appointed by the President for a two year term and other members as necessary to carry out the appropriate duties. The Committee shall define the marketing and communications goals and objectives, which are supportive of the purpose and philosophy of Masters Swimming, and will execute the activities and produce materials necessary to accomplish these goals and objectives.
- .11 Nominating Committee The Nominating Committee shall be the Zone Committee. The Committee will canvass qualified and interested persons and present one or more candidates for each office at least one month before the annual meeting. Additional candidates may be nominated at the Annual Meeting by two delegates to the House of Delegates provided the nominee(s) gives written consent.
- .12 Planning Committee The Planning Committee shall consist of the Chairman appointed by the President for a two year term, one member from each zone, and other members as may be appropriate, who represent a broad range of experience in all aspects of the Masters Swimming program. The Committee shall develop long range plans, goals, and objectives related to the vitality and quality of the Masters Swimming program and shall recommend appropriate projects, policies, and priorities in response to issues which affect USMS programs. In addition, the Committee shall conduct periodic reviews of the organizational structure and, when appropriate, shall suggest changes designed to enhance communications, efficiency, and productivity.
- .13 Records and Tabulation Committee The Records and Tabulation Committee shall consist of the Chairman appointed by the President for a two year term. The Chairman shall choose from the House of Delegates as many

- members as necessary to carry out the duties of the Committee. The duties of this Committee are to establish and maintain a standardized process of recording and verifying times and publishing the Top Ten Times and USMS National Records annually for each course.
- .14 Registration Committee The Registration Committee shall consist of the Chairman appointed by the President for a two year term, one member from each zone, and one member-at-large. Duties of the Committee include preparing regulations and fees for presentation to the House of Delegates.
- .15 Rules Committee The Rules Committee Chairman shall be appointed by the President for a two year term. The Chairman shall choose from the House of Delegates ten members with at least one member from each zone. The Rules Committee recommends to the House of Delegates at its annual meeting rule changes for the improvement of the sport. Such recommendations shall be based on proposals submitted to the Rules Committee in writing and in the proper form in accordance with the provisions of Part Six, Amendment Procedures.
- .16 Sports Medicine and Research Committee The Sports Medicine and Research Committee shall consist of the Chairman appointed by the President for a two year term and others who can stimulate research in the physiology and psychology of Masters swimming at basic and clinical research levels, and further investigate the benefits of continued exercise programs on aging processes, cardiopulmonary involvement, orthopedic problems, and other preventable debilitating processes. The Committee shall stimulate and encourage such research and investigations and shall also distribute results of that research and other pertinent information to Masters swimmers and others as appropriate.
- .17 Zone Committee The Zone Committee shall consist of a representative from each zone elected by the members of the House of Delegates from each LMSC in each zone at the annual meeting of the House of Delegates for a two year term. Zone representatives shall be residents of their zones, and a change of residency by a Zone Representative out of the zone shall cause a vacancy. In the event a vacancy exists, the President shall appoint a member of the zone to fill the unexpired term. The Zone Representatives shall select the Chairman of the Committee from within or without the Committee. The Committee shall carry out the responsibilities assigned to it by the policies of the House of Delegates, the President, the USMS Code of Regulations, and the stated need of the LMSCs.
- 506.3. AD HOC COMMITTEES The President may establish other committees on an ad hoc basis which are deemed necessary to carry out the duties of the President.

ARTICLE 507: FINANCIAL POLICY

507.1. FISCAL YEAR - The Corporation shall have a one-year fiscal period for tax and accounting purposes commencing on the first day of January.

Page 86 PART FIVE

- 507.2. CONTROLLER The Controller shall be appointed by and serve at the pleasure of the President and shall report to the Finance Committee. The Controller shall:
- .1 Establish and maintain the financial records of the Corporation using generally accepted accounting principles and practices.
- .2 Record corporate income from the Registrar and all other sources on the books of the Corporation.
- .3 Receive and record all invoices and/or bills, which invoice and/or bills shall have been approved by an Officer or Committee Chairman or other person authorized to approve such expenses.
- .4 Authorize the Treasurer to disburse corporate funds pursuant to paragraph .3 above.
- . 5 Prepare annual financial summaries of the Corporation's financial status within two months following the end of the fiscal year.
- .6 Prepare the annual financial reports showing the income and disbursements of the Corporation, which shall be similar to those reports required of nonprofit organizations by Section 6056 of the Internal Revenue Code of 1954 (or corresponding provisions of any subsequent tax laws). Such annual financial reports shall be made available for inspection by members of the general public at the Corporation's principal office on request made within 180 days after notice of its availability.
- . 7 Prepare the Corporation's annual tax returns.
- . 8 Submit all financial records to the Internal Audit Committee annually within two months following the end of the fiscal year.
- .9 Submit recommendations for improvements in the management of the Corporation's fiscal affairs to the Chairman of the Finance Committee as requested or deemed advisable.
- .10 The Controller shall be reimbursed for expenses incurred in the performance of the duties of the position, following authorization by an Officer or the Chairman of the Finance Committee.
- **507.3. FEES** Fees shall be as established by the House of Delegates.

ARTICLE 508: INDEMNIFICATION AND DISSOLUTION

508.1. INDEMNIFICATION

.1 Each person who is or was a Director, officer, or employee of the Corporation (including the heirs, executors, administrators, or estate of such person) shall be indemnified by the Corporation to the full extent permitted by the Nonprofit Corporation Law of the State of Ohio against any liability cost or expense incurred by him in his capacity as director, officer, or employee, or arising out of his status as a Director, officer, or employee (including serving at the

- request of the Corporation as a director, trustee, officer, employee, or agent of another corporation).
- .2 The Corporation may maintain insurance, at its expense, to protect itself and any such person against any such liability, cost, or expense. For the purpose of Article 508.1, references to "the Corporation" include all constituents absorbed in a consolidation or merger as well as the resulting or surviving corporation.

508.2. DISSOLUTION

- .1 If deemed advisable by the members, the Corporation may be dissolved pursuant to the applicable provision of the Corporation laws of the State of Ohio.
- .2 Upon the dissolution of the Corporation, the Board of Directors shall, after paying or making provision for the payment of all the liabilities of the Corporation, dispose of all the assets of the Corporation exclusively for the purposes of the Corporation or to such organization or organizations organized and operated exclusively for charitable, educational, religious, literary, or scientific purposes as shall qualify as exempt organizations under Section 501(c)(3) of the Internal Revenue Code of 1954 (or the corresponding provision of any future United States Internal Revenue Law).

PART SIX: AMENDMENT PROCEDURES

ARTICLE 601: AMENDMENTS

601.1. COMMITTEE JURISDICTION

- .1 Rules Proposed changes to the Rules for Competition (Part One) shall be considered by the Rules Committee for report and recommendation to the House of Delegates.
- .2 Long Distance Proposed changes to the Rules for Long Distance Swimming (Part Three) shall be considered by the Long Distance Committee for report and recommendation to the House of Delegates.
- .3 Legislation Proposed changes to the Code of Regulations (Preamble, Goals and Objectives, Glossary, Part Two, Part Four, Part Five, Part Six, and Appendix D LMSC and Zone Boundaries) shall be considered by the Legislation Committee for report and recommendation to the House of Delegates.
- .4 Executive Committee Proposed changes to all other sections of the USMS Code of Regulations and Rules of Competition shall be considered by the Executive Committee or committee designated by the President. Such proposals are not subject to the provisions of Articles 601.2, 601.3, 601.4, and 601.5.

601.2. SUBMISSION OF PROPOSED AMENDMENTS

- .1 Authorization Changes to the USMS Code of Regulations and Rules of Competition may be proposed only by an LMSC, a standing committee of the House of Delegates, the Board of Directors, or the Executive Committee.
- .2 Format Proposed changes shall be in such form as to show the entire section as it will read if adopted, with any changes in language underlined if new and lined out if deleted.
- .3 Submission Deadline Proposed changes by an LMSC must be submitted to the Chairman of the Rules, Legislation, or Long Distance Committee not later than July 10.
- .4 Publication of Proposed Amendments All proposed changes to the Rules or Code shall be published and mailed to each LMSC and each member of the House of Delegates not later than August 15.
- 601.3. MODIFICATION OF PROPOSED AMENDMENTS Proposed amendments may be modified in any manner by the Rules, Legislation, or Long Distance Committee, where appropriate, while under consideration by said Committee. Such modification must be germane to the subject matter and intent of the proposed change.

- 601.4 ADOPTION OF PROPOSED AMENDMENTS The USMS Code of Regulations and Rules of Competition may only be altered, amended, repealed, or otherwise changed at the annual meeting of the House of Delegates and only as follows:
- .1 Rules In even-numbered years, Part One may be amended by a majority vote of the House of Delegates members present and voting, if submitted to and reported out favorably by the Rules Committee, or by a two-thirds vote of the House of Delegates members present and voting if submitted to and NOT reported out favorably by the Rules Committee.
- .2 Long Distance In even-numbered years, Part Three may be amended by a majority vote of the House of Delegates members present and voting if submitted to and reported out favorably by the Long Distance Committee, or by a two-thirds vote of the House of Delegates members present and voting if submitted to and NOT reported out favorably by the Long Distance Committee.
- .3 Legislation In odd-numbered years, the Preamble, Goals and Objectives, Glossary, Part Two, Part Four, Part Five, Part Six, and Appendix D LMSC and Zone Boundaries may be amended by a majority vote of the House of Delegates present and voting if submitted to and reported out favorably by the Legislation Committee, or by a two-thirds vote of the House of Delegates members present and voting if submitted to and NOT reported out favorably by the Legislation Committee.
- .4 Emergency Amendments Emergency amendments may be passed by a nine-tenths vote of the House of Delegates members present and voting if they are not submitted in conformity with Articles 601.4.1, 601.4.2, and 601.4.3, and only if properly submitted to, deemed an emergency, and reported out favorably by the appropriate governing committee as defined in Article 601.1.

.5 USS Amendments Which Affect USMS Rules

- A Amendments to USS Articles 101, "Individual Strokes and Relays," and 102, "Conduct and Officiating of All Swimming Competition," shall automatically be adopted by USMS, unless the USMS House of Delegates votes to reject those amendments.
- B If amendments to USS Articles 101 and 102 are adopted between the annual meetings of the House of Delegates, the corresponding portions of Part One shall automatically be adopted by USMS, except that such amendments may be altered, amended, repealed, or changed by a ninetenths vote of the Rules Committee and a majority vote of the Executive Committee.
- 601.5 EFFECTIVE DATE Unless otherwise specified, all changes approved as prescribed shall become effective on January 1 of the year following their adoption.

Page 90 PART SIX

Summary of Amendment Procedures	Even Years	Odd Years
Rules (Part One) If reported out favorably by committee If NOT reported out favorably by committee	Majority 2/3	*
Long Distance (Part Three) If reported out favorably by committee If NOT reported out favorably by committee	Majority 2/3	*
Legislation (Preamble, Goals and Objectives, Glossary, Part Two, Part Four, Part Five, Part Six, and Appendix D) If reported out favorably by committee If NOT reported out favorably by committee	¥	Majority 2/3

^{*}Emergency Amendments: by a 9/10 vote ONLY if properly submitted, deemed an emergency, and reported out favorably by the appropriate committee.

APPENDIX A

RECORDS

Category	Current as of
USMS Short Course Yards	May 31, 1992
USMS Short Course Meters	October 1, 1992
USMS Long Course Meters	September 15, 1992
World Short Course Meters	October 1, 1992
World Long Course Meters	October 1, 1992
USMS Long Distance	October 31, 1992

EFFECTIVE DATES: The records in this listing reflect applications received by the above effective dates. Some records achieved by these effective dates may not yet have been submitted or processed.

DISCREPANCIES AND ERRATA: The USMS record is faster than the world record in some events. Possible reasons for these discrepancies include: (a) the application for the USMS record has been approved, but the application for the world record still is in progress; (b) a birth certificate was not submitted as proof-of-age; (c) certification of pool length was not submitted; or (d) the application for the world record was not submitted within six months of the date of the performance.

CORRECTIONS: Any questions about the listed records should be addressed to:

"Pool" Records	Long Distance Records
Walter Reid	Rob Copeland
Records/Tabulation Committee	Long Distance Committee
P.O. Box 8800A	246 Berger Street
Steilacoom, WA 98388	Somerset, NJ 08873

WOMEN 19-24	SC-Yards Year	USMS	SC-Meters	Year U	JSMS	LC-Meters	Year	USMS	
50 free	S Miller 1991 .	23.97	P Maxwell	19892	28.51	D Dutcher	1992	. 27.94	
100 free	S Miller 1991 .	52.08	P Maxwell	19891:0	01.87	A Harrison	1990	1:01.49	
200 free	D Graner 1989 .	1:54.22	S Jones	19882:1	15.34	D Ursin	1987	2:14.17	
400/500 free	D Graner 1989 .	5:04.90	D Buckendahl	1988 4:5	50.48	C Hinshaw	1992	4:40.07	
800/1000 free	M Peck 1992 .	. 10:41.76	K Henson	199010:0	03.39	C Hinshaw	1992	9:54.84	
1500/1650 free	K Burton 1987 .	17:31.70	K Henson	199018:5	54.01	C Hinshaw	1992. 1	8:37.22	
50 back	D Risen 1990 .	27 . 85	N Wengrofsky	19903	33,30	T Smith	1990	. 31.55	
100 back	D Risen 1990 .	57 . 96	C Hartzell	19891:1	12.40	D Braciak	1987	1:06.09	
200 back	D Graner 1989 .	2:07.07	C Hartzell	19882:3	34.32	M Donahue	1992	2:26.62	
50 brst	C Searcy 1992 .	31.14	K Cavanaugh	19893	36.55	T McFarlane	1991	. 35.22	
100 brst	A Tweedy 1987 .	1:08.12	P Lindroos	19881:2	20.68	T McFarlane	1991	1:18.44	
200 brst	A Tweedy 1987 .	2:25.40	G Gatti	19872:5	57.47	J Hauer	1992	2:54.47	
50 fly	S Miller 1991 .	26.59	L Hughes	19893	30.46	S Heringer	1992	. 30.40	
100 fly	S Miller 1991 .	57.39	S Turek	19901:0	07.42	B Castillo	1988	1:06.05	
200 fly	S Turek 1991 .	. 2:11.03	C Planje	19912:3	34.28	B Castillo	1988	2:22.59	
100 IM	S Miller 1991 .	59.21	L Hughes	19891:1	12.42				
200 IM	S Miller 1991 .	2:08.74	D Buckendahl	19882:3	34.48	M Donahue	1992	2:29.90	
400 IM	N Stauffer 1988 .	. 4:45.34	C Planje	19915:2	27.99	D Ursin	1987	5:20.39	
	1	1			1				
WOMEN 25-29	SC-Yards Year	USMS	SC-Meters		JSMS World	LC-Meters	Year	USMS	World
WOMEN 25-29 50 free	SC-Yards Year A Pettis-Scott 1992 .		SC-Meters L Fabrizio		Acqueta and the control of the contr	LC-Meters S Shand			World 26.68
		23.20		19892	26.93 26.93		1991	. 26.68	
50 free	A Pettis-Scott 1992 .	23.20	L Fabrizio	19892 19895	26.93 26.93 59.17 58.93	S Shand	1991 1991 1989	. 26.68 . 58.23 2:07.11	26.68
50 free 100 free	A Pettis-Scott 1992 . S Shand 1991 .	23.20 51.24 1:51.80	L Fabrizio L Fabrizio	19895 19895	26.93 26.93 59.17 58.93 06.47 2:05.80	S Shand	1991 1991 1989	. 26.68 . 58.23 2:07.11	26.68 58.23
50 free 100 free 200 free	A Pettis-Scott 1992 . S Shand 1991 . S Shand 1991 .	23.20 51.24 1:51.80 4:56.18	L Fabrizio L Fabrizio D Graner	19892 19895 19892:0 19894:2	26.93 26.93 59.17 58.93 06.47 2:05.80 26.18 4:25.94	S Shand	1991 1991 1989 1989	. 26.68 . 58.23 2:07.11 4:27.53	26.68 58.23 2:07.11
50 free 100 free 200 free 400/500 free	A Pettis-Scott 1992 . S Shand 1991 . S Shand 1991 . K Burton 1991 . K Burton 1991 .	23.20 51.24 1:51.80 4:56.18 . 10:17.82	L Fabrizio L Fabrizio D Graner D Graner	19895 19895 19892:0 19894:2 19909:1	26.93 26.93 59.17 58.93 06.47 2:05.80 26.18 4:25.94 18.99 9:18.99	S Shand	1991 1991 1989 1989	. 26.68 . 58.23 2:07.11 4:27.53 9:18.43	26.68 58.23 2:07.11 4:27.53 9:18.43
50 free 100 free 200 free 400/500 free 800/1000 free	A Pettis-Scott 1992 . S Shand 1991 . S Shand 1991 . K Burton 1991 . K Burton 1991 .	23.20 51.24 1:51.80 4:56.18 . 10:17.82 . 16:50.17	L Fabrizio L Fabrizio D Graner D Graner D Graner	19895 19895 19892:0 19894:2 19909:1	26.93 26.93 59.17 58.93 06.47 2:05.80 26.18 4:25.94 18.99 9:18.99 30.18 17:30.18	S Shand S Shand S Shand S Shand S Shand S Shand	1991 1991 1989 1989 1989	. 26.68 . 58.23 2:07.11 4:27.53 9:18.43 7:38.78	26.68 58.23 2:07.11 4:27.53 9:18.43
50 free 100 free 200 free 400/500 free 800/1000 free 1500/1650 free	A Pettis-Scott 1992 1991 1991 S Shand 1991 1991 K Burton 1991 1991	23.20 51.24 1:51.80 4:56.18 10:17.82 16:50.17 26.76	L Fabrizio L Fabrizio D Graner D Graner K Burton	19892:0 19892:0 19894:2 19909:1 199117:3 19893	26.93 26.93 59.17 58.93 06.47 2:05.80 26.18 4:25.94 18.99 9:18.99 30.18 17:30.18 30.63 30.63	S Shand S Shand S Shand S Shand S Shand A Pope	1991 1991 1989 1989 1988 . 1 1988	. 26.68 . 58.23 2:07.11 4:27.53 9:18.43 7:38.78 . 30.80	26.68 58.23 2:07.11 4:27.53 9:18.43 17:38.78
50 free 100 free 200 free 400/500 free 800/1000 free 1500/1650 free 50 back	A Pettis-Scott 1992 1991 S Shand 1991 S Shand 1991 K Burton 1991 K Burton 1991 K Burton 1991 Burton 1991 Burton 1998 1989	23.20 51.24 1:51.80 4:56.18 10:17.82 16:50.17 26.76 56.70	L Fabrizio L Fabrizio D Graner D Graner K Burton D Graner	19895 19892:0 19894:2 19894:2 19909:1 199117:3 19893	26.93 26.93 59.17 58.93 06.47 2:05.80 26.18 4:25.94 18.99 9:18.99 30.18 17:30.18 30.63 30.63 04.66 1:04.66	S Shand	1991 1991 1989 1989 1988 . 1 1989 1989	. 26.68 . 58.23 2:07.11 4:27.53 9:18.43 7:38.78 . 30.80 1:07.32	26.68 58.23 2:07.11 4:27.53 9:18.43 17:38.78 30.80
50 free 100 free 200 free 400/500 free 800/1000 free 1500/1650 free 50 back 100 back	A Pettis-Scott 1992 1991 S Shand 1991 S Shand 1991 K Burton 1991 K Burton 1991 K Burton 1991 D Graner 1989 D Graner 1991	23.20 51.24 1:51.80 4:56.18 10:17.82 16:50.17 26.76 56.70 2:01.29	L Fabrizio L Fabrizio D Graner D Graner K Burton D Graner D Graner	19892 19895 19892:0 19894:2 19909:1 199117:3 19893 19891:0	26.93 26.93 59.17 58.93 06.47 2:05.80 026.18 4:25.94 18.99 9:18.99 30.18 17:30.18 30.63 30.63 04.66 1:04.66 20.66 2:17.86	S Shand S Shand S Shand S Shand S Shand D Graner D Graner	1991 1991 1989 1989 1988 . 1 1989 1989	. 26.68 . 58.23 2:07.11 4:27.53 9:18.43 7:38.78 . 30.80 1:07.32 2:19.97	26.68 58.23 2:07.11 4:27.53 9:18.43 17:38.78 30.80 1:06.46
50 free 100 free 200 free 400/500 free 800/1000 free 1500/1650 free 50 back 100 back 200 back	A Pettis-Scott 1992 S Shand 1991 S Shand 1991 K Burton 1991 K Burton 1991 K Burton 1991 D Graner 1989 D Graner 1991 D Graner 1991 1991 1991	23.20 51.24 1:51.80 4:56.18 . 10:17.82 . 16:50.17 26.76 56.70 2:01.29	L Fabrizio L Fabrizio D Graner D Graner D Graner O Graner O Graner D Graner D Graner	1989	26.93 26.93 59.17 58.93 50.6.47 2:05.80 26.18 4:25.94 18.99 9:18.99 30.18 17:30.18 30.63 30.63 04.66 1:04.66 2:17.86 34.36 33.60	S Shand S Shand S Shand S Shand S Shand D Graner D Graner D Graner	1991 1991 1989 1989 1988 . 1 1989 1989 1989	. 26.68 . 58.23 2:07.11 4:27.53 9:18.43 7:38.78 . 30.80 1:07.32 2:19.97 . 34.36	26.68 58.23 2:07.11 4:27.53 9:18.43 17:38.78 30.80 1:06.46 2:19.97
50 free 100 free 200 free 400/500 free 800/1000 free 1500/1650 free 50 back 100 back 200 back 50 brst	A Pettis-Scott 1992 S Shand 1991 S Shand 1991 S Shand 1991 K Burton 1991 K Burton 1991 K Burton 1991 D Graner 1999 D Graner 1991 S McIntyre-Woods 1991 S McIntyre-Woods 1991	23.20 51.24 1:51.80 4:56.18 .10:17.82 .16:50.17 26.76 56.70 2:01.29 30.60 1:06.50	L Fabrizio L Fabrizio D Graner D Graner K Burton D Graner D Graner T Graner	1989	26.93 26.93 59.17 58.93 106.47 2:05.80 106.47 2:05.80 107.05.94 18.99 9:18.99 30.18 17:30.18 30.63 30.63 30.4.66 1:04.66 20:066 2:17.86 34.36 33.60 14.82 1:13.60	S Shand S Shand S Shand S Shand S Shand D Graner D Graner D Graner R Seaman	1991 1991 1989 1989 1988 . 1 1989 1989 1987	. 26.68 . 58.23 2:07.11 4:27.53 9:18.43 7:38.78 . 30.80 1:07.32 2:19.97 . 34.36 1:16.60	26.68 58.23 2:07.11 4:27.53 9:18.43 17:38.78 30.80 1:06.46 2:19.97 32.01
50 free 100 free 200 free 400/500 free 800/1000 free 1500/1650 free 50 back 100 back 200 back 50 brst 100 brst	A Pettis-Scott 1992 S Shand 1991 S Shand 1991 K Burton 1991 K Burton 1991 K Burton 1991 D Graner 1992 D Graner 1991 D Graner 1991 S McIntyre-Woods 1991 S McIntyre-Woods 1991 S McIntyre-Woods 1991 S McIntyre-Woods 1991	23.20 51.24 1:51.80 4:56.18 10:17.82 16:50.17 26.76 56.70 2:01.29 30.60 1:06.50	L Fabrizio L Fabrizio D Graner D Graner K Burton D Graner O Graner T McFarlane T McFarlane	1989	26.93 26.93 59.17 58.93 106.47 2:05.80 126.18 4:25.94 18.99 9:18.99 30.18 17:30.18 30.63 30.63 104.66 1:04.66 104.66 2:17.86 33.63 33.60 14.82 1:13.60 14.82 1:13.60	S Shand S Shand S Shand S Shand A Pope D Graner D Graner B Graner B Graner B Graner S McIntyre-Woods	1991	. 26.68 . 58.23 2:07.11 4:27.53 9:18.43 7:38.78 . 30.80 1:07.32 2:19.97 . 34.36 1:16.60 2:50.04	26.68 58.23 2:07.11 4:27.53 9:18.43 17:38.78 30.80 1:06.46 2:19.97 32.01 1:16.05
50 free 100 free 200 free 400/500 free 800/1000 free 1500/1650 free 50 back 100 back 200 back 50 brst 100 brst 200 brst	A Pettis-Scott 1992 S Shand 1991 S Shand 1991 K Burton 1991 K Burton 1991 K Burton 1991 D Graner 1991 D Graner 1991 D Graner 1991 S McIntyre-Woods 1991 S McIntyre-Woods 1991 C Convis 1991 C 1991 1991 1991	23.20 51.24 1:51.80 4:56.18 10:17.82 16:50.17 26.76 56.70 2:01.29 30.60 1:06.50 2:25.23	L Fabrizio L Fabrizio D Graner D Graner K Burton D Graner C Graner T Graner D Graner D Graner D Graner	1989	26.93 26.93 59.17 58.93 306.47 2:05.80 26.18 4:25.94 18.99 9:18.99 30.18 17:30.18 30.63 30.63 30.63 30.63 30.66 2:17.86 34.36 33.60 44.62 1:13.60 47.08 2:44.82 29.13 29.48	S Shand S Shand S Shand S Shand A Pope D Graner D Graner B Graner C Graner C Graner S McIntyre-Woods N Mitchell	1991 1991 1989 1989 1988 . 1 1989 1989 1989 1989 1987 1987	. 26.68 . 58.23 2:07.11 4:27.53 9:18.43 7:38.78 . 30.80 1:07.32 2:19.97 . 34.36 1:16.60 2:50.04 . 28.79	26.68 58.23 2:07.11 4:27.53 9:18.43 17:38.78 30.80 1:06.46 2:19.97 32.01 1:16.05 2:42.02
50 free 100 free 200 free 400/500 free 800/1000 free 1500/1650 free 50 back 100 back 200 back 50 brst 100 brst 200 brst 50 fly	A Pettis-Scott 1992 S Shand 1991 S Shand 1991 K Burton 1991 K Burton 1991 K Burton 1991 D Graner 1991 D Graner 1991 S McIntyre-Woods 1991 S McIntyre-Woods 1991 C Convis 1997 Lanini 1987	23.20 51.24 1:51.80 4:56.18 10:17.82 16:50.17 56.70 56.70 30.60 1:06.50 2:25.23 25.68 57.01	L Fabrizio L Fabrizio D Graner D Graner K Burton D Graner C Graner T Graner T McFarlane G Gatti B O'Connor	1989	26.93 26.93 59.17 58.93 56.47 2:05.80 26.18 4:25.94 18.99 9:18.99 30.18 17:30.18 30.63 30.63 30.66 1:04.66 20:66 2:17.86 34.36 33.60 14.82 1:13.60 47.08 2:44.82 29.13 29.48 96.31 1:05.71	S Shand S Shand S Shand S Shand A Pope D Graner D Graner B Graner S Seaman S McIntyre-Woods N Mitchell R Seaman	1991	. 26.68 . 58.23 2:07.11 4:27.53 9:18.43 7:38.78 . 30.80 1:07.32 2:19.97 34.36 1:16.60 2:50.04 . 28.79 1:03.91	26.68 58.23 2:07.11 4:27.53 9:18.43 17:38.78 30.80 1:06.46 2:19.97 32.01 1:16.05 2:42.02 28.79
50 free 100 free 200 free 400/500 free 800/1000 free 50 back 100 back 200 back 50 brst 100 brst 200 brst 50 fly 100 fly	A Pettis-Scott 1992 Shand 1991 Shand 1991 Shand 1991 K Burton 1991 K Burton 1991 K Burton 1991 D Graner 1999 D Graner 1991 S McIntyre-Woods 1991 S McIntyre-Woods 1991 C Convis 1991 Lanini 1987 1991 Lanini 1987 1991	23.20 51.24 1:51.80 4:56.18 10:17.82 16:50.17 26.76 2:01.29 30.60 1:06.50 2:25.23 25.68 57.01	L Fabrizio L Fabrizio D Graner D Graner D Graner K Burton D Graner D Graner T Graner T McFarlane C Gatti B O'Connor D Graner	1989	26.93 26.93 59.17 58.93 50.47 2:05.80 26.18 4:25.94 18.99 9:18.99 30.18 17:30.18 30.63 30.63 50.66 2:17.86 34.36 33.60 34.36 33.60 14.82 1:13.60 47.08 2:44.82 29.13 29.48 60.31 1:05.71 28.67 2:17.13	S Shand S Shand S Shand S Shand S Shand O S Shand A Pope D Graner D Graner D Graner R Seaman S McIntyre-Woods N Mitchell R Seaman R Seaman	1991	. 26.68 . 58.23 2:07.11 4:27.53 9:18.43 7:38.78 . 30.80 1:07.32 2:19.97 34.36 1:16.60 2:50.04 . 28.79 1:03.91	26.68 58.23 2:07.11 4:27.53 9:18.43 17:38.78 30.80 1:06.46 2:19.97 32.01 1:16.05 2:42.02 28.79 1:03.91
50 free 100 free 200 free 400/500 free 800/1000 free 1500/1650 free 50 back 100 back 200 back 50 brst 100 brst 200 brst 50 fly 100 fly 200 fly	A Pettis-Scott 1992 Shand 1991 Shand 1991 Shand 1991 K Burton 1991 K Burton 1991 Burton 1991 D Graner 1999 D Graner 1991 SMcIntyre-Woods 1991 SMcIntyre-Woods 1991 Convis 1991 Lanini 1987 D Graner 1997 J Ford 1987	23.20 51.24 1:51.80 4:56.18 16:50.17 26.76 26.76 2:01.29 30.60 1:06.50 2:25.23 25.68 57.01 2:03.38 59.39	L Fabrizio L Fabrizio D Graner D Graner K Burton D Graner D Graner T Graner T McFarlane G Gatti B O'Connor D Graner K Burton	1989	26.93 26.93 59.17 58.93 59.17 58.93 59.17 58.93 56.47 2:05.80 4:25.94 18.99 9:18.99 30.18 17:30.18 30.63 30.63 30.4.66 1:04.66 2:17.86 33.60 14.82 1:13.60 47.08 2:44.82 29.13 29.48 50.631 1:05.71 28.67 2:17.13 308.16 1:06.84	S Shand S Shand S Shand S Shand S Shand O S Shand A Pope D Graner D Graner D Graner R Seaman S McIntyre-Woods N Mitchell R Seaman R Seaman	1991	. 26.68 . 58.23 2:07.11 4:27.53 9:18.43 7:38.78 . 30.80 1:07.32 2:19.97 . 34.36 1:16.60 2:50.04 . 28.79 1:03.91 2:22.42	26.68 58.23 2:07.11 4:27.53 9:18.43 17:38.78 30.80 1:06.46 2:19.97 32.01 1:16.05 2:42.02 28.79 1:03.91

WOMEN 30-34	SC-Yards Year USMS	SC-Meters Year USMS	World	LC-Meters Year USMS Wor	1d
50 free	S Neilson-Bell 1988 23.04	S Neilson 1987 26.55	26.55	S Neilson-Bell 1988 26.37 26.	. 37
100 free	S Neilson 1987 50.83	S Neilson-Bell 198857.35	57.35	S Neilson-Bell 1988 58.09 58.	.09
200 free	S Neilson 1987 1:52.57	S Neilson 19872:06.83	2:06.83	B Knight 1989 2:07.84 2:07.	.84
400/500 free	B Knight 1990 5:05.60	B Knight 19904:31.88	4:31.88	B Knight 1991 4:30.38 4:30.	. 38
800/1000 free	B Knight 1990 . 10:31.89	B Knight 19909:17.55	9:09.90	B Knight 1991 9:20.20 9:20.	.20
1500/1650 free	K Parker-Medlin 1992 . 17:39.20	B Durdy 198918:24.43	18:24.43	K Burton 1992. 17:40.50 17:40.	.50
50 back	S Walsh-Stankavag 1992 27.36	L Hasselquist 1989 32.24	32.24	B Mauer 1988 32.11 32.	. 11
100 back	B Mauer 1988 1:00.03	L Doughty 19911:10.41	1:10.41	Z Herrmann 1992 1:09.07 1:09.	.07
200 back	Z Herrmann 1992 2:09.33	Z Herrmann 19912:32.32	2:32.32	Z Herrmann 1992 2:26.99 2:26	.99
50 brst	R Seaman 1989 29.84	V Kerr-Hauge 1991 35.25	33.74	L Bennett	. 56
100 brst	R Seaman 1989 1:05.05	L Bennett 19891:18.13	1:18.13	L Bennett	. 52
200 brst	K Melick 1990 2:29.75	K Melick 19912:50.96	2:49.16	K Melick 1987 2:53.08 2:48	.41
50 fly	R Seaman 1989 25.62	S Neilson-Bell 1988 30.20	30.20	B Harrell 1992 29.22 29	.22
100 fly	R Seaman 1989 55.68	T Bennett 19881:07.34	1:04.69	B Harrell 1992 1:06.08 1:06	.08
200 fly	J Ford 1992 2:10.18	N Mitchell 19912:26.98	2:26.35	K Burton 1992 2:27.54 2:27	.54
100 IM	R Seaman	S Neilson-Bell 19881:07.78	1:07.78		
200 IM	S Neilson 1987 2:09.99	S Neilson 19872:27.11	2:27.11	S Neilson-Bell 1988 2:29.22 2:29	. 22
400 IM	B Glasgow-Rhodes . 1991 4:39.22	B Glasgow-Rhodes 19915:13.84	5:13.69	K Burton 1992 5:11.39 5:11	. 39
1	-	·			
- 1					
WOMEN 35-39	SC-Yards Year USMS	SC-Meters Year USMS	World	LC-Meters Year USMS Wor	rld
<u>WOMEN 35-39</u> 50 free	SC-Yards Year USMS S Neilson-Bell 1991 24.29	SC-Meters Year USMS J Hirsty 1989 27.66	World 27.66		.38
1					. 38
50 free	S Neilson-Bell 1991 24.29	J Hirsty 198927.66	27.66	J Hirsty 1990 27.38 27.	.38
50 free 100 free	S Neilson-Bell 1991 24.29 S Halfacre 1988 52.24	J Hirsty 198927.66 J Hirsty 19891:00.75	27.66 1:00.75	J Hirsty 1990 27.38 27. S Halfacre 1988 1:00.25 1:00.	.38
50 free 100 free 200 free	S Neilson-Bell 1991 24.29 S Halfacre 1988 52.24 S Halfacre 1988 1:52.79	J Hirsty 1989 27.66 J Hirsty 1989 1:00.75 J Hirsty 1989 2:12.69	27.66 1:00.75 2:12.69	J Hirsty 1990 27.38 27. S Halfacre 1988 1:00.25 1:00. S Halfacre 1988 2:09.33 2:09.	.38 .25 .33
50 free 100 free 200 free 400/500 free	S Neilson-Bell 1991 24.29 S Halfacre 1988 52.24 S Halfacre 1988 1:52.79 S Halfacre 1988 5:01.04	J Hirsty 1989 27.66 J Hirsty 1989 1:00.75 J Hirsty 1989 2:12.69 D Ogier 1990 4:51.04	27.66 1:00.75 2:12.69 4:51.04 9:46.95	J Hirsty 1990 27.38 27. S Halfacre 1988 1:00.25 1:00. S Halfacre 1988 2:09.33 2:09. S Halfacre 1988 4:33.08 4:33.	.38 .25 .33 .08
50 free 100 free 200 free 400/500 free 800/1000 free	S Neilson-Bell 1991 24.29 S Halfacre 1988 52.24 S Halfacre 1988 1:52.79 S Halfacre 1988 5:01.04 S Halfacre 1988 10:39.87	J Hirsty 1989 27.66 J Hirsty 1989 1:00.75 J Hirsty 1989 2:12.69 D Ogier 1990 4:51.04 L Val 1987 9:46.95	27.66 1:00.75 2:12.69 4:51.04 9:46.95	J Hirsty 1990 27.38 27. S Halfacre 1988 1:00.25 1:00. S Halfacre 1988 2:09.33 2:09. S Halfacre 1988 4:33.08 4:33. S Halfacre 1988 9:24.54 9:24. S Halfacre 1987 18:12.11 18:12.	.38 .25 .33 .08
50 free 100 free 200 free 400/500 free 800/1000 free 1500/1650 free	S Neilson-Bell 1991 24.29 S Halfacre 1988 52.24 S Halfacre 1988 1:52.79 S Halfacre 1988 5:01.04 S Halfacre 1988 10:39.87 S Halfacre 1988 17:15.23	J Hirsty 1989 27.66 J Hirsty 1989 1:00.75 J Hirsty 1989 2:12.69 D Ogier 1990 4:51.04 L Val 1987 9:46.95 L Val 1987 18:27.71	27.66 1:00.75 2:12.69 4:51.04 9:46.95 18:27.71	J Hirsty 1990 27.38 27. S Halfacre 1988 1:00.25 1:00. S Halfacre 1988 2:09.33 2:09. S Halfacre 1988 4:33.08 4:33. S Halfacre 1988 9:24.54 9:24. S Halfacre 1987 18:12.11 18:12.	.38 .25 .33 .08 .54 .11
50 free 100 free 200 free 400/500 free 800/1000 free 1500/1650 free 50 back	S Neilson-Bell 1991 24.29 S Halfacre 1988 52.24 S Halfacre 1988 1:52.79 S Halfacre 1988 . 5:01.04 S Halfacre 1988 10:39.87 S Halfacre 1988 17:15.23 L Val 1991 27.82	J Hirsty 1989 27.66 J Hirsty 1989 1:00.75 J Hirsty 1989 2:12.69 D Ogier 1990 4:51.04 L Val 1987 9:46.95 L Val 1987 18:27.71 L Val 1991 32.50	27.66 1:00.75 2:12.69 4:51.04 9:46.95 18:27.71 32.50	J Hirsty 1990 27.38 27. S Halfacre 1988 1:00.25 1:00. S Halfacre 1988 2:09.33 2:09. S Halfacre 1988 4:33.08 4:33. S Halfacre 1988 9:24.54 9:24. S Halfacre 1987 18:12.11 18:12. L Val 1989 32.39 32.	.38 .25 .33 .08 .54 .11 .39
50 free 100 free 200 free 400/500 free 800/1000 free 1500/1650 free 50 back 100 back	S Neilson-Bell 1991 24.29 S Halfacre 1988 52.24 S Halfacre 1988 1:52.79 S Halfacre 1988 . 1:52.79 S Halfacre 1988 . 10:39.87 S Halfacre 1988 . 17:15.23 L Val 1991 27.82 L Val 1991 1:01.68	J Hirsty 1989 27.66 J Hirsty 1989 1:00.75 J Hirsty 1989 2:12.69 D Ogier 1990 4:51.04 L Val 1987 9:46.95 L Val 1987 18:27.71 L Val 1991 32.50 L Val 1991 1:12.14	27.66 1:00.75 2:12.69 4:51.04 9:46.95 18:27.71 32.50 1:10.47	J Hirsty 1990 27.38 27. S Halfacre 1988 1:00.25 1:00. S Halfacre 1988 2:09.33 2:09. S Halfacre 1988 4:33.08 4:33. S Halfacre 1988 9:24.54 9:24. S Halfacre 1987 18:12.11 18:12. L Val 1989 32.39 32. L Val 1990 1:10.94 1:10. K Farnsworth 1992 2:35.44 2:35.	.38 .25 .33 .08 .54 .11 .39
50 free 100 free 200 free 400/500 free 800/1000 free 1500/1650 free 50 back 100 back 200 back	S Neilson-Bell . 1991 24.29 S Halfacre 1988 52.24 S Halfacre 1988 1:52.79 S Halfacre 1988 . 5:01.04 S Halfacre 1988 . 10:39.87 S Halfacre 1988 . 17:15.23 L Val 1991 27.82 L Val 1991 1:01.68 K Farnsworth 1992 . 2:15.44	J Hirsty 1989 27.66 J Hirsty 1989 1:00.75 J Hirsty 1989 2:12.69 D Ogier 1990 4:51.04 L Val 1987 9:46.95 L Val 1987 18:27.71 L Val 1991 32.50 L Val 1991 1:12.14 K Farnsworth 1991 2:35.03	27.66 1:00.75 2:12.69 4:51.04 9:46.95 18:27.71 32.50 1:10.47 2:34.09	J Hirsty 1990 27.38 27. S Halfacre 1988 1:00.25 1:00. S Halfacre 1988 2:09.33 2:09. S Halfacre 1988 4:33.08 4:33. S Halfacre 1988 9:24.54 9:24. S Halfacre 1987 18:12.11 18:12. L Val 1989 32.39 32. L Val 1990 1:10.94 1:10. K Farnsworth 1992 2:35.44 2:35.	.38 .25 .33 .08 .54 .11 .39 .94
50 free 100 free 200 free 400/500 free 800/1000 free 1500/1650 free 50 back 100 back 200 back 50 brst	S Neilson-Bell 1991 24.29 S Halfacre 1988 52.24 S Halfacre 1988 52.79 S Halfacre 1988 10.39.87 S Halfacre 1988 10:39.87 S Halfacre 1988 17:15.23 L Val 1991 27.82 L Val 1991 10.68 K Farnsworth 1992 2:15.44 L Wetzel 1989 30.85	J Hirsty 1989 27.66 J Hirsty 1989 1:00.75 J Hirsty 1989 1:00.75 J Hirsty 1989 2:12.69 D Ogier 1990 4:51.04 L Val 1987 9:46.95 L Val 1987 18:27.71 L Val 1991 32.50 L Val 1991 1:12.14 K Farnsworth 1991 2:35.03 L Wetzel 1989 34.63	27.66 1:00.75 2:12.69 4:51.04 9:46.95 18:27.71 32.50 1:10.47 2:34.09 34.63	J Hirsty 1990 27.38 27. S Halfacre 1988 1:00.25 1:00. S Halfacre 1988 2:09.33 2:09. S Halfacre 1988 4:33.08 4:33. S Halfacre 1988 9:24.54 9:24. S Halfacre 1987 18:12.11 18:12. L Val 1989 32.39 32. L Val 1990 1:10.94 1:10. K Farnsworth 1992 2:35.44 2:35. L Wetzel 1989 34.41 34.	.38 .25 .33 .08 .54 .11 .39 .94 .44
50 free 100 free 200 free 400/500 free 800/1000 free 1500/1650 free 50 back 100 back 200 back 50 brst 100 brst	S Neilson-Bell . 1991 24.29 S Halfacre 1988 52.24 S Halfacre 1988 52.79 S Halfacre 1988 5:01.04 S Halfacre 1988 . 10:39.87 S Halfacre 1988 . 17:15.23 L Val 1991 27.82 L Val 1991 1:01.68 K Farnsworth 1992 . 2:15.44 L Wetzel 1989 30.85 L Wetzel 1989 . 1:07.58	J Hirsty 1989 27.66 J Hirsty 1989 1:00.75 J Hirsty 1989 2:12.69 D Ogier 1990 4:51.04 L Val 1987 9:46.95 L Val 1987 18:27.71 L Val 1991 32.50 L Val 1991 1:12.14 K Farnsworth 1991 2:35.03 L Wetzel 1989 34.63 L Wetzel 1989 34.63	27.66 1:00.75 2:12.69 4:51.04 9:46.95 18:27.71 32.50 1:10.47 2:34.09 34.63 1:16.70	J Hirsty 1990 27.38 27. S Halfacre 1988 1:00.25 1:00. S Halfacre 1988 2:09.33 2:09. S Halfacre 1988 4:33.08 4:33. S Halfacre 1988 9:24.54 9:24. S Halfacre 1987 18:12.11 18:12. L Val 1989 32.39 32. L Val 1990 1:10.94 1:10. K Farnsworth 1992 2:35.44 2:35. L Wetzel 1999 34.41 34. L Wetzel 1990 1:17.44 1:17. K Melick 1992 2:53.64 2:53.	.38 .25 .33 .08 .54 .11 .39 .94 .44
50 free 100 free 200 free 400/500 free 800/1000 free 1500/1650 free 50 back 100 back 200 back 50 brst 100 brst 200 brst	S Neilson-Bell . 1991 24.29 S Halfacre 1988 52.24 S Halfacre 1988 152.79 S Halfacre 1988 . 5:01.04 S Halfacre 1988 . 17:15.23 L Val 1991 27.82 L Val 1991	J Hirsty 1989 27.66 J Hirsty 1989 1:00.75 J Hirsty 1989 2:12.69 D Ogier 1990 4:51.04 L Val 1987 9:46.95 L Val 1987 18:27.71 L Val 1991 32.50 L Val 1991 1:12.14 K Farnsworth 1991 2:35.03 L Wetzel 1989 34.63 L Wetzel 1989 1:16.70 L Wetzel 1989 1:16.70	27.66 1:00.75 2:12.69 4:51.04 9:46.95 18:27.71 32.50 1:10.47 2:34.09 34.63 1:16.70 2:50.93	J Hirsty 1990 27.38 27. S Halfacre 1988 1:00.25 1:00. S Halfacre 1988 2:09.33 2:09. S Halfacre 1988 4:33.08 4:33. S Halfacre 1988 9:24.54 9:24. S Halfacre 1987 18:12.11 18:12. L Val 1989 32.39 32. L Val 1990 1:10.94 1:10. K Farnsworth 1992 2:35.44 2:35. L Wetzel 1999 34.41 34. L Wetzel 1990 1:17.44 1:17. K Melick 1992 2:53.64 2:53.	.38 .25 .33 .08 .54 .11 .39 .94 .44 .41 .44
50 free 100 free 200 free 400/500 free 800/1000 free 1500/1650 free 50 back 100 back 200 back 50 brst 100 brst 200 brst 50 fly	S Neilson-Bell 1991 24.29 S Halfacre 1988 52.24 S Halfacre 1988 152.79 S Halfacre 1988 10:39.87 S Halfacre 1988 10:39.87 S Halfacre 1988 17:15.23 L Val 1991 27.82 L Val 1991 1:01.68 K Farnsworth 1992 2:15.44 L Wetzel 1989 30.85 L Wetzel 1989 1:07.58 K Melick 1992 2:30.53 L Val 1987 26.68	J Hirsty 1989 27.66 J Hirsty 1989 1:00.75 J Hirsty 1989 2:12.69 D Ogier 1990 4:51.04 L Val 1987 9:46.95 L Val 1987 18:27.71 L Val 1991 32.50 L Val 1991 1:12.14 K Farnsworth 1991 2:35.03 L Wetzel 1989 34.63 L Wetzel 1989 1:16.70 L Wetzel 1989 2:50.93 L Val 1991 30.05	27.66 1:00.75 2:12.69 4:51.04 9:46.95 18:27.71 32.50 1:10.47 2:34.09 34.63 1:16.70 2:50.93	J Hirsty 1990 27.38 27. S Halfacre 1988 1:00.25 1:00. S Halfacre 1988 2:09.33 2:09. S Halfacre 1988 4:33.08 4:33. S Halfacre 1988 9:24.54 9:24. S Halfacre 1987 18:12.11 18:12. L Val 1989 32.39 32. L Val 1990 1:10.94 1:10. K Farnsworth 1992 2:35.44 2:35. L Wetzel 1989 34.41 34. L Wetzel 1990 1:17.44 1:17. K Melick 1992 2:53.64 2:53. S Halfacre 1988 29.27 29.	.38 .25 .33 .08 .54 .11 .39 .94 .44 .41 .44 .64
50 free 100 free 200 free 400/500 free 800/1000 free 1500/1650 free 50 back 100 back 200 back 50 brst 100 brst 200 brst 50 fly 100 fly	S Neilson-Bell 1991 24.29 S Halfacre 1988 52.24 S Halfacre 1988 52.27 S Halfacre 1988 501.04 S Halfacre 1988 10:33.87 S Halfacre 1988 17:15.23 L Val 1991 27.82 L Val 1991 1:01.68 K Farnsworth 1992 2:15.44 L Wetzel 1989 30.85 L Wetzel 1989 1:07.58 K Melick 1992 2:30.53 L Val 1987 26.68 S Halfacre 1988 56.90	J Hirsty 1989	27.66 1:00.75 2:12.69 4:51.04 9:46.95 18:27.71 32.50 1:10.47 2:34.09 34.63 1:16.70 2:50.93 30.05 1:07.42	J Hirsty 1990 27.38 27. S Halfacre 1988 1:00.25 1:00. S Halfacre 1988 2:09.33 2:09. S Halfacre 1988 4:33.08 4:33. S Halfacre 1988 9:24.54 9:24. S Halfacre 1987 18:12.11 18:12. L Val 1989 32.39 32. L Val 1990 1:10.94 1:10. K Farnsworth 1992 2:35.44 2:35. L Wetzel 1989 34.41 34. L Wetzel 1990 1:17.44 1:17. K Melick 1992 2:53.64 2:53. S Halfacre 1988 29.27 29. S Halfacre 1988 29.27 29. S Halfacre 1988 1:05.39 1:05.	.38 .25 .33 .08 .54 .11 .39 .94 .44 .41 .44 .64
50 free 100 free 200 free 400/500 free 800/1000 free 1500/1650 free 50 back 100 back 200 back 50 brst 100 brst 200 brst 50 fly 100 fly 200 fly	S Neilson-Bell 1991 24.29 S Halfacre 1988 52.24 S Halfacre 1988 52.79 S Halfacre 1988 5:01.04 S Halfacre 1988 10:39.87 S Halfacre 1988 17:15.23 L Val 1991 27.82 L Val 1991 1:01.68 K Farnsworth 1992 2:15.44 L Wetzel 1989 30.85 L Wetzel 1989 1:07.58 K Melick 1992 2:30.53 L Val 1987 26.68 S Halfacre 1988 56.90 L Val 1987 2:10.80	J Hirsty 1989. 27.66 J Hirsty 1989 1:00.75 J Hirsty 1989 2:12.69 D Ogier 1990. 4:51.04 L Val 1987 9:46.95 L Val 1987 18:27.71 L Val 1991 32.50 L Val 1991 1:12.14 K Farnsworth 1991 2:35.03 L Wetzel 1989 34.63 L Wetzel 1989 34.63 L Wetzel 1989 32.50 L Val 1991 30.05 L Val 1991 1:07.42 L Val 1991 2:28.96	27.66 1:00.75 2:12.69 4:51.04 9:46.95 18:27.71 32.50 1:10.47 2:34.09 34.63 1:16.70 2:50.93 30.05 1:07.42 2:28.96	J Hirsty 1990 27.38 27. S Halfacre 1988 1:00.25 1:00. S Halfacre 1988 2:09.33 2:09. S Halfacre 1988 4:33.08 4:33. S Halfacre 1988 9:24.54 9:24. S Halfacre 1987 18:12.11 18:12. L Val 1989 32.39 32. L Val 1990 1:10.94 1:10. K Farnsworth 1992 2:35.44 2:35. L Wetzel 1989 34.41 34. L Wetzel 1990 1:17.44 1:17. K Melick 1992 2:53.64 2:53. S Halfacre 1988 29.27 29. S Halfacre 1988 29.27 29. S Halfacre 1988 1:05.39 1:05.	.38 .25 .33 .08 .54 .11 .39 .94 .44 .41 .44 .64 .27 .39 .38
50 free 100 free 200 free 400/500 free 800/1000 free 1500/1650 free 50 back 100 back 200 back 50 brst 100 brst 200 brst 50 fly 100 fly 200 fly 100 fly	S Neilson-Bell 1991 24.29 S Halfacre 1988 52.24 S Halfacre 1988 52.79 S Halfacre 1988 10:39.87 S Halfacre 1988 10:39.87 S Halfacre 1988 17:15.23 L Val 1991 27.82 L Val 1991 1:01.68 K Farnsworth 1992 2:15.44 L Wetzel 1989 30.85 L Wetzel 1989 1:07.58 K Melick 1992 2:30.53 L Val 1987 26.68 S Halfacre 1988 56.90 L Val 1987 2:10.80 S Halfacre 1988 1:00.22	J Hirsty 1989 27.66 J Hirsty 1989 1:00.75 J Hirsty 1989 2:12.69 D Ogier 1990 4:51.04 L Val 1987 9:46.95 L Val 1987 18:27.71 L Val 1991 32.50 L Val 1991 1:12.14 K Farnsworth 1991 2:35.03 L Wetzel 1989 34.63 L Wetzel 1989 1:16.70 L Wetzel 1989 1:16.70 L Wetzel 1989 1:16.70 L Wetzel 1991 30.05 L Val 1991 30.05 L Val 1991 1:07.42 L Val 1991 2:28.96 J Hirsty 1989 1:15.55 C Kohn 1989 2:35.52	27.66 1:00.75 2:12.69 4:51.04 9:46.95 18:27.71 32.50 1:10.47 2:34.09 34.63 1:16.70 2:50.93 30.05 1:07.42 2:28.96 1:11.55	J Hirsty 1990 27.38 27. S Halfacre 1988 1:00.25 1:00. S Halfacre 1988 2:09.33 2:09. S Halfacre 1988 4:33.08 4:33. S Halfacre 1988 9:24.54 9:24. S Halfacre 1987 18:12.11 18:12. L Val 1989 32.39 32. L Val 1990 1:10.94 1:10. K Farnsworth 1992 2:35.44 2:35. L Wetzel 1989 34.41 34. L Wetzel 1990 1:17.44 1:17. K Melick 1992 2:53.64 2:53. S Halfacre 1988 29.27 29. S Halfacre 1988 1:05.39 1:05. L Val 1989 2:26.38 2:26.	.38 .25 .33 .08 .54 .11 .39 .94 .44 .41 .44 .64 .27 .39 .38

WOMEN 40-44	SC-Yards	Year	USMS	SC-Meters	Year	USMS	World	LC-Meters	Year	USMS	World
50 free	L Va1	. 1992	24.95	A Mueller	. 1985	29.38	29.09	L Val	1992	28.05	28.05
100 free	L Val	. 1992	54.48	C Iannacone	. 1988	.1:05.27	1:04.92	M Martin	1988	1:03.40	1:03.40
200 free	B Dunbar	. 1990	2:04.00	B Dunbar	. 1991	.2:21.22	2:21.91	D Munger	1991	2:21.09	2:21.09
400/500 free	B Dunbar	. 1989 .	5:30.58	B Dunbar	. 1990	.4:53.28	4:53.28	B Dunbar	1990	4:54.49	4:54.49
800/1000 free	B Dunbar	. 1990	. 11:20.18	B Dunbar	. 1991	10:04.16	10:04.16	B Dunbar	1991 .	10:07.92	10:07.92
1500/1650 free	B Dunbar	. 1989 .	. 18:58.23	B Dunbar	. 1990	19:00.81	19:00.81	B Dunbar	1989 .	19:13.16	19:13.16
50 back	L Va1	. 1992 .	27.91	D Strickland	. 1988	35.26	33.85	L Val	1992	32.42	32.42
100 back	L Val	. 1992	1:02.22	J Pesavento	. 1991	.1:14.46	1:13.17	L Val	1992	1:11.03	1:11.03
200 back	J Pesavento	. 1992	2:23.47	J Pesavento	. 1991	.2:43.32	2:39.04	J Stefanick	1992	2:45.63	2:45.63
50 brst	A Wright-Belknap	. 1992	33.25	G Pierson	. 1987	38.36	38.00	A Wright-Belkna	ар 1992	37.02	37.02
100 brst	D Munger	. 1992	1:11.73	G Pierson	. 1988	.1:23.81	1:23.81	D Walker	1991	1:21.73	1:21.73
200 brst	G Pierson	. 1986	2:38.86	G Pierson	. 1987	.3:01.86	3:01.86	D Walker	1991	3:01.46	3:01.46
50 fly	L Val	. 1992 .	27.13	B Dunbar	. 1989	32.11	31.81	L Val	1992	30.13	30.13
100 fly	L Val	. 1992 .	59.22	B Dunbar	. 1989	.1:10.56	1:10.56	L Val	1992	1:06.27	1:06.27
200 fly	L Val	. 1992	2:11.08	B Dunbar	. 1989	.2:32.19	2:32.19	B Dunbar	1989	2:33.51	2:33.51
100 IM	M Martin	. 1989 .	1:04.30	B Dunbar	. 1989	.1:16.24	1:14.63				
200 IM	C Ferris Boak	. 1985	2:24.13	B Dunbar	. 1991	. 2:42.81	2:42.81	8 Dunbar	1990	2:43.49	2:43.49
400 IM	B Dunbar	. 1989	5:04.08	B Dunbar	. 1991	.5:37.05	5:42.95	B Dunbar	1991	5:45.58	5:45.58
WOMEN 45-49	SC-Yards	Year	USMS	SC-Meters	Year	USMS	World	LC-Meters	Year	USMS	World
<u>WOMEN 45-49</u> 50 free	SC-Yards A Mueller		-	SC-Meters N Ridout			World 30.05	LC-Meters A Mueller			World 29.08
		. 1988 .	25.98		. 1989	30.05			1987	29.08	
50 free	A Mueller	. 1988	25.98	N Ridout	. 1989 . 1989	30.05	30.05	A Mueller	1987	29.08 1:05.44	29.08
50 free 100 free	A Mueller A Mueller	. 1988 . 1987 . 1988	25.98 57.91 2:05.71	N Ridout N Ridout	. 1989 . 1989 . 1987	30.05 .1:07.90 .2:28.69	30.05 1:07.90	A Mueller A Mueller	1987 1987 1987	29.08 1:05.44 2:24.24	29.08 1:05.44
50 free 100 free 200 free	A Mueller A Mueller A Mueller	. 1988 . 1987 . 1988 . 1988	25.98 57.91 2:05.71 5:40.37	N Ridout N Ridout A Mueller	. 1989 . 1989 . 1987 . 1991	30.05 .1:07.90 .2:28.69 .5:08.62	30.05 1:07.90 2:28.69 5:23.41	A Mueller A Mueller A Mueller	1987 1987 1987 1987 1987	29.08 1:05.44 2:24.24 5:08.67	29.08 1:05.44 2:24.24 5:08.67
50 free 100 free 200 free 400/500 free	A Mueller A Mueller A Mueller A Mueller	. 1988 . 1987 . 1988 . 1988 . 1991	25.98 57.91 2:05.71 5:40.37 . 11:54.44	N Ridout N Ridout A Mueller A Mueller	. 1989 . 1989 . 1987 . 1991	30.05 .1:07.90 .2:28.69 .5:08.62 11:04.43	30.05 1:07.90 2:28.69 5:23.41 11:04.43	A Mueller A Mueller A Mueller A Mueller		29.08 1:05.44 2:24.24 5:08.67 10:48.41	29.08 1:05.44 2:24.24 5:08.67 10:48.41
50 free 100 free 200 free 400/500 free 800/1000 free	A Mueller A Mueller A Mueller A Mueller A Mueller	. 1988 . 1987 . 1988 . 1988 . 1991 . 1986	25.98 57.91 2:05.71 5:40.37 . 11:54.44 . 20:12.73	N Ridout	. 1989 . 1989 . 1987 . 1991 . 1991	30.05 .1:07.90 .2:28.69 .5:08.62 11:04.43 22:06.73	30.05 1:07.90 2:28.69 5:23.41 11:04.43	A Mueller A Mueller A Mueller A Mueller A Mueller		29.08 1:05.44 2:24.24 5:08.67 10:48.41 21:08.30	29.08 1:05.44 2:24.24 5:08.67 10:48.41
50 free 100 free 200 free 400/500 free 800/1000 free 1500/1650 free	A Mueller A Mueller A Mueller A Mueller A Mueller A Mueller	. 1988 . 1987 . 1988 . 1988 . 1991 . 1986	25.98 57.91 2:05.71 5:40.37 .11:54.44 .20:12.73	N Ridout N Ridout A Mueller A Mueller J Katz A Svanson	. 1989 . 1989 . 1987 . 1991 . 1991	30.05 .1:07.90 .2:28.69 .5:08.62 11:04.43 22:06.73	30.05 1:07.90 2:28.69 5:23.41 11:04.43 22:18.64	A Mueller A Mueller A Mueller A Mueller A Mueller A Mueller		29.08 1:05.44 2:24.24 5:08.67 10:48.41 21:08.30 37.43	29.08 1:05.44 2:24.24 5:08.67 10:48.41 21:08.30
50 free 100 free 200 free 400/500 free 800/1000 free 1500/1650 free 50 back	A Mueller A Mueller A Mueller A Mueller A Mueller A Mueller B Bennett	. 1988 . 1987 . 1988 . 1988 . 1991 . 1986 . 1988	25.98 57.91 2:05.71 5:40.37 .11:54.44 .20:12.73 32.57	N Ridout N Ridout A Mueller A Mueller J Katz A Svanson B Bennett	. 1989 . 1989 . 1987 . 1991 . 1991 . 1989	30.05 .1:07.90 .2:28.69 .5:08.62 11:04.43 22:06.73 37.29	30.05 1:07.90 2:28.69 5:23.41 11:04.43 22:18.64 35.43	A Mueller M Frank		29.08 1:05.44 2:24.24 5:08.67 10:48.41 21:08.30 37.43 1:21.04	29.08 1:05.44 2:24.24 5:08.67 10:48.41 21:08.30 34.51
50 free 100 free 200 free 400/500 free 800/1000 free 1500/1650 free 50 back 100 back	A Mueller A Mueller A Mueller A Mueller A Mueller A Mueller B Bennett B Bennett	. 1988 . 1987 . 1988 . 1988 . 1991 . 1986 . 1988 . 1988	25.98 57.91 2:05.71 5:40.37 11:54.44 20:12.73 32.57 1:11.07	N Ridout N Ridout A Mueller A Mueller J Katz A Svanson B Bennett B Bennett	. 1989 . 1987 . 1987 . 1991 . 1991 . 1991 . 1989 . 1989	30.05 .1:07.90 .2:28.69 .5:08.62 11:04.43 22:06.73 37.29 .1:21.06	30.05 1:07.90 2:28.69 5:23.41 11:04.43 22:18.64 35.43 1:17.13	A Mueller A Mueller A Mueller A Mueller A Mueller A Mueller M Frank B Jordan		29.08 1:05.44 2:24.24 5:08.67 10:48.41 21:08.30 37.43 1:21.04 2:56.28	29.08 1:05.44 2:24.24 5:08.67 10:48.41 21:08.30 34.51 1:17.06
50 free 100 free 200 free 400/500 free 800/1000 free 1500/1650 free 50 back 100 back 200 back	A Mueller A Mueller A Mueller A Mueller A Mueller B Bennett C Chidester	. 1988 . 1987 . 1988 . 1988 . 1991 . 1986 . 1988 . 1988 . 1991 . 1989	25.98 57.91 2:05.71 5:40.37 11:54.44 20:12.73 32.57 1:11.07 2:30.46	N Ridout N Ridout A Mueller A Mueller J Katz A Svanson B Bennett B Bennett B Bennett	. 1989 . 1987 . 1987 . 1991 . 1991 . 1989 . 1989 . 1989	30.05 .1:07.90 .2:28.69 .5:08.62 11:04.43 22:06.73 37.29 .1:21.06 .2:56.06	30.05 1:07.90 2:28.69 5:23.41 11:04.43 22:18.64 35.43 1:17.13 2:56.06	A Mueller A Mueller A Mueller A Mueller A Mueller Mueller B Jordan A Mueller		29.08 1:05.44 2:24.24 5:08.67 10:48.41 21:08.30 37.43 1:21.04 2:56.28 39.20	29.08 1:05.44 2:24.24 5:08.67 10:48.41 21:08.30 34.51 1:17.06 2:50.27
50 free 100 free 200 free 400/500 free 800/1000 free 1500/1650 free 50 back 100 back 200 back 50 brst	A Mueller	. 1988 . 1987 . 1988 . 1988 . 1991 . 1986 . 1988 . 1988 . 1991 . 1989 . 1991	25.98 57.91 2:05.71 5:40.37 .11:54.44 .20:12.73 32.57 1:11.07 2:30.46 34.46	N Ridout N Ridout A Mueller A Mueller J Katz A Svanson B Bennett B Bennett E Bromwich	. 1989 1989 1987 1991 1991 1991 1989 1989 1989 1990	30.05 .1:07.90 .2:28.69 .5:08.62 11:04.43 22:06.73 37.29 .1:21.06 .2:56.06 38.67 .1:24.87	30.05 1:07.90 2:28.69 5:23.41 11:04.43 22:18.64 35.43 1:17.13 2:56.06 38.67	A Mueller A Mueller A Mueller A Mueller A Mueller A Mueller B Jordan A Mueller C Ferris Boak .	1987	29.08 1:05.44 2:24.24 5:08.67 10:48.41 21:08.30 37.43 1:21.04 2:56.28 39.20 1:26.28	29.08 1:05.44 2:24.24 5:08.67 10:48.41 21:08.30 34.51 1:17.06 2:50.27 37.77
50 free 100 free 200 free 400/500 free 800/1000 free 1500/1650 free 50 back 100 back 200 back 50 brst 100 brst	A Mueller	. 1988 . 1987 . 1988 . 1988 . 1991 . 1986 . 1988 . 1988 . 1991 . 1989 . 1991	25.98 57.91 2:05.71 5:40.37 11:54.44 20:112.73 32.57 1:11.07 2:30.46 34.46 1:14.11	N Ridout N Ridout A Mueller J Katz A Svanson B Bennett B Bennett B Bennett B Bennett C B Bennett C B Pierson	. 1989 1987 1987 1991 1991 1989 1989 1989 1990 1991	30.05 .1:07.90 .2:28.69 .5:08.62 11:04.43 22:06.73 37.29 .1:21.06 .2:56.06 38.67 .1:24.87	30.05 1:07.90 2:28.69 5:23.41 11:04.43 22:18.64 35.43 1:17.13 2:56.06 38.67 1:24.87	A Mueller A Mueller A Mueller A Mueller A Mueller A Mueller B Jordan A Mueller C Ferris Boak C Ferris Boak		29.08 1:05.44 2:24.24 5:08.67 10:48.41 21:08.30 37.43 1:21.04 2:56.28 39.20 1:26.28 3:09.19	29.08 1:05.44 2:24.24 5:08.67 10:48.41 21:08.30 34.51 1:17.06 2:50.27 37.77 1:26.28
50 free 100 free 200 free 400/500 free 800/1000 free 1500/1650 free 50 back 100 back 200 back 50 brst 100 brst 200 brst	A Mueller	. 1988 . 1987 . 1988 . 1988 . 1991 . 1986 . 1988 . 1988 . 1991 . 1989 . 1991 . 1991 . 1988	25.98 57.91 2:05.71 5:40.37 11:54.44 20:12.73 32.57 1:11.07 2:30.46 34.46 1:14.11 2:45.24	N Ridout N Ridout A Mueller A Mueller J Katz A Svanson B Bennett B Bennett B Bennett C B Bennett C B Fierson G Pierson	. 1989 1989 1987 1991 1991 1999 1989 1989 1991 1991 1991	30.05 .1:07.90 .2:28.69 .5:08.62 11:04.43 22:06.73 37.29 .1:21.06 38.67 38.67 .1:24.87 .3:04.75	30.05 1:07.90 2:28.69 5:23.41 11:04.43 22:18.64 35.43 1:17.13 2:56.06 38.67 1:24.87 3:04.75	A Mueller A Mueller A Mueller A Mueller A Mueller B Jordan A Mueller C Ferris Boak C Ferris Boak		29.08 1:05.44 2:24.24 5:08.67 10:48.41 21:08.30 37.43 1:21.04 2:56.28 39.20 1:26.28 3:09.19	29.08 1:05.44 2:24.24 5:08.67 10:48.41 21:08.30 34.51 1:17.06 2:50.27 37.77 1:26.28 3:09.19
50 free 100 free 200 free 400/500 free 800/1000 free 1500/1650 free 50 back 100 back 200 back 50 brst 100 brst 200 brst 50 fly	A Mueller	. 1988 . 1987 . 1988 . 1988 . 1991 . 1986 . 1988 . 1988 . 1991 . 1989 . 1991 . 1991 . 1988 . 1988	25.98 57.91 2105.71 5140.37 .11:54.44 .20:12.73 32.57 111.07 2130.46 34.46 114.11 .2145.24	N Ridout N Ridout A Mueller A Mueller J Katz A Svanson B Bennett B Bennett B Bennett G Bernewich G Pierson G Pierson B Hoellen	. 1989 1989 1987 1991 1991 1991 1989 1989 1989 1999 1991 1991 1991 1989 1989	30.05 .1:07.90 .2:28.69 .5:08.62 11:04.43 22:06.73 37.29 .1:21.06 .2:56.06 38.67 .1:24.87 .1:24.87 3:04.75	30.05 1:07.90 2:28.69 5:23.41 11:04.43 22:18.64 35.43 1:17.13 2:56.06 38.67 1:24.87 3:04.75	A Mueller A Mueller A Mueller A Mueller A Mueller M Frank B Jordan A Mueller C Ferris Boak . C Ferris Boak . A Mueller		29.08 1:05.44 2:24.24 5:08.67 10:48.41 21:08.30 37.43 1:21.04 2:56.28 39.20 1:26.28 3:09.19 30.74 1:12.67	29.08 1:05.44 2:24.24 5:08.67 10:48.41 21:08.30 34.51 1:17.06 2:50.27 37.77 1:26.28 3:09.19 30.74
50 free 100 free 200 free 400/500 free 800/1000 free 1500/1650 free 50 back 100 back 200 back 50 brst 100 brst 200 brst	A Mueller	. 1988 . 1987 . 1988 . 1988 . 1991 . 1986 . 1988 . 1988 . 1991 . 1989 . 1991 . 1988 . 1988 . 1988	25.98 57.91 2:05.71 5:40.37 11:54.44 20:12.73 32.57 1:11.07 2:30.46 34.46 1:14.11 2:45.24 28.26 1:03.08 28.26	N Ridout N Ridout A Mueller A Mueller J Katz A Svanson B Bennett B Bennett E Bromwich G Pierson G Pierson B Hoellen N Ridout	. 1989 1989 1987 1991 1991 1991 1999 1989 1989 1990 1991 1991 1991 1991 1998 1998 1998 1989 1989	30.05 .1:07.90 .2:28.69 .5:08.62 11:04.43 22:06.73 37.29 .1:21.06 .2:56.06 38.67 .1:24.87 .3:04.75 .3:304.75	30.05 1:07.90 2:28.69 5:23.41 11:04.43 22:18.64 35.43 1:17.13 2:56.06 38.67 1:24.87 3:04.75 32.97 1:15.58	A Mueller A Mueller A Mueller A Mueller A Mueller M Frank B Jordan A Mueller C Ferris Boak . C Ferris Boak . C Ferris Boak . A Mueller A Mueller A Mueller		29.08 1:05.44 2:24.24 5:08.67 10:48.41 21:08.30 37.43 1:21.04 2:56.28 39.20 1:26.28 3:09.19 30.74 1:12.67	29.08 1:05.44 2:24.24 5:08.67 10:48.41 21:08.30 34.51 1:17.06 2:50.27 37.77 1:26.28 3:09.19 30.74 1:12.67
50 free 100 free 200 free 400/500 free 800/1000 free 1500/1650 free 50 back 100 back 200 back 50 brst 100 brst 200 brst 50 fly 100 fly 200 fly	A Mueller	. 1988 . 1987 . 1988 . 1988 . 1991 . 1986 . 1988 . 1988 . 1991 . 1989 . 1991 . 1988 . 1988 . 1988 . 1988	25.98 25.98 57.91 2:05.71 5:40.37 11:54.44 20:12.73 32.57 1:11.07 2:30.46 34.46 1:14.11 2:45.24 28.26 1:03.08 2:20.14	N Ridout N Ridout A Mueller A Mueller J Katz A Svanson B Bennett B Bennett E Bromwich G Pierson G Pierson B Hoellen N Ridout A Mueller	. 1989 1989 1987 1991 1991 1991 1989 1989 1989 1991 1991 1991 1991 1991 1989 1989 1989 1989 1989 1989 1989 1989	30.05 .1:07.90 .2:28.69 .5:08.62 11:04.43 22:06.73 37.29 .1:21.06 .2:56.06 .38.67 .1:24.87 .3:04.75 33.93 .1:18.79 .2:37.88	30.05 1:07.90 2:28.69 5:23.41 11:04.43 22:18.64 35.43 1:17.13 2:56.06 38.67 1:24.87 3:04.75 32.97 1:15.58 2:37.88	A Mueller A Mueller A Mueller A Mueller A Mueller M Frank B Jordan A Mueller C Ferris Boak . C Ferris Boak . C Ferris Boak . A Mueller A Mueller A Mueller	1987 1987 1987 1987 1987 1987 1987 1992 1986 1992 1992 1992 1992 1992 1987 1987 1987	29.08 1:05.44 2:24.24 5:08.67 10:48.41 21:08.30 37.43 1:21.04 2:56.28 3:09.19 30.74 1:12.67 2:44.10	29.08 1:05.44 2:24.24 5:08.67 10:48.41 21:08.30 34.51 1:17.06 2:50.27 37.77 1:26.28 3:09.19 30.74 1:12.67
50 free 100 free 200 free 400/500 free 800/1000 free 1500/1650 free 50 back 100 back 200 back 50 brst 100 brst 200 brst 50 fly 100 fly 200 fly 100 IM	A Mueller	. 1988 . 1987 . 1988 . 1988 . 1991 . 1986 . 1988 . 1991 . 1989 . 1991 . 1988 . 1988 . 1988 . 1988 . 1988 . 1988 . 1988		N Ridout N Ridout A Mueller A Mueller J Katz A Svanson B Bennett B Bennett B Bennett G Pierson G Pierson B Hoellen N Ridout A Mueller A Mueller	. 1989 1987 1987 1991 1991 1991 1989 1989 1989 1999 1991 1991 1991 1991 1989 1989 1987	30.05 .1:07.90 .2:28.69 .5:08.62 11:04.43 22:06.73 37.29 .1:21.06 .2:56.06 .38.67 .1:24.87 .3:04.75 .3:04.75 .3:39.31:18.79 .2:37.88	30.05 1:07.90 2:28.69 5:23.41 11:04.43 22:18.64 35.43 1:17.13 2:56.06 38.67 1:24.87 3:04.75 32.97 1:15.58 2:37.88 1:14.41	A Mueller A Mueller A Mueller A Mueller A Mueller B Jordan A Mueller C Ferris Boak C Ferris Boak C Ferris Boak A Mueller A Mueller A Mueller A Mueller A Mueller		29.08 1:05.44 2:24.24 5:08.67 10:48.41 21:08.30 37.43 1:21.04 2:56.28 3:09.19 30.74 1:12.67 2:44.10	29.08 1:05.44 2:24.24 5:08.67 10:48.41 21:08.30 34.51 1:17.06 2:50.27 37.77 1:26.28 3:09.19 30.74 1:12.67 2:44.10

SC-Yards	Year	USMS	SC-Meters	Year	USMS	World	LC-Meters	Year	USMS	World
N Ridout	1992 .	27.29	J Bruner	1989	32.30	31.31	A Mueller	1992	30.04	30.04
N Ridout	. 1992 .	1:01.26	A Mueller	1991	1:06.41	1:06.41	A Mueller	1992	1:07.42	1:07.42
A Mueller	1992 .	. 2:12.11	A Mueller	1991	2:28.85	2:27.95	A Mueller	1991	2:32.25	2:32.25
A Mueller	1992 .	. 5:53.05	A Mueller	1991	5:12.43	5:12.43	A Mueller	1991 .	. 5:16.62	5:16.62
A Mueller	1992 .	12:04.75	L Stoinoff	1987	11:35.78	11:35.78	A Mueller	1991 .	10:58.47	10:58.47
L Stoinoff	1985 .	21:32.25	L Stoinoff	1987	21:44.35	21:44.35	A Mueller	1991.	21:02.46	21:02.46
B Jordan	. 1990 .	32.72	B Jordan	1991	37 . 59	37.59	B Jordan	1991 .	37.62	37.18
B Jordan	1990 .	. 1:11.96	A Mueller	1991	1:20.50	1:20.50	B Jordan	1991 .	. 1:23.29	1:21.01
B Jordan	1991 .	. 2:38.09	A Mueller	1991	.2:48.88	2:48.88	B Jordan	1987 .	. 3:01.07	3:01.07
J Bruner	1985 .	35.55	J Leilich	1990	40.51	38.82	J Bruner	1986 .	40.22	39.52
J Leilich	1989 .	. 1:17.72	J Leilich	1989	.1:28.51	1:25.73	J Leilich	1990 .	. 1:28.83	1:28.83
J Leilich	1990 .	. 2:50.93	J Leilich	1989	.3:11.20	3:08.87	J Leilich	1989 .	. 3:15.76	3:14.70
S Brougher	1992 .	30.55	J Lambke	1989	36.43	35.23	A Mueller	1991 .	32.76	32.76
A Mueller	1992 .	. 1:05.69	A Mueller	1991.,	. 1:12.66	1:12.66	A Mueller	1991 .	. 1:15.47	1:15.47
A Mueller	1992 .	. 2:25.73	S Rademacher	1989	3:11.83	3:11.83	A Mueller	1991 .	. 2:49.53	2:49.53
J Bruner	1986 .	. 1:10.73	A Mueller	1991	1:18.05	1:18.05				
A Mueller	1992 .	. 3:32.89	B Jordan	1991	.3:04.97	2:57.65	A Mueller	1991 .	. 2:54.57	2:54.57
A Mueller	1992 .	. 5:22.42	A Mueller	1991	.5:56.24	5:56.24	A Mueller	1992 .	. 6:12.08	6:12.08
		l								
SC-Yards	Year	USMS	SC-Meters	Year	USMS	World	LC-Meters	Year	USMS	World
J Bruner	1990 .	28.03	J Bruner	1989	31 . 83	31.83				32.59
J Bruner	1990 .	. 1:02.38	J Bruner	1989	. 1:11.63	1:11.63	J Bruner	1989 .	. 1:12.34	1:12.34
L Stoinoff	1988 .	. 2:22.66	L Stoinoff	1989	2:40.27	2:40.27	L Stoinoff	1988 .		2:42.04
L Stoinoff L Stoinoff		1	L Stoinoff L Stoinoff			2:40.27 5:34.32	L Stoinoff L Stoinoff		. 2:42.04	
	1988 .	. 6:09.83		1989	. 5:34.32	5:34.32		1988 .	. 2:42.04 . 5:36.66	2:42.04 5:36.66
L Stoinoff	1988 . 1988 .	. 6:09.83 12:45.02	L Stoinoff L Stoinoff L Stoinoff	1989 1989 1989	.5:34.32 11:29.99 21:35.84	5:34.32 11:29.99	L Stoinoff	1988 .	. 2:42.04 . 5:36.66 11:30.97	2:42.04 5:36.66 11:30.97
L Stoinoff L Stoinoff	1988 . 1988 . 1989 .	. 6:09.83 12:45.02 21:22.63	L Stoinoff L Stoinoff	1989 1989 1989	.5:34.32 11:29.99 21:35.84	5:34.32 11:29.99	L Stoinoff L Stoinoff	1988 . 1988 . 1988 .	. 2:42.04 . 5:36.66 11:30.97 22:18.91	2:42.04 5:36.66 11:30.97
L Stoinoff L Stoinoff L Stoinoff	. 1988 . . 1988 . . 1989 . . 1992 .	. 6:09.83 12:45.02 21:22.63 33.01	L Stoinoff L Stoinoff L Stoinoff	1989 1989 1989	.5:34.32 11:29.99 21:35.84 37.92	5:34.32 11:29.99 21:35.84	L Stoinoff L Stoinoff L Stoinoff	1988 . 1988 . 1988 . 1992 .	. 2:42.04 . 5:36.66 11:30.97 22:18.91 37.30	2:42.04 5:36.66 11:30.97 22:18.91
L Stoinoff L Stoinoff L Stoinoff B Jordan	1988 . 1988 . 1989 . 1992 .	. 6:09.83 12:45.02 21:22.63 33.01	L Stoinoff L Stoinoff L Stoinoff B Jordan	1989 1989 1989 1992	.5:34.32 11:29.99 21:35.84 37.92 .1:21.90	5:34.32 11:29.99 21:35.84 37.92	L Stoinoff L Stoinoff L Stoinoff B Jordan		. 2:42.04 . 5:36.66 11:30.97 22:18.91 37.30 . 1:21.42	2:42.04 5:36.66 11:30.97 22:18.91 37.30
L Stoinoff L Stoinoff B Jordan B Jordan	. 1988 . . 1988 . . 1989 . . 1992 . . 1992 .	. 6:09.83 12:45.02 21:22.63 33.01 .1:11.11	L Stoinoff L Stoinoff B Jordan B Jordan	1989 1989 1989 1992 1992	.5:34.32 11:29.99 21:35.84 37.92 .1:21.90	5:34.32 11:29.99 21:35.84 37.92 1:21.90	L Stoinoff L Stoinoff L Stoinoff B Jordan B Jordan		. 2:42.04 . 5:36.66 11:30.97 22:18.91 37.30 . 1:21.42 . 2:59.18	2:42.04 5:36.66 11:30.97 22:18.91 37.30 1:21.42
L Stoinoff L Stoinoff Stoinoff B Jordan B Jordan B Jordan	. 1988 . . 1988 . . 1989 . . 1992 . . 1992 . . 1991 .	. 6:09.83 12:45.02 21:22.63 33.01 .1:11.11 .2:34.80 35.16	L Stoinoff L Stoinoff B Jordan B Jordan L Stoinoff	1989 1989 1989 1992 1992 1989	.5:34.32 11:29.99 21:35.84 37.92 .1:21.90 .3:11.13	5:34.32 11:29.99 21:35.84 37.92 1:21.90 3:11.13	L Stoinoff L Stoinoff L Stoinoff B Jordan B Jordan B Jordan		. 2:42.04 . 5:36.66 11:30.97 22:18.91 37.30 . 1:21.42 . 2:59.18	2:42.04 5:36.66 11:30.97 22:18.91 37.30 1:21.42 2:59.18
L Stoinoff L Stoinoff L Stoinoff B Jordan B Jordan J Bruner	. 1988 . . 1988 . . 1989 . . 1992 . . 1992 . . 1991 . . 1991 .	. 6:09.83 12:45.02 21:22.63 33.01 .1:11.11 .2:34.80 35.16	L Stoinoff L Stoinoff L Stoinoff B Jordan L Stoinoff J Bruner	1989 1989 1989 1992 1992 1989 1991	. 5:34.32 11:29.99 21:35.84 37.92 .1:21.90 .3:11.13 40.69	5:34.32 11:29.99 21:35.84 37.92 1:21.90 3:11.13 40.69	L Stoinoff L Stoinoff B Stoinoff B Jordan B Jordan B Jordan J Bruner		. 2:42.04 . 5:36.66 11:30.97 22:18.91 37.30 .1:21.42 .2:59.18 39.91 1:29.88	2:42.04 5:36.66 11:30.97 22:18.91 37.30 1:21.42 2:59.18 39.91
L Stoinoff L Stoinoff B Stoinoff B Jordan B Jordan J Bruner J Bruner	. 1988 . . 1988 . . 1989 . . 1992 . . 1992 . . 1991 . . 1991 .	. 6:09.83 12:45.02 21:22.63 33.01 .1:11.11 .2:34.80 35.16 .1:18.52 .3:00.46	L Stoinoff L Stoinoff L Stoinoff B Jordan B Jordan L Stoinoff J Bruner J Bruner	1989 1989 1989 1992 1992 1989 1991	. 5:34.32 11:29.99 21:35.84 37.92 .1:21.90 .3:11.13 40.69 .1:30.31 .3:23.08	5:34.32 11:29.99 21:35.84 37.92 1:21.90 3:11.13 40.69 1:28.13	L Stoinoff L Stoinoff Stoinoff B Jordan B Jordan J Bruner J Bruner		. 2:42.04 . 5:36.66 11:30.97 22:18.91 37.30 . 1:21.42 . 2:59.18 39.91 . 1:29.88 . 3:27.89	2:42.04 5:36.66 11:30.97 22:18.91 37.30 1:21.42 2:59.18 39.91 1:29.88
L Stoinoff L Stoinoff B Jordan B Jordan J Jordan J Bruner J Bruner J Bruner	. 1988 . . 1989 . . 1992 . . 1992 . . 1992 . . 1991 . . 1991 . . 1991 .	. 6:09.83 12:45.02 21:22.63 33.01 .1:11.11 .2:34.80 35.16 .1:18.52 .3:00.46 31.76	L Stoinoff L Stoinoff B Jordan B Jordan L Stoinoff J Stoinoff J Bruner J Bruner J Bruner	1989 1989 1989 1992 1992 1991 1991 1991	. 5:34.32 11:29.99 21:35.84 37.92 .1:21.90 .3:11.13 40.69 .1:30.31 .3:23.08 37.81	5:34.32 11:29.99 21:35.84 37.92 1:21.90 3:11.13 40.69 1:28.13 3:12.85	L Stoinoff L Stoinoff B Jordan B Jordan J Bruner J Bruner J Bruner J Bruner		. 2:42.04 . 5:36.66 11:30.97 22:18.91 37.30 . 1:21.42 . 2:59.18 39.91 . 1:29.88 . 3:27.89 35.29	2:42.04 5:36.66 11:30.97 22:18.91 37.30 1:21.42 2:59.18 39.91 1:29.88 3:18.11
L Stoinoff L Stoinoff L Stoinoff B Jordan B Jordan J Bruner J Bruner G Roper	. 1988 1988 1989 1992 1992 1991 1991 1991 1991 1991 1985 1991	. 6:09.83 . 12:45.02 . 21:22.63 33.01 . 1:11.11 . 2:34.80 35.16 1:18.52 3:00.46 31.76 1:15.18	L Stoinoff L Stoinoff L Stoinoff B Jordan B Jordan L Stoinoff J Bruner J Bruner J Bruner B Jordan	1989 1989 1989 1992 1992 1991 1991 1991 1992	. 5:34.32 11:29.99 21:35.84 37.92 .1:21.90 .3:11.13 40.69 .1:30.31 .3:23.08 37.81	5:34.32 11:29.99 21:35.84 37.92 1:21.90 3:11.13 40.69 1:28.13 3:12.85 37.81	L Stoinoff L Stoinoff L Stoinoff B Jordan B Jordan J Bruner J Bruner J Bruner J Bruner G Roper		. 2:42.04 . 5:36.66 11:30.97 22:18.91 37.30 .1:21.42 .2:59.18 39.91 1:29.88 3:27.89 35.29 1:27.49	2:42.04 5:36.66 11:30.97 22:18.91 37.30 1:21.42 2:59.18 39.91 1:29.88 3:18.11 35.29
L Stoinoff L Stoinoff L Stoinoff B Jordan B Jordan J Bruner J Bruner J Bruner G Roper J Bruner	. 1988 1988 1989 1992 1992 1992 1991 1991 1991 1985 1991 1986 1986	. 6:09.83 . 12:45.02 . 21:22.63 33.01 . 1:11.11 . 2:34.80 35.16 1:18.52 3:00.46 31.76 . 1:15.18 . 2:51.18	L Stoinoff L Stoinoff L Stoinoff B Jordan L Stoinoff J Bruner J Bruner J Bruner B Jordan B Jordan	1989 1989 1989 1992 1992 1991 1991 1991 1992 1992	. 5:34.32 11:29.99 21:35.84 37.92 .1:21.90 .3:11.13 40.69 .1:30.31 .3:23.08 37.81 .1:27.95	5:34.32 11:29.99 21:35.84 37.92 1:21.90 3:11.13 40.69 1:28.13 3:12.85 37.81 1:27.88	L Stoinoff L Stoinoff B Jordan B Jordan J Bruner J Bruner J Bruner G Roper G Roper		. 2:42.04 . 5:36.66 11:30.97 22:18.91 37.30 .1:21.42 .2:59.18 39.91 1:29.88 3:27.89 35.29 1:27.49	2:42.04 5:36.66 11:30.97 22:18.91 37.30 1:21.42 2:59.18 39.91 1:29.88 3:18.11 35.29 1:27.49
L Stoinoff L Stoinoff L Stoinoff B Jordan B Jordan J Bruner J Bruner J Bruner G Roper G Roper	. 1988 1988 1989 1992 1992 1991 1991 1991 1985 1991 1986 1992 1992 .	. 6:09.83 12:45.02 21:22.63 33.01 .1:11.11 .2:34.80 35.16 .1:18.52 .3:00.46 31.76 31.76 31.76 31.76 31.76	L Stoinoff L Stoinoff L Stoinoff B Jordan L Stoinoff J Bruner J Bruner J Bruner B Jordan G Roper	1989 1989 1992 1992 1993 1991 1991 1992 1992 1998	. 5:34.32 11:29.99 21:35.84 37.92 .1:21.90 .3:11.13 40.69 .1:30.31 .3:23.08 37.81 .1:27.95 .3:20.43 .1:24.19	5:34.32 11:29.99 21:35.84 37.92 1:21.90 3:11.13 40.69 1:28.13 3:12.85 37.81 1:27.88 3:11.42	L Stoinoff L Stoinoff B Jordan B Jordan J Bruner J Bruner J Bruner G Roper G Roper		. 2:42.04 . 5:36.66 11:30.97 22:18.91 37.30 . 1:21.42 . 2:59.18 39.91 . 1:29.88 . 3:27.89 35.29 35.29 1:27.49 3:19.84	2:42.04 5:36.66 11:30.97 22:18.91 37.30 1:21.42 2:59.18 39.91 1:29.88 3:18.11 35.29 1:27.49
-	N Ridout N Ridout A Mueller A Mueller L Stoinoff B Jordan B Jordan J Bruner J Leilich J Leilich J Leilich J Brougher A Mueller A Bruner A Mueller	N Ridout 1992 N Ridout 1992 A Mueller 1992 A Mueller 1992 L Stoinoff 1985 B Jordan 1990 B Jordan 1991 J Bruner 1985 J Leilich 1989 J Leilich 1990 S Brougher 1992 A Mueller 1992 SC-Yards Year J Bruner 1990 J Bruner 1990	N Ridout 1992 27.29 N Ridout 1992 1:01.26 A Mueller 1992 5:53.05 A Mueller 1992 12:04.75 L Stoinoff 1985 21:32.25 B Jordan 1990 27.2 B Jordan 1990 1:11.96 B Jordan 1990 1:11.96 B Jordan 1991 2:38.09 J Bruner 1985 35.55 J Leilich 1989 1:7.72 J Leilich 1990 2:50.93 S Brougher 1992 30.55 A Mueller 1992 30.55 A Mueller 1992 30.55 A Mueller 1992 30.56 A Mueller 1992 30.56 A Mueller 1992 30.56 A Mueller 1992 30.56 A Mueller 1992 30.55 A Mueller 1992 30.56 A Mueller 1992 30.56 A Mueller 1992 30.55 Brougher 1992 30.55 C A Mueller 1992 30.56 C A Mueller 1992 30.55 C A Mueller 1992 30.52 C A S A Mueller 1992 30.55 C A S A S A S A S A S A S A S A S A S A	N Ridout 1992 27.29 N Ridout 1992 1:01.26 A Mueller 1992 2:12.11 A Mueller 1992 5:53.05 A Mueller 1992 5:53.05 L Stoinoff 1992 12:04.75 L Stoinoff 1995 21:32.25 B Jordan 1990 32.72 B Jordan 1990 1:11.96 B Jordan 1990 1:11.96 B Jordan 1991 2:38.09 A Mueller 1985 35.55 J Leilich 1989 1:17.72 J Leilich 1989 1:17.72 J Leilich 1989 1:17.72 J Leilich 1990 2:50.93 S Brougher 1992 30.55 A Mueller 1992 30.55 A Mueller 1992 30.55 J Lambke A Mueller 39.05 A Mueller 1992 30.55 J S Rademacher 30 A Mueller 1992 3132.89 A Mueller 1992 3132.89 A Mueller 1992 3132.89 A Mueller 1992 3132.89 A Mueller 1992 5:22.42 A Mueller 39.25 4 Mueller 32.25 SC-Yards Year USMS SC-Meters J Bruner 1990 28.03 J Bruner 1990 28.03	N Ridout 1992 27.29 J Bruner 1989. N Ridout 1992 1:01.26 A Mueller 1991. A Mueller 1992 2:12.11 A Mueller 1991. A Mueller 1992 5:53.05 A Mueller 1991. A Mueller 1992 12:04.75 L Stoinoff 1987. L Stoinoff 1985 21:32.25 L Stoinoff 1987. B Jordan 1990 32.72 B Jordan 1991. B Jordan 1990 1:11.96 A Mueller 1991. J Bruner 1985 35.55 J Leilich 1990. J Bruner 1989 1:17.72 J Leilich 1989. J Leilich 1989 1:17.72 J Leilich 1989. S Brougher 1992 30.55 J Lambke 1989. A Mueller 1992 30.55 A Mueller 1991. A Mueller 1992 31.25.93 B Jordan 1991. A Mueller 1992 3:32.89 B Jordan 1991. A Mueller 1992 5:22.42 A Mueller 1991. SC-Yards Year USMS SC-Meters Year	N Ridout 1992 27.29 J Bruner 1989 32.30 N Ridout 1992 1:01.26 A Mueller 1991 1:06.41 A Mueller 1992 2:12.11 A Mueller 1991 2:28.85 A Mueller 1992 5:53.05 A Mueller 1991 5:12.43 A Mueller 1992 12:04.75 L Stoinoff 1987 11:35.78 L Stoinoff 1985 21:32.25 L Stoinoff 1987 11:35.78 L Stoinoff 1985 21:32.25 L Stoinoff 1987 21:44.35 B Jordan 1990 32.72 B Jordan 1991 37.59 B Jordan 1990 1:11.96 A Mueller 1991 1:20.50 B Jordan 1991 2:38.09 A Mueller 1991 2:48.88 J Bruner 1985 35.55 J Leilich 1990 40.51 J Leilich 1989 1:17.72 J Leilich 1989 1:28.51 J Leilich 1990 2:50.93 J Leilich 1989 3:11.20 S Brougher 1992 30.55 J Lambke 1989 36.43 A Mueller 1992 1:05.69 A Mueller 1991 1:2.66 A Mueller 1992 2:25.73 S Rademacher 1989 3:11.83 J Bruner 1986 1:10.73 A Mueller 1991 1:12.66 A Mueller 1992 3:32.89 B Jordan 1991 3:04.97 A Mueller 1992 5:22.42 A Mueller 1991 5:56.24 SC-Yards Year USMS SC-Meters Year USMS J Bruner 1990 28.03 J Bruner 1989 31.83	N Ridout 1992 27.29 J Bruner 1989 32.30 31.31 N Ridout 1992 1:01.26 A Mueller 1991 1:06.41 1:06.41 A Mueller 1992 2:12.11 A Mueller 1991 2:28.85 2:27.95 A Mueller 1992 5:53.05 A Mueller 1991 5:12.43 5:12.43 A Mueller 1992 12:04.75 L Stoinoff 1987 11:35.78 L Stoinoff 1985 21:32.25 L Stoinoff 1987 21:44.35 21:44.35 B Jordan 1990 32.72 B Jordan 1991 37.59 37.59 B Jordan 1990 1:11.96 A Mueller 1991 1:20.50 1:20.50 B Jordan 1991 2:38.09 A Mueller 1991 2:48.88 2:48.88 J Bruner 1985 35.55 J Leilich 1990 40.51 38.82 J Leilich 1989 1:17.72 J Leilich 1989 1:28.51 1:25.73 J Leilich 1990 2:50.93 J Leilich 1989 3:11.20 3:08.87 S Brougher 1992 30.55 J Lambke 1989 3:11.20 3:08.87 S Brougher 1992 30.55 A Mueller 1991 1:12.66 1:12.66 A Mueller 1992 2:25.73 S Rademacher 1989 3:11.83 3:11.83 J Bruner 1986 1:10.73 A Mueller 1991 1:18.05 1:18.05 A Mueller 1992 3:32.89 B Jordan 1991 3:04.97 2:57.65 A Mueller 1992 5:22.42 A Mueller 1991 5:56.24 5:56.24 SC-Yards Year USMS SC-Meters Year USMS World	N Ridout 1992 27.29 J Bruner 1989 32.30 31.31 A Mueller N Ridout 1992 1:01.26 A Mueller 1991 1:06.41 1:06.41 A Mueller A Mueller 1992 2:12.11 A Mueller 1991 2:28.85 2:27.95 A Mueller A Mueller 1992 5:53.05 A Mueller 1991 5:12.43 5:12.43 A Mueller 1992 12:04.75 L Stoinoff 1987 21:44.35 21:44.35 A Mueller 1992 12:04.75 L Stoinoff 1987 21:44.35 21:44.35 A Mueller 1992 10:04.75 L Stoinoff 1987 21:44.35 21:44.35 A Mueller 1991 37.59 37.59 B Jordan 1990 32.72 B Jordan 1991 37.59 37.59 B Jordan 1990 1:11.96 A Mueller 1991 1:20.50 1:20.50 B Jordan 1991 2:38.09 A Mueller 1991 2:48.88 2:48.88 B Jordan 1991 2:38.09 A Mueller 1991 2:48.88 2:48.88 B Jordan 1991 2:38.09 A Mueller 1991 2:48.88 2:48.88 B Jordan 1991 2:38.09 J Leilich 1990 40.51 38.82 J Bruner 1985 35.55 J Leilich 1990 40.51 38.82 J Bruner 1989 1:17.72 J Leilich 1989 1:28.51 1:25.73 J Leilich 1989 3:11.20 3:08.87 J Leilich 1989 3:11.20 3:08.87 J Leilich 1989 3:11.20 3:08.87 J Leilich 1989 3:11.83 3:11.83 A Mueller 1992 1:05.69 A Mueller 1991 1:12.66 1:12.66 A Mueller 1992 1:05.69 A Mueller 1991 1:18.05 1:18.05 A Mueller 1992 3:32.89 B Jordan 1991 3:04.97 2:57.65 A Mueller 1992 5:22.42 A Mueller 1991 5:56.24 5:56.24 A Mueller 1992 5:22.42 A Mueller 1991 5:56.24 5:56.24 A Mueller 1992 5:22.42 A Mueller 1991 5:56.24 5:56.24 A Mueller 1992 5:22.42 A Mueller 1991 5:56.24 5:56.24 A Mueller 1992 5:22.42 A Mueller 1999 3:18.33 31.83 J Bruner 1989 3:18.33 3	N Ridout 1992 27.29 J Bruner 1989 32.30 31.31 A Mueller 1992 N Ridout 1992 1:01.26 A Mueller 1991 1:06.41 1:06.41 1:06.41 A Mueller 1992 A Mueller 1992 2:28.85 2:27.95 A Mueller 1992 A Mueller 1992 5:53.05 A Mueller 1991 5:12.43 5:12.43 A Mueller 1991 A Mueller 1992 2:20.4.75 L Stoinoff 1987.11:35.78 11:35.78 A Mueller 1991 B Jordan 1990 32.72 B Jordan 1990 32.72 B Jordan 1991 37.59 37.59 B Jordan 1990 1:11.96 A Mueller 1991 1:20.50 1:20.50 B Jordan 1991 2:38.09 A Mueller 1991 2:48.88 2:48.88 B Jordan 1991 B Jordan 1991 2:38.09 A Mueller 1991 2:48.88 2:48.88 B Jordan 1985 J Leilich 1989 1:17.72 J Leilich 1990 4.0.51 38.82 J Bruner 1995 30.55 J Leilich 1989 1:28.51 1:25.73 J Leilich 1990 3 J Leilich 1989 3:11.20 3:08.87 J Leilich 1991	N Ridout 1992 27.29 J Bruner 1989 32.30 31.31 A Mueller 1992 30.04 N Ridout 1992 1:01.26 A Mueller 1991 1:06.41 1:06.41 A Mueller 1992 1:07.42 A Mueller 1992 2:12.11 A Mueller 1991 2:28.85 2:27.95 A Mueller 1992 5:53.05 A Mueller 1991 5:12.43 5:12.43 A Mueller 1991 5:16.62 A Mueller 1992 1:04.75 L Stoinoff 1987 11:35.78 11:35.78 A Mueller 1991 10:58.47 L Stoinoff 1985 21:32.25 L Stoinoff 1987 21:44.35 21:44.35 A Mueller 1991 10:58.47 L Stoinoff 1985 21:32.25 L Stoinoff 1987 21:44.35 21:44.35 A Mueller 1991 37.69 B Jordan 1990 32.72 B Jordan 1991 37.59 37.59 B Jordan 1990 1:11.96 A Mueller 1991 1:20.50 1:20.50 B Jordan 1991 2:38.09 A Mueller 1991 1:20.50 1:20.50 B Jordan 1991 2:38.09 A Mueller 1991 2:48.88 2:48.88 B Jordan 1991 3:01.07 J Bruner 1985 35.55 J Leflich 1990 40.51 38.82 J Bruner 1986 40.22 J Leflich 1989 1:28.51 1:25.73 J Leflich 1990 2:50.93 J Leflich 1989 3:11.20 3:08.87 J Leflich 1990 2:50.93 J Leflich 1989 3:11.20 3:08.87 J Leflich 1990 3:15.76 S Brougher 1992 3:0.55 J Lambke 1989 3:31.83 3:1.83 A Mueller 1991 2:49.53 J Bruner 1986 1:10.73 A Mueller 1991 1:18.05 1:18.05 A Mueller 1992 5:22.42 A Mueller 1991 1:18.05 1:18.05 A Mueller 1992 5:22.42 A Mueller 1991 5:56.24 5:56.24 A Mueller 1992 5:22.42 A Mueller 1991 5:56.24 5:56.24 A Mueller 1992 6:12.08 SC-Yards Year USMS SC-Meters Year USMS World LC-Meters Year USMS J Bruner 1990 32.55

WOMEN 60-64	SC-Yards Year USMS	SC-Meters	Year USMS	World	LC-Meters	Year	USMS	World
50 free	D Donnelly 1982 30.67	A Adams	198935.33	33.54	D Donnelly	. 1985	. 35.08	33.60
100 free	D Donnelly 1982 1:08.11	C Walker	19891:17.99	1:13.68	D Ressiguie	. 1981	1:20.10	1:14.25
200 free	C Walker 1987 2:31.16	C Walker	19892:50.94	2:49.55	C Walker	. 1988	2:50.03	2:50.03
400/500 free	C Walker 1989 6:50.37	C Walker	19876:02.43	6:02.43	C Walker	. 1988	6:02.28	6:02.28
800/1000 free	C Walker 1987 . 13:56.85	C Walker	199012:21.67	12:21.67	C Walker	. 1988 . 1	2:19.35	12:19.35
1500/1650 free	C Walker 1989 . 23:21.14	C Walker	199023:28.15	23:28.15	C Walker	. 1986 . 2	3:55.57	23:55.57
50 back	C Walker 1991 35.27	C Walker	198939.60	39.60	D Steadman	. 1989	. 40.35	40.35
100 back	C Walker 1991 1:17.94	C Wa?ker	19891:29.13	1:29.13	C Walker	. 1986	1:31.06	1:30.22
200 back	C Walker 1990 2:54.83	D Steadman	19883:16.14	3:16.14	D Steadman	. 1989	3:15.92	3:15.92
50 brst	C Taylor 1990 39,74	C Taylor	198945.39	42.02	A Pisciotta	. 1992	. 45.74	42.49
100 brst	A Pisciotta 1991 1:27.13	A Pisciotta	19911:39.26	1:39.26	A Pisciotta	. 1992	1:40.18	1:38.72
200 brst	A Pisciotta 1991 3:11.24	A Pisciotta	19913:36.01	3:36.01	A Pisciotta	. 1992	3:35.36	3:35.36
50 fly	B Brey	A Adams	198939.64	38.40	A Adams	. 1988	. 38.64	38.54
100 fly	J Eppley 1980 1:23.43	P Dotson	19871:36.95	1:36.95	A Adams	. 1988	1:34.48	1:31.52
200 fly	J Krauser 1988 3:10.64	J Krauser	19903:32.29	3:21.73	G Roper	. 1990	3:32.87	3:28.58
100 IM	C Walker 1989 1:18.93	C Walker	19891:27.50	1:27.50				
200 IM	C Walker 1991 2:52.50	C Walker	19903:14.28	3:14.28	C Walker	. 1986	3:17.40	3:17.40
400 IM	C Walker 1991 6:14.72	C Walker	19916:58.97	6:58.97	C Walker	. 1986	6:59.45	6:59.45
i		1		1				
		1		1				
WOMEN 65-69	SC-Yards Year USMS	SC-Meters	Year USMS	World	LC-Meters	Year	USMS	World
WOMEN 65-69 50 free	SC-Yards Year USMS C Walker	SC-Meters C Walker		World 34.92	C Walker	. 1992	. 34.75	World 34.75
			199135.76	-		. 1992	. 34.75	-
50 free	C Walker1992 31.01	C Walker	199135.76 19911:20.80	34.92	C Walker	. 1992 . 1992	. 34.75 1:16.84	34.75
50 free 100 free	C Walker 1992 31.01 C Walker 1992 1:09.04	C Walker	199135.76 19911:20.80 19913:03.63	34.92 1:20.80	C Walker	. 1992 _v . 1992 . 1992	. 34.75 1:16.84 2:48.51	34.75 1:16.84
50 free 100 free 200 free	C Walker 1992 31.01 C Walker 1992 1:09.04 C Walker 1992 2:35.44	C Walker C Walker P Smith	199135.76 19911:20.80 19913:03.63 19916:16.83	34.92 1:20.80 3:02.54 6:16.83	C Walker C Walker C Walker	. 1992 . 1992 . 1992 . 1991	. 34.75 1:16.84 2:48.51 6:05.22	34.75 1:16.84 2:48.51 6:05.22
50 free 100 free 200 free 400/500 free	C Walker	C Walker C Walker P Smith C Walker	199135.76 19911:20.80 19913:03.63 19916:16.83 199112:38.09	34.92 1:20.80 3:02.54 6:16.83 12:38.09	C Walker	. 1992 . 1992 . 1992 . 1991	. 34.75 1:16.84 2:48.51 6:05.22 2:39.70	34.75 1:16.84 2:48.51 6:05.22 12:39.70
50 free 100 free 200 free 400/500 free 800/1000 free	C Walker 1992 31.01 C Walker 1992 1:09.04 C Walker 1992 2:35.44 C Walker 1992 6:49.80 C Walker 1992 14:05.88	C Walker C Walker P Smith C Walker C Walker	199135.76 19911:20.80 19913:03.63 19916:16.83 199112:38.09 199123:48.62	34.92 1:20.80 3:02.54 6:16.83 12:38.09	C Walker	. 1992 . 1992 . 1992 . 1991 . 1991 . 1	. 34.75 1:16.84 2:48.51 6:05.22 2:39.70 4:07.05	34.75 1:16.84 2:48.51 6:05.22 12:39.70
50 free 100 free 200 free 400/500 free 800/1000 free 1500/1650 free	C Walker 1992 31.01 C Walker 1992 1:09.04 C Walker 1992 2:35.44 C Walker 1992 6:49.80 C Walker 1992 14:05.88 C Walker 1992 24:14.08	C Walker C Walker P Smith C Walker C Walker C Walker	199135.76 19911:20.80 19913:03.63 19916:16.83 199112:38.09 199123:48.62 198940.48	34.92 1:20.80 3:02.54 6:16.83 12:38.09 23:48.62	C Walker C Walker C Walker C Walker C Walker C Walker	. 1992 . 1992 . 1992 . 1991 . 1991 . 1 . 1992 . 2	. 34.75 1:16.84 2:48.51 6:05.22 2:39.70 4:07.05 . 39.85	34.75 1:16.84 2:48.51 6:05.22 12:39.70 24:07.05
50 free 100 free 200 free 400/500 free 800/1000 free 1500/1650 free 50 back	C Walker 1992 31.01 C Walker 1992 1:09.04 C Walker 1992 2:35.44 C Walker 1992 6:49.80 C Walker 1992 14:05.88 C Walker 1992 24:14.08 C Walker 1992 36.03	C Walker C Walker P Smith C Walker C Walker C Walker D Steadman	199135.76 19911:20.80 19913:03.63 19916:16.83 199112:38.09 199123:48.62 198940.48	34.92 1:20.80 3:02.54 6:16.83 12:38.09 23:48.62 40.48	C Walker	. 1992 . 1992 . 1992 . 1991 . 1991 . 1 . 1992 . 2 . 1992	. 34.75 1:16.84 2:48.51 6:05.22 2:39.70 4:07.05 . 39.85 1:30.97	34.75 1:16.84 2:48.51 6:05.22 12:39.70 24:07.05 39.85
50 free 100 free 200 free 400/500 free 800/1000 free 1500/1650 free 50 back 100 back	C Walker 1992 31.01 C Walker 1992 1:09.04 C Walker 1992 2:35.44 C Walker 1992 6:49.80 C Walker 1992 14:05.88 C Walker 1992 24:14.08 C Walker 1992 36.03 C Walker 1992 1:21.69	C Walker C Walker P Smith C Walker C Walker C Walker D Steadman D Steadman	199135.76 19911:20.80 19913:03.63 19916:16.83 199123:48.62 199940.48 19891:30.41 19893:15.72	34.92 1:20.80 3:02.54 6:16.83 12:38.09 23:48.62 40.48 1:30.41	C Walker	. 1992 . 1992 . 1992 . 1991 . 1991 . 1 . 1992 . 2 . 1992 . 1991	. 34.75 1:16.84 2:48.51 6:05.22 2:39.70 4:07.05 . 39.85 1:30.97 3:17.12	34.75 1:16.84 2:48.51 6:05.22 12:39.70 24:07.05 39.85 1:31.58
50 free 100 free 200 free 400/500 free 800/1000 free 1500/1650 free 50 back 100 back 200 back	C Walker 1992 31.01 C Walker 1992 1:09.04 C Walker 1992 2:35.44 C Walker 1992 6:49.80 C Walker 1992 14:05.88 C Walker 1992 24:14.08 C Walker 1992 36.03 C Walker 1992 36.03 C Walker 1992 1:21.69 C Walker 1992 2:58.87	C Walker C Walker P Smith C Walker C Walker C Walker D Steadman D Steadman	199135.76 19911:20.80 19913:03.63 19916:16.83 199112:38.09 199123:48.62 198940.48 19891:30.41 19893:15.72 198947.39	34.92 1:20.80 3:02.54 6:16.83 12:38.09 23:48.62 40.48 1:30.41 3:15.72	C Walker D Steadman	. 1992 . 1992 . 1992 . 1991 . 1991 . 1 . 1992 . 2 . 1992 . 1991	. 34.75 1:16.84 2:48.51 6:05.22 2:39.70 4:07.05 . 39.85 1:30.97 3:17.12	34.75 1:16.84 2:48.51 6:05.22 12:39.70 24:07.05 39.85 1:31.58 3:17.12
50 free 100 free 200 free 400/500 free 800/1000 free 1500/1650 free 50 back 100 back 200 back 50 brst	C Walker 1992 31.01 C Walker 1992 1:09.04 C Walker 1992 2:35.44 C Walker 1992 6:49.80 C Walker 1992 14:05.88 C Walker 1992 24:14.08 C Walker 1992 36.03 C Walker 1992 1:21.69 C Walker 1992 1:21.69 C Walker 1992 2:58.87 C Walker 1992 40.93	C Walker C Walker P Smith C Walker C Walker C Walker D Steadman D Steadman D Steadman B Christian	199135.76 19911:20.80 19913:03.63 19916:16.83 199123:48.62 198940.48 19891:30.41 19893:15.72 198947.39	34.92 1:20.80 3:02.54 6:16.83 12:38.09 23:48.62 40.48 1:30.41 3:15.72 47.39	C Walker D Walker C Walker C Walker	. 1992 1992 1992 1991 1991 . 1 . 1992 . 2 . 1992 1991 1990 1991	. 34.75 1:16.84 2:48.51 6:05.22 2:39.70 4:07.05 . 39.85 1:30.97 3:17.12 . 47.73 1:42.84	34.75 1:16.84 2:48.51 6:05.22 12:39.70 24:07.05 39.85 1:31.58 3:17.12 47.73
50 free 100 free 200 free 400/500 free 800/1000 free 1500/1650 free 50 back 100 back 200 back 50 brst 100 brst	C Walker 1992 31.01 C Walker 1992 1:09.04 C Walker 1992 2:35.44 C Walker 1992 6:49.80 C Walker 1992 14:05.88 C Walker 1992 24:14.08 C Walker 1992 36.03 C Walker 1992 1:21.69 C Walker 1992 2:58.87 C Walker 1992 40.93 C Walker 1992 1:30.66	C Walker C Walker P Smith C Walker C Walker C Walker D Steadman D Steadman D Steadman B Christian R Kenner	199135.76 19911:20.80 19913:03.63 19916:16.83 199123:48.62 198940.48 19893:15.73 19893:15.73 19893:15.73 19901:46.82 19903:48.71	34.92 1:20.80 3:02.54 6:16.83 12:38.09 23:48.62 40.48 1:30.41 3:15.72 47.39 1:43.57	C Walker D Steadman C Walker C Walker	. 1992 1992 1992 1991 1991 . 1 . 1992 . 2 . 1992 1991 1990 1991 1991 1989	. 34.75 1:16.84 2:48.51 6:05.22 2:39.70 4:07.05 . 39.85 1:30.97 3:17.12 . 47.73 1:42.84 3:49.96	34.75 1:16.84 2:48.51 6:05.22 12:39.70 24:07.05 39.85 1:31.58 3:17.12 47.73 1:42.84
50 free 100 free 200 free 400/500 free 800/1000 free 1500/1650 free 50 back 100 back 200 back 50 brst 100 brst 200 brst	C Walker 1992 31.01 C Walker 1992 1:09.04 C Walker 1992 2:35.44 C Walker 1992 6:49.80 C Walker 1992 14:05.88 C Walker 1992 24:14.08 C Walker 1992 36.03 C Walker 1992 1:21.69 C Walker 1992 2:58.87 C Walker 1992 40.93 C Walker 1992 1:30.66 C Walker 1992 3:17.42	C Walker C Walker P Smith C Walker C Walker C Walker D Steadman D Steadman D Steadman B Christian R Kenner	199135.76 19911:20.80 19913:03.63 19916:16.83 199123:48.62 198940.48 19891:30.41 198947.30 198947.30 19891:46.82 19901:46.82 19903:48.71 199043.93	34.92 1:20.80 3:02.54 6:16.83 12:38.09 23:48.62 40.48 1:30.41 3:15.72 47.39 1:43.57 3:46.02	C Walker C Steadman C Walker C Walker	. 1992 1992 1992 1991 1991 . 1 . 1992 . 2 . 1992 1991 1991 1991 1991 1991 1990 1990	. 34.75 1:16.84 2:48.51 6:05.22 2:39.70 4:07.05 . 39.85 1:30.97 3:17.12 . 47.73 1:42.84 3:49.96	34.75 1:16.84 2:48.51 6:05.22 12:39.70 24:07.05 39.85 1:31.58 3:17.12 47.73 1:42.84 3:45.71
50 free 100 free 200 free 400/500 free 800/1000 free 1500/1650 free 50 back 100 back 200 back 50 brst 100 brst 200 brst 50 fly	C Walker 1992 31.01 C Walker 1992 1:09.04 C Walker 1992 2:35.44 C Walker 1992 6:49.80 C Walker 1992 24:14.08 C Walker 1992 24:14.08 C Walker 1992 36.03 C Walker 1992 1:21.69 C Walker 1992 2:58.87 C Walker 1992 40.93 C Walker 1992 40.93 C Walker 1992 1:30.66 C Walker 1992 3:17.42 J Eppley 1985 38.39	C Walker C Walker P Smith C Walker C Walker C Walker D Steadman D Steadman D Steadman B Christian R Kenner R Kenner	199135.76 19911:20.80 19913:03.63 19916:16.83 199123:48.62 198940.48 19891:30.41 19693:15.72 198947.39 19901:46.82 19903:48.71 199043.93	34.92 1:20.80 3:02.54 6:16.83 12:38.09 23:48.62 40.48 1:30.41 3:15.72 47.39 1:43.57 3:46.02 44.27	C Walker D Steadman C Walker C Walker	. 1992 1992 1992 1991 1991 1992 1993 1991 1990 1991 1990 1991 1990 1991 1999 1990	. 34.75 1:16.84 2:48.51 6:05.22 2:39.70 4:07.05 . 39.85 1:30.97 . 47.73 1:42.84 3:49.96 . 43.35 1:40.35	34.75 1:16.84 2:48.51 6:05.22 12:39.70 24:07.05 39.85 1:31.58 3:17.12 47.73 1:42.84 3:45.71 43.35
50 free 100 free 200 free 400/500 free 800/1000 free 1500/1650 free 50 back 100 back 200 back 50 brst 100 brst 200 brst 50 fly 100 fly	C Walker 1992 31.01 C Walker 1992 1:09.04 C Walker 1992 2:35.44 C Walker 1992 6:49.80 C Walker 1992 14:05.88 C Walker 1992 24:14.08 C Walker 1992 36.03 C Walker 1992 1:21.69 C Walker 1992 2:58.87 C Walker 1992 40.93 C Walker 1992 40.93 C Walker 1992 3:74.42 J Eppley 1985 38.39 J Krauser 1991 1:28.14	C Walker C Walker P Smith C Walker C Walker D Steadman D Steadman D Steadman B Christian R Kenner F Carr J Krauser	199135.76 1991120.80 19913:03.63 19916:16.83 199123:48.62 198940.48 19891:30.41 19893:15.72 198947.39 19901:46.82 19903:48.71 19903:48.71 19903:36.73	34.92 1:20.80 3:02.54 6:16.83 12:38.09 23:48.62 40.48 1:30.41 3:15.72 47.39 1:43.57 3:46.02 44.27 1:38.74	C Walker D Steadman C Walker C Walker	. 1992 1992 1992 1991 1991 1992 1993 1991 1990 1991 1990 1991 1990 1991 1999 1990	. 34.75 1:16.84 2:48.51 6:05.22 2:39.70 4:07.05 . 39.85 1:30.97 . 47.73 1:42.84 3:49.96 . 43.35 1:40.35	34.75 1:16.84 2:48.51 6:05.22 12:39.70 24:07.05 39.85 1:31.58 3:17.12 47.73 1:42.84 3:45.71 43.35 1:40.35
50 free 100 free 200 free 400/500 free 800/1000 free 1500/1650 free 50 back 100 back 200 back 50 brst 100 brst 200 brst 50 fly 100 fly 200 fly	C Walker 1992 31.01 C Walker 1992 1:09.04 C Walker 1992 2:35.44 C Walker 1992 6:49.80 C Walker 1992 14:05.88 C Walker 1992 24:14.08 C Walker 1992 36.03 C Walker 1992 1:21.69 C Walker 1992 2:58.87 C Walker 1992 1:30.66 C Walker 1992 1:30.66 C Walker 1992 3:17.42 J Eppley 1985 38.39 J Krauser 1991 3:28.14 J Krauser 1991 3:13.72	C Walker C Walker P Smith C Walker C Walker D Steadman D Steadman D Steadman B Christian R Kenner R Kenner F Carr J Krauser J Krauser	1991 35.76 1991 1:20.80 1991 3:03.63 1991 6:16.83 1991 23:48.62 1999 40.48 1989 1:30.41 1989 3:15.72 1989 47.39 1990 1:46.82 1990 3:48.71 1990 43.93 1991 1:38.74 1991 3:36.03	34.92 1:20.80 3:02.54 6:16.83 12:38.09 23:48.62 40.48 1:30.41 3:15.72 47.39 1:43.57 3:46.02 44.27 1:38.74 3:38.65	C Walker D Steadman C Walker C Walker	. 1992 1992 1992 1992 1991 1991 1992 1991 1991 1990 1990 1991 1990 1992	. 34.75 1:16.84 2:48.51 6:05.22 2:39.70 4:07.05 . 39.85 1:30.97 3:17.12 . 47.73 1:42.84 3:49.96 . 43.35 1:40.35 3:42.61	34.75 1:16.84 2:48.51 6:05.22 12:39.70 24:07.05 39.85 1:31.58 3:17.12 47.73 1:42.84 3:45.71 43.35 1:40.35
50 free 100 free 200 free 400/500 free 800/1000 free 1500/1650 free 50 back 100 back 200 back 50 brst 100 brst 200 brst 50 fly 100 fly 200 fly 100 IM	C Walker 1992 31.01 C Walker 1992 1:09.04 C Walker 1992 2:35.44 C Walker 1992 6:49.80 C Walker 1992 14:05.88 C Walker 1992 24:14.08 C Walker 1992 36.03 C Walker 1992 1:21.69 C Walker 1992 2:58.87 C Walker 1992 1:30.66 C Walker 1992 3:17.42 J Eppley 1985 38.39 J Krauser 1991 1:28.14 J Krauser 1991 3:13.72 C Walker 1992 1:31.37	C Walker C Walker P Smith C Walker C Walker D Steadman D Steadman D Steadman B Christian R Kenner R Kenner F Carr J Krauser F Carr	199135.76 19911:20.80 19913:03.63 19916:16.83 19912:3:48.62 198940.48 19893:15.72 198947.39 19903:48.71 19903:48.71 19903:36.03 19913:36.03 19913:36.03	34.92 1:20.80 3:02.54 6:16.83 12:38.09 23:48.62 40.48 1:30.41 3:15.72 47.39 1:43.57 3:46.02 44.27 1:38.74 3:38.65 1:37.07	C Walker D Steadman C Walker C Walker C Walker J Krauser J Krauser	. 1992	. 34.75 1:16.84 2:48.51 6:05.22 2:39.70 4:07.05 . 39.85 1:30.97 3:17.12 . 47.73 1:42.84 3:49.96 . 43.35 1:40.35 3:14.0.35	34.75 1:16.84 2:48.51 6:05.22 12:39.70 24:07.05 39.85 1:31.58 3:17.12 47.73 1:42.84 3:45.71 43.35 1:40.35 3:42.61

Nome
D Donnelly . 1992 2:58.72 D Donnelly . 1992 3:27.01 3:27.01 J Gilbert . 1987 3:27.09 3:21.01 400/500 free R Simonton . 1992 8:09.64 R Simonton . 1992 17:01.69 R Simonton . 1992 17:01.69 R Simonton . 1991 28:05.85 R Simonton . 1992 . 41.06 R Simonton . 1992 . 42.06 R Simonton . 1993 . 15:06.99 R Simonton . 1988 . 25:04.64 R Simonton . 1992 . 44.05 R Simonton . 1992 . 40.05 R Simon
400/500 free R Simonton 1992 8:09.64 R Simonton 19887:17.22 7:17.22 7:17.22 C Donovan 19887:28.90 7:15.99 800/1000 free R Simonton 1992 17:01.69 R Simonton 198915:06.99 R Simonton 19887:28.90 7:15.99 1500/1650 free R Simonton 1991 28:05.85 R Simonton 199028:29.85 28:29.85 R Simonton 198828:46.45 28:46.6
Booling R Simonton 1992 17:01.69 R Simonton 1989 15:06.99 R Simonton 1988 15:04.91 15:04
1500/1650 free R Simonton 1991 28:05.85 R Simonton 1990 28:29.85 28:29.85 R Simonton 1988 28:46.45
50 back B Cederlund 1992 41.96 N Phillips 1991 .49.00 45.08 B Cedarlund 1992 .44.53 44.53 100 back B Christian 1992 .1:35.53 Y Frischhertz 1990 .1:51.64 1:44.02 B Cedarlund 1992 .1:44.88 1:39.85 200 back Y Frischhertz 1990 .3:56.72 3:53.86 B Cedarlund 1992 .1:44.88 1:39.85 50 brst B Christian 1992 .44.27 G Zint 1987 .50.95 50.53 B Christian 1992 .50.08 49.57 100 brst B Christian 1992 1:39.18 G Zint 1987 .1:55.84 1:54.84 B Christian 1992 1:52.88 1:52.88 200 brst B Christian 1992 3:36.00 G Zint 1987 .51.96 48.27 J Eppley 1990 4:05.80 4:06.80 4:06.80 4:06.80 4:06.80 4:06.80 4:06.80 4:06.80 4:06.80 4:06.80 4:06.80 </td
B Christian
200 back Y Frischhertz 1990 3:30.69 Y Frischhertz 1987 3:56.72 3:53.86 B Cedarlund 1992 3:52.95 3:47.59 50 brst B Christian 1992 44.27 G Zint 1987 50.95 50.53 B Christian 1992 50.08 49.57 100 brst B Christian 1992 1:39.18 G Zint 1987 1:55.84 154.84 B Christian 1992 1:52.88 1:52.88 200 brst B Christian 1992 3:36.00 G Zint 1987 4:11.18 4:09.41 B Christian 1992 4:06.80 4:06.80 50 fly J Eppley 1990 40.34 1989 51.96 48.27 J Eppley 1990 49.55 46.55 100 fly J Eppley 1990 1:39.75 G Zint 1988 2:04.25 J Eppley 1990 49.55 46.55 200 fly J Eppley 1990 3:54.84 M Merlino 1986 4:36.96 4:36.96 <td< td=""></td<>
50 brst B Christian 1992 44.27 G Zint 1987 50.95 50.53 B Christian 1992 50.08 49.57 100 brst B Christian 1992 1:39.18 G Zint 1987 1:55.84 1:54.84 B Christian 1992 1:52.88
B Christian 1992 1:39.18 G Zint 1987 1:55.84 1:54.84 B Christian 1992 1:52.88 1:52.88 200 brst B Christian 1992 3:36.00 G Zint 1987 4:11.18 4:09.41 B Christian 1992 4:06.80 4:06.80 50 fly J Eppley 1990 40.34 G Zint 1989 51.96 48.27 J Eppley 1990 49.55 46.55 200 fly J Eppley 1990 3:54.84 M Merlino 1988 2:04.25 J Eppley 1992 2:06.32 2:02.61 2:00 fly J Eppley 1992 1:33.69 G Zint 1988 1:50.32 1:43.67 M Merlino 1982 4:37.05
200 brst B Christian 1992 3:36.00 G Zint 1987 4:11.18 4:09.41 B Christian 1992 4:06.80 4:06.80 50 fly J Eppley 1990 40.34 G Zint 1989 51.96 48.27 J Eppley 1990 49.55 46.55 100 fly J Eppley 1990 1:33.75 G Zint 1988 2:04.25 J Eppley 1992 2:06.32 2:02.61 200 fly J Eppley 1990 3:54.84 M Merlino 1986 4:36.96 4:36.96 M Merlino 1982 4:37.05 4:37.05 100 IM B Christian 1992 1:33.69 G Zint 1988 1:50.32 1:43.67 M Merlino 1982 4:37.05 4:37.05 200 IM D Donnelly 1992 3:31.04 D Donnelly 1992 4:01.01 D Donnelly 1992 4:04.73 3:51.91 400 IM M Merlino 1982 7:36.45 R Simonton 1988 8:34.79 R Simonton 1988 8:39.36 8:33.57
50 fly
100 fly
200 fly
100 IM B Christian 1992 1:33.69 G Zint 1988 1:50,32 1:43.67 D Donnelly 1992 3:31.04 D Donnelly 1992 4:01.01 D Donnelly 1992 4:04.73 3:51.91 M Merlino 1982 7:36.45 R Simonton 1988 8:34.79 R Simonton 1988 8:34.79 R Simonton 1988 8:39.36 8:33.57
200 IM
400 IM Merlino 1982 7:36.45 R Simonton 1988 8:34.79 R Simonton 1988 8:39.36 8:33.57
WOMEN 75-79 SC-Yards Year USMS SC-Meters Year USMS World LC-Meters Year USMS World
WOMEN 75-79 SC-Yards Year USMS SC-Meters Year USMS World LC-Meters Year USMS World
50 free L Wingard 1987 36.17 M Merlino 1988 43.98 42.88 N Clark 1989 43.35 40.85
100 free L Wingard 1986 1:21.57 N Clark
200 free L Wingard 1987 3:05.04 M Wicklum
400/500 free A Etienne 1992 9:16.23 M Merlino 19888:11.07 7:56.05 J Durston 1990 8:21.15 8:04.16
800/1000 free J Durston 1990 . 18:51.01 M Merlino 198817:16.06 17:16.06 J Durston 1990 . 17:09.60 16:33.41
1500/1650 free J Durston 1990 . 31:01.55 M Merlino 1988 33:53.33 33:53.33 J Durston 1990 . 31:46.49 31:46.49
50 back M Wicklum 1989 46.51 M Wicklum 1989 52.11 48.06 A Walker 1991 50.45 46.64
100 back A Walker 1992 1:42.30 A Walker 19911:53.00 1:48.13 A Walker 1992 1:53.76 1:49.73
200 back M Wicklun 1991 3:42.11 M Wicklun 1989 4:01.89 4:00.43 M Wicklun 1989 4:07.44 4:07.44
50 brst S Joy
100 brst M Merlino
200 brst M Merlino 1988 4:09.09 M Merlino 1988 4:35.24 4:35.24 M Merlino 1987 4:39.52 4:36.72
50 fly M Hubbard 1990 49.97 M Merlino 1988 59.27 59.27 K Schimpf 1992 59.68 57.22
100 fly J Durston 1990 2:00.66 M Merlino 1988 2:12.17 2:12.17 M Merlino 1988 2:20.80 2:20.80
200 fly M Merlino 1988 . 4:19.43 M Merlino 1988 . 4:48.50 4:48.50 M Merlino 1988 . 4:54.79 4:54.79
The state of the s
100 IM M Lenk-Zigler 1992 1:48.71 M Merlino 1988 2:00.07

	1			1				
WOMEN 80-84	SC-Yards Year USMS	The second secon	Year USMS	World	LC-Meters	Year	USMS	World
50 free	J Dolce 1991 44.25	J Dolce		48.76	M Merlino			44.25
100 free	J Dolce 1990 1:39.96	J Dolce	19891:54.23	1:53.70	J Dolce			1:39.30
200 free	J Dolce 1990 3:51.76	J Dolce	19894:17.73	4:17.73	M Merlino			3:44.00
400/500 free	R Switzer 1988 . 10:45.81	J Dolce		8:51.10	M Merlino			8:23.50
800/1000 free	D Hopkins 1990 . 22:36.51	J Dolce		18:11.90	M Merlino			
1500/1650 free	D Hopkins 1990 . 38:35.07	D Hopkins	198939:39.28	35:44.26	J Dolce			36:54.26
50 back	A Soule 1989 52.35	J Dolce		1:05.08	A Soule			53.73
100 back	A Soule 1989 1:56.19	M Scanlon		2:24.00	A Soule			2:01.87
200 back	A Soule 1991 4:16.57	S Scott		5:18.44	A Soule			4:22.89
50 brst	E Mattila 1990 1:01.70	M Miller	19901:13.55	1:07.65	M Merlino			1:04.78
100 brst	E Mattila 1990 2:18.65	E Mattila	19922:39.80	2:39.80	M Merlino			2:22.79
200 brst	E Mattila 1992 5:03.19	E Mattila	19915:33.05	5:33.05	M Merlino			5:07.83
50 fly	K Pelton 1986 1:06.25	K Pelton	19871:19.40	1:13.27	K Pelton	. 1987	1:16.09	1:13.71
100 fly	K Pelton 1986 2:36.36	K Pelton	19863:09.18	3:09.18	M Merlino	. 1992 :	2:37.32	2:37.32
200 fly	E Mattila 1991 5:33.46	E Mattila	19916:20.56	6:20.56	M Merlino	. 1992 :	5:29.93	5:29.93
100 IM	E Mattila 1990 2:14.16	D Hopkins	19892:40.92	2:21.39				
200 IM	J Cooke 1989 4:51.27	E Mattila	19915:23.78	5:23.78	M Merlino	. 1992	4:47.02	4:47.02
400 IM	E Mattila 1990 9:53.28	E Mattila	199111:19.93	11:19.93	M Merlino	. 1992 . 10	0:05.13	10:05.13
WOMEN 85-89	SC-Yards Year USMS		Year USMS	World	LC-Meters	Year	USMS	World
50 free	A Soule 1991 48.59	M McKechnie	19891:03.78	1:03.78	A Soule	. 1991	. 51.48	51.48
50 free 100 free	A Soule	M McKechnie A Bauscher	19891:03.78 19893:01.15	1:03.78 3:01.15	A Soule	. 1991 . 1991 :	. 51.48 2:07.61	51.48 2:07.61
50 free 100 free 200 free	A Soule	M McKechnie A Bauscher M McKechnie	19891:03.78 19893:01.15 19895:33.83	1:03.78	A Soule A Soule	. 1991 . 1991 : . 1991	. 51.48 2:07.61 4:49.52	51.48 2:07.61 4:49.52
50 free 100 free 200 free 400/500 free	A Soule	M McKechnie A Bauscher M McKechnie	19891:03.78 19893:01.15 19895:33.83	1:03.78 3:01.15 5:33.83	A Soule	. 1991 . 1991 . 1991 . 1984 . 1	. 51.48 2:07.61 4:49.52 3:22.48	51.48 2:07.61 4:49.52 13:22.48
50 free 100 free 200 free 400/500 free 800/1000 free	A Soule	M McKechnie A Bauscher M McKechnie	19891:03.78 19893:01.15 19895:33.83	1:03.78 3:01.15 5:33.83	A Soule	. 1991 . 1991 . 1991 . 1984 . 1:	. 51.48 2:07.61 4:49.52 3:22.48 4:23.38	51.48 2:07.61 4:49.52 13:22.48 24:23.38
50 free 100 free 200 free 400/500 free	A Soule	M McKechnie A Bauscher M McKechnie	19891:03.78 19893:01.15 19895:33.83 198924:05.34	1:03.78 3:01.15 5:33.83	A Soule	. 1991 . 1991 . 1991 . 1984 . 1:	. 51.48 2:07.61 4:49.52 3:22.48 4:23.38	51.48 2:07.61 4:49.52 13:22.48 24:23.38
50 free 100 free 200 free 400/500 free 800/1000 free	A Soule	M McKechnie A Bauscher M McKechnie M McKechnie	19891:03.78 19893:01.15 19895:33.83 198924:05.34	1:03.78 3:01.15 5:33.83	A Soule	. 1991 . 1991 . 1991 . 1984 . 1 . 1988 . 2	. 51.48 2:07.61 4:49.52 3:22.48 4:23.38 2:15.77	51.48 2:07.61 4:49.52 13:22.48 24:23.38
50 free 100 free 200 free 400/500 free 800/1000 free 1500/1650 free	A Soule 1991 48.59 A Soule 1991 1:51.05 A Soule 1991 4:08.66 M McKechnie 1990 14:15.17 M McKechnie 1992 30:28.48 E Peckham 1985 50:54.73	M McKechnie A Bauscher M McKechnie M McKechnie	19891:03.78 19893:01.15 19895:33.83 198924:05.34 19891:13.57	1:03.78 3:01.15 5:33.83 24:05.34	A Soule A Soule A Soule E Peckham A Bauscher A Bauscher	. 1991 . 1991 . 1991 . 1984 . 1 . 1988 . 2 . 1991 5	. 51.48 2:07.61 4:49.52 3:22.48 4:23.38 2:15.77	51.48 2:07.61 4:49.52 13:22.48 24:23.38 52:15.77
50 free 100 free 200 free 400/500 free 800/1000 free 1500/1650 free 50 back	A Soule 1991 48.59 A Soule 1991 1:51.05 A Soule 1991 4:08.66 M McKechnie 1990 14:15.17 M McKechnie 1992 30:28.48 E Peckham 1985 50:54.73 A Soule 1991 49.59	M McKechnie A Bauscher M McKechnie M McKechnie M McKechnie	19891:03.78 19893:01.15 19895:33.83 	1:03.78 3:01.15 5:33.83 24:05.34 1:13.57	A Soule A Soule A Soule E Peckham A Bauscher A Bauscher A Soule	. 1991	. 51.48 2:07.61 4:49.52 3:22.48 4:23.38 2:15.77 . 58.42 2:13.13	51.48 2:07.61 4:49.52 13:22.48 24:23.38 52:15.77 58.42
50 free 100 free 200 free 400/500 free 800/1000 free 1500/1650 free 50 back 100 back	A Soule 1991 48.59 A Soule 1991 1:51.05 A Soule 1991 4:08.66 M McKechnie 1990 14:15.17 M McKechnie 1992 30:28.48 E Peckham 1985 50:54.73 A Soule 1991 49.59 A Soule 1991 1:55.84	M McKechnie A Bauscher M McKechnie M McKechnie M McKechnie A McKechnie	19891:03.78 19893:01.15 19895:33.83 	1:03.78 3:01.15 5:33.83 24:05.34 1:13.57 2:52.17	A Soule A Soule A Soule E Peckham A Bauscher A Bauscher A Soule A Soule	. 1991	. 51.48 2:07.61 4:49.52 3:22.48 4:23.38 2:15.77 . 58.42 2:13.13 4:47.82	51.48 2:07.61 4:49.52 13:22.48 24:23.38 52:15.77 58.42 2:13.13
50 free 100 free 200 free 400/500 free 800/1000 free 1500/1650 free 50 back 100 back 200 back	A Soule 1991 48.59 A Soule 1991 1:51.05 A Soule 1991 4:08.66 M McKechnie 1990 14:15.17 M McKechnie 1992 30:28.48 E Peckham 1985 50:54.73 A Soule 1991 49.59 A Soule 1991 1:55.84 A Soule 1991 4:09.33	M McKechnie A Bauscher M McKechnie M McKechnie M McKechnie A Bauscher M McKechnie	19891:03.78 19893:01.15 19895:33.83 198924:05.34 19892:52.17 19892:52.17 19896:00.16 19901:37.05	1:03.78 3:01.15 5:33.83 24:05.34 1:13.57 2:52.17 6:00.16	A Soule A Soule C Peckham A Bauscher A Soule A Soule A Soule A Soule A Soule A Soule	. 1991	. 51.48 2:07.61 4:49.52 3:22.48 4:23.38 2:15.77 . 58.42 2:13.13 4:47.82 1:42.40	51.48 2:07.61 4:49.52 13:22.48 24:23.38 52:15.77 58.42 2:13.13 4:47.82
50 free 100 free 200 free 400/500 free 800/1000 free 1500/1650 free 50 back 100 back 200 back 50 brst	A Soule 1991 48.59 A Soule 1991 1:51.05 A Soule 1991 4:08.66 M McKechnie 1990 4:15.17 M McKechnie 1992 30:28.48 E Peckham 1985 50:54.73 A Soule 1991 49.59 A Soule 1991 1:55.84 A Soule 1991 4:09.33 M Pollack 1992 1:17.90	M McKechnie A Bauscher M McKechnie M McKechnie M McKechnie A Bauscher M McKechnie K Pelton	19891:03.78 19893:01.15 19895:33.83 	1:03.78 3:01.15 5:33.83 24:05.34 1:13.57 2:52.17 6:00.16 1:37.05	A Soule A Soule A Soule A Soule E Peckham A Bauscher A Bauscher A Soule A Soule E Peckham	. 1991	. 51.48 2:07.61 4:49.52 3:22.48 4:23.38 2:15.77 . 58.42 2:13.13 4:47.82 1:42.40 3:18.97	51.48 2:07.61 4:49.52 13:22.48 24:23.38 52:15.77 58.42 2:13.13 4:47.82 1:28.69
50 free 100 free 200 free 400/500 free 800/1000 free 1500/1650 free 50 back 100 back 200 back 50 brst 100 brst	A Soule 1991 48.59 A Soule 1991 1:51.05 A Soule 1991 4:08.66 M McKechnie 1990 14:15.17 M McKechnie 1992 30:28.48 E Peckham 1985 50:54.73 A Soule 1991 49.59 A Soule 1991 4:09.33 M Pollack 1992 1:17.90 K Pelton 1991 2:47.87	M McKechnie A Bauscher M McKechnie M McKechnie M McKechnie A Bauscher M McKechnie K Pelton K Pelton	19891:03.78 19893:01.15 19995:33.83 	1:03.78 3:01.15 5:33.83 24:05.34 1:13.57 2:52.17 6:00.16 1:37.05	A Soule A Soule A Soule E Peckham A Bauscher A Bauscher A Soule A Soule E Peckham A Soule E Peckham K Pelton	. 1991	. 51.48 2:07.61 4:49.52 3:22.48 4:23.38 2:15.77 . 58.42 2:13.13 4:47.82 1:42.40 3:18.97 6:58.50	51.48 2:07.61 4:49.52 13:22.48 24:23.38 52:15.77 58.42 2:13.13 4:47.82 1:28.69 3:18.97
50 free 100 free 200 free 400/500 free 800/1000 free 1500/1650 free 50 back 100 back 200 back 50 brst 100 brst 200 brst	A Soule 1991 48.59 A Soule 1991 1:51.05 A Soule 1991 4:08.66 M McKechnie 1990 14:15.17 M McKechnie 1992 30:28.48 E Peckham 1985 50:54.73 A Soule 1991 49.59 A Soule 1991 49.59 A Soule 1991 4:09.33 M Pollack 1992 1:17.90 K Pelton 1991 2:47.87 K Pelton 1991 6:12.44	M McKechnie A Bauscher M McKechnie M McKechnie M McKechnie A Bauscher M McKechnie K Pelton K Pelton	19891:03.78 19893:01.15 19895:33.83 	1:03.78 3:01.15 5:33.83 24:05.34 1:13.57 2:52.17 6:00.16 1:37.05 3:09.62	A Soule A Soule A Soule E Peckham A Bauscher A Bauscher A Soule A Soule F Peckham K Pelton A Soule	. 1991	. 51.48 2:07.61 4:49.52 3:22.48 4:23.38 2:15.77 . 58.42 2:13.13 4:47.82 1:42.40 3:18.97 6:58.50 1:27.77	51.48 2:07.61 4:49.52 13:22.48 24:23.38 52:15.77 58.42 2:13.13 4:47.82 1:28.69 3:18.97 7:45.92
50 free 100 free 200 free 400/500 free 800/1000 free 1500/1650 free 50 back 100 back 200 back 50 brst 100 brst 200 brst 50 fly	A Soule 1991 48.59 A Soule 1991 1:51.05 A Soule 1991 4:08.66 M McKechnie 1990 14:15.17 M McKechnie 1992 30:28.48 E Peckham 1985 50:54.73 A Soule 1991 49.59 A Soule 1991 49.59 A Soule 1991 1:55.84 A Soule 1991 4:09.33 M Pollack 1992 1:17.90 K Pelton 1991 2:47.87 K Pelton 1991 6:12.44 E Peckham 1985 1:16.00	M McKechnie A Bauscher M McKechnie M McKechnie M McKechnie A Bauscher M McKechnie K Pelton K Pelton	19891:03.78 19893:01.15 19895:33.83 198924:05.34 19891:13.57 19892:52.17 19896:00.16 19901:37.05 19903:09.62 19901:24.53	1:03.78 3:01.15 5:33.83 24:05.34 1:13.57 2:52.17 6:00.16 1:37.05 3:09.62 1:24.53	A Soule A Soule A Soule E Peckham A Bauscher A Bauscher A Soule A Soule E Peckham K Pelton E Peckham	. 1991	. 51.48 2:07.61 4:49.52 3:22.48 4:23.38 2:15.77 . 58.42 2:13.13 4:47.82 1:42.40 3:18.97 6:58.50 1:27.77	51.48 2:07.61 4:49.52 13:22.48 24:23.38 52:15.77 58.42 2:13.13 4:47.82 1:28.69 3:18.97 7:45.92
50 free 100 free 200 free 400/500 free 800/1000 free 50 back 100 back 200 back 50 brst 100 brst 200 brst 50 fly 100 fly	A Soule 1991 48.59 A Soule 1991 45.05 A Soule 1991 4:08.66 M McKechnie 1990 14:15.17 M McKechnie 1992 30:28.48 E Peckham 1985 50:54.73 A Soule 1991 49.59 A Soule 1991 49.59 A Soule 1991 1:55.84 A Soule 1991 4:09.33 M Pollack 1992 1:17.90 K Pelton 1991 2:47.87 K Pelton 1991 6:12.44 E Peckham 1985 1:16.00 E Peckham 1984 3:01.71	M McKechnie A Bauscher M McKechnie M McKechnie M McKechnie A Bauscher M McKechnie K Pelton K Pelton K Pelton K Pelton	19891:03.78 19893:01.15 19895:33.83	1:03.78 3:01.15 5:33.83 24:05.34 1:13.57 2:52.17 6:00.16 1:37.05 3:09.62 1:24.53 3:29.58	A Soule A Soule A Soule E Peckham A Bauscher A Soule A Soule E Peckham C Peckham C Petton E Peckham K Pelton E Peckham K Pelton	. 1991	. 51.48 2:07.61 4:49.52 3:22.48 4:23.38 2:15.77 . 58.42 2:13.13 4:47.82 1:42.40 3:18.97 6:58.50 1:27.77	51.48 2:07.61 4:49.52 13:22.48 24:23.38 52:15.77 58.42 2:13.13 4:47.82 1:28.69 3:18.97 7:45.92 1:27.77 3:01.14
50 free 100 free 200 free 400/500 free 800/1000 free 1500/1650 free 50 back 100 back 200 back 50 brst 100 brst 200 brst 50 fly 100 fly 200 fly	A Soule 1991 48.59 A Soule 1991 1:51.05 A Soule 1991 4:08.66 M McKechnie 1990 14:15.17 M McKechnie 1992 30:28.48 E Peckham 1985 50:54.73 A Soule 1991 49.59 A Soule 1991 49.59 A Soule 1991 4:09.33 M Pollack 1992 1:17.90 K Pelton 1991 2:47.87 K Pelton 1991 6:12.44 E Peckham 1985 1:16.00 E Peckham 1984 3:01.71 K Pelton 1991 6:39.85	M McKechnie A Bauscher M McKechnie M McKechnie M McKechnie A Bauscher M McKechnie K Pelton K Pelton K Pelton K Pelton K Pelton K Pelton	19891:03.78 19893:01.15 19895:33.83 198924:05.34 19892:52.17 19896:00.16 19901:37.05 19903:09.62 19903:29.58 19907:15.07	1:03.78 3:01.15 5:33.83 24:05.34 1:13.57 2:52.17 6:00.16 1:37.05 3:09.62 1:24.53 3:29.58 7:15.07	A Soule A Soule A Soule E Peckham A Bauscher A Soule A Soule E Peckham C Peckham C Petton E Peckham K Pelton E Peckham K Pelton	. 1991	. 51.48 2:07.61 4:49.52 3:22.48 4:23.38 2:15.77 . 58.42 2:13.13 4:47.82 1:42.40 3:18.97 6:58.50 1:27.77 3:01.14 7:18.41	51.48 2:07.61 4:49.52 13:22.48 24:23.38 52:15.77 58.42 2:13.13 4:47.82 1:28.69 3:18.97 7:45.92 1:27.77 3:01.14 7:18.41

WOMEN 90-94	SC-Yards	Year	USMS	SC-Meters	Year	USMS	World90+	LC-Meters	Year	USMS	World90+
50 free	L Tyra	. 1983 .	. 1:27.65				2:06.95	P Miller	1988		2:02.38
100 free	L Tyra	. 1984 .	. 3:31.33	• • • • • • • • • • • • • • • • • • • •			4:23.67	P Miller	1988	4:08.22	4:08.22
200 free	L Tyra	. 1983 .	. 8:28.07				1	• • • • • • • • • • • • • • • • • • • •			
400/500 free											
800/1000 free							1				
1500/1650 free				• • • • • • • • • • • • • • • • • • • •				***************************************			
50 back	P Miller	. 1988 .	. 1:42.97	• • • • • • • • • • • • • • • • • • • •			1:55.07	P Miller	1989.	2:17.25	2:01.70
100 back	P Miller	. 1988 .	. 3:32.00	• • • • • • • • • • • • • • • • • • • •			4:19.46				3:59.89
200 back	P Miller	. 1988 .	. 7:33.41					P Miller	1989.	10:47.76	10:47.76
50 brst	L Tyra	. 1984	. 2:26.52				1:49.01				
100 brst	L Tyra	. 1983 .	. 5:30.32				4:05.59				
200 brst	L Tyra	. 1983 .	11:48.36								
50 fly	• • • • • • • • • • • • • • • • • • • •							•••••			
100 fly											
200 fly				• • • • • • • • • • • • • • • • • • • •		• • •					
100 IM						• • •					
200 IM						• • •					
400 IM						• • •					
WOMEN 95+	SC-Yards	Year	USMS	SC-Meters	Year	USMS	~	LC-Meters	Year	USMS	
50 free			• • • • •			• • •		*****************	• • • • • •		
100 free		• • • • • • •				• • •		• • • • • • • • • • • • • • • • • • • •	• • • • • •	• • • •	
200 free		• • • • • • •				• • •		•••••	• • • • • •	• • • •	
400/500 free			• • • • •		• • • • • • •	• • •		• • • • • • • • • • • • • • • • • • • •	• • • • • •		
800/1000 free	• • • • • • • • • • • • • • • • • • • •					• • •	1	• • • • • • • • • • • • • • • • • • • •			
1500/1650 free		• • • • • • •				• • •		•••••	• • • • • •	• • • •	
50 back		• • • • • • •				• • •		• • • • • • • • • • • • • • • • • • • •	•••••	• • • •	
100 back						• • •		•••••			
200 back					• • • • • • • •	• • •				• • • •	
50 brst						• • •	(• • • • • •	• • • •	
100 brst			• • • • •		• • • • • • • •	• • •				• • • •	
200 brst			• • • • •			• • •	l	• • • • • • • • • • • • • • • • • • • •	• • • • • •	• • • •	
50 fly							į				
100 fly						• • •			• • • • •	• • • •	
200 fly						• • •	į		• • • • • •		
100 IM		• • • • • • •	• • • • • •			• • •					
200 IM	• • • • • • • • • • • • • • • • • • • •		• • • • • •			• • •			• • • • • •	• • • •	
400 IM							j				

45

MEN 19-24	SC-Yards Year USMS	SC-Meters Year USMS		LC-Meters Year USMS	
50 free	A Werth 1992 21.07	R Sprout 198924.62		D Mendenhall 1988 24.52	
100 free	J Keppeler 1992 45.90	G Mackem		T Batis 1989 53.90	
200 free	J Keppeler 1992 1:41.45	M MacDonald 19912:01.20	i	T Batis 1989 1:56.99	
400/500 free	R Drewelow 1992 4:38.46	G Mackem 19914:16.24		T Batis 1989 4:10.98	
800/1000 free	M Cleavenger 1987 9:49.98	M Collins 19898:52.70		S Finlayson 1992 9:02.10	
1500/1650 free	M Collins 1989 . 16:46.74	M Collins 198917:03.17		J Allen 1991 . 17:12.51	
50 back	J Keppeler 1992 24.19	K Clear 199129.62		C Stevenson 1987 28.06	
100 back	J Keppeler 1992 51.35	J Roddin 19921:01.29		C Stevenson 1987 1:01.85	
200 back	J Keppeler 1992 1:50.28	J Hoess 19892:19.68		C Stevenson 1987 2:15.36	
50 brst	N Williams 1992 27.01	M Ewing 1991 31.68		J Amato 1987 30.10	
100 brst	N Williams 1992 58.69	P McClafferty 19871:09.79		J Surowiec 1988 1:06.61	
200 brst	D Phelan 1988 2:11.59	M Collins 19892:36.23		J Harlow 1992 2:30.64	
50 fly	A Werth 1992 23.14	J Roddin 1992 26.94		A Geller 1992 26.54	
100 fly	J Roddin 1992 50.58	J Roddin 1992 58.41		T Batis 1989 58.16	
200 fly	C Stevenson 1989 1:53.38	R Shinnick 19902:13.68		K Duncan	
100 IM	A Werth 1992 52.01	G Mackem 19911:00.93			
200 IM	J Roddin 1992 1:54.64	G Mackem 19912:14.07		G Mackem	
400 IM	J Keppeler 1992 4:04.34	G Mackem 19914:45.83		G Mackem	
				1	
	1			ł	
MEN 25-29	SC-Yards Year USMS	SC-Meters Year USMS	World	LC-Meters Year USMS	World
MEN 25-29 50 free	SC-Yards Year USMS R Peel 1991 19,83	SC-Meters Year USMS R Peel	The second second	LC-Meters Year USMS K DeForrest 1983 22.59	World 22.59
			The second second		-
50 free	R Peel 1991 19.83	R Peel 199123.16	23.16	K DeForrest	22.59
50 free 100 free	R Peel 1991 19.83 R Peel 1991 44.39	R Peel 199123.16 M Noetzel 199052.29	23.16 51.74 1:54.00	K DeForrest	22.59 51.25
50 free 100 free 200 free	R Peel	R Peel	23.16 51.74 1:54.00 4:04.50	K DeForrest 1983 22.59 J Montgomery 1981 51.25 J Keppeler 1992 1:52.17 C Reid 1987 4:07.73	22.59 51.25 1:52.17
50 free 100 free 200 free 400/500 free	R Peel	R Peel	23.16 51.74 1:54.00 4:04.50 8:29.19	K DeForrest 1983 22.59 J Montgomery 1981 51.25 J Keppeler 1992 1:52.17 C Reid 1987 4:07.73	22.59 51.25 1:52.17 4:06.99 8:36.83
50 free 100 free 200 free 400/500 free 800/1000 free	R Peel	R Peel	23.16 51.74 1:54.00 4:04.50 8:29.19 16:23.21	K DeForrest 1983 22.59 J Montgomery 1981 51.25 J Keppeler 1992 1:52.17 C Reid 1987 4:07.73 J Erwin 1992 8:36.83	22.59 51.25 1:52.17 4:06.99 8:36.83
50 free 100 free 200 free 400/500 free 800/1000 free 1500/1650 free	R Peel 1991 19.83 R Peel 1991 44.39 K Switzer 1988 1:40.16 K Switzer 1988 4:32.71 P Asmuth 1985 9:33.93 B Patten 1990 15:46.91	R Peel	23.16 51.74 1:54.00 4:04.50 8:29.19 16:23.21 27.25	K DeForrest 1983 22.59 J Montgomery 1981 51.25 J Keppeler 1992 1:52.17 C Reid 1987 4:07.73 J Erwin 1992 8:36.83 C Reid 1987 16:28.69 1 J C Britt 1989 27.48 J Keppeler 1992 58.24	22.59 51.25 1:52.17 4:06.99 8:36.83 6:28.69
50 free 100 free 200 free 400/500 free 800/1000 free 1500/1650 free 50 back	R Peel 1991 19.83 R Peel 1991 44.39 K Switzer 1988 1:40.16 K Switzer 1988 4:32.71 P Asmuth 1985 9:33.93 B Patten 1990 15:46.91 M Rhodenbaugh 1991 23.23	R Peel	23.16 51.74 1:54.00 4:04.50 8:29.19 16:23.21 27.25 58.42	K DeForrest 1983 22.59 J Montgomery 1981 51.25 J Keppeler 1992 1:52.17 C Reid 1987 4:07.73 J Erwin 1992 8:36.83 C Reid 1987 16:28.69 1 J C Britt 1989 27.48 J Keppeler 1992 58.24	22.59 51.25 1:52.17 4:06.99 8:36.83 16:28.69 27.39
50 free 100 free 200 free 400/500 free 800/1000 free 1500/1650 free 50 back 100 back	R Peel 1991 19.83 R Peel 1991 44.39 K Switzer 1988 1:40.16 K Switzer 1988 4:32.71 P Asmuth 1985 9:33.93 B Patten 1990 15:46.91 M Rhodenbaugh 1991 23.23 A Gill 1992 49.83	R Peel	23.16 51.74 1:54.00 4:04.50 8:29.19 16:23.21 27.25 58.42	K DeForrest 1983 22.59 J Montgomery 1981 51.25 J Keppeler 1992 1:52.17 C Reid 1987 4:07.73 J Erwin 1992 8:36.83 C Reid 1987 16:28.69 1 J C Britt 1989 27.48 J Keppeler 1992 58.24	22.59 51.25 1:52.17 4:06.99 8:36.83 16:28.69 27.39 58.24
50 free 100 free 200 free 400/500 free 800/1000 free 1500/1650 free 50 back 100 back 200 back	R Peel 1991 19.83 R Peel 1991 44.39 K Switzer 1988 1:40.16 K Switzer 1988 4:32.71 P Asmuth 1985 9:33.93 B Patten 1990 15:46.91 M Rhodenbaugh 1991 23.23 A Gill 1992 49.83 R Hauck 1991 1:50.49	R Peel	23.16 51.74 1:54.00 4:04.50 8:29.19 16:23.21 27.25 58.42 2:09.12	K DeForrest 1983 22.59 J Montgomery 1981 51.25 J Keppeler 1992 1:52.17 C Reid 1987 4:07.73 J Erwin 1992 8:36.83 C Reid 1987 16:28.69 1 J C Britt 1989 27.48 J Keppeler 1992 58.24 J Keppeler 1992 2:07.57 D Wyatt 1992 29.77	22.59 51.25 1:52.17 4:06.99 8:36.83 16:28.69 27.39 58.24 2:07.57
50 free 100 free 200 free 400/500 free 800/1000 free 1500/1650 free 50 back 100 back 200 back 50 brst	R Peel 1991 19.83 R Peel 1991 44.39 K Switzer 1988 1:40.16 K Switzer 1988 4:32.71 P Asmuth 1985 9:33.93 B Patten 1990 15:46.91 M Rhodenbaugh 1991 23.23 A Gill 1992 49.83 R Hauck 1991 1:50.49 G Rhodenbaugh 1991 25.34	R Peel	23.16 51.74 1:54.00 4:04.50 8:29.19 16:23.21 27.25 58.42 2:09.12 28.81	K DeForrest 1983 22.59 J Montgomery 1981 51.25 J Keppeler 1992 1:52.17 C Reid 1987 4:07.73 J Erwin 1992 8:36.83 C Reid 1987 16:28.69 1 J C Britt 1989 27.48 J Keppeler 1992 58.24 J Keppeler 1992 2:07.57 D Wyatt 1992 29.77 D Lundberg 1989 1:04.60	22.59 51.25 1:52.17 4:06.99 8:36.83 6:28.69 27.39 58.24 2:07.57 29.88
50 free 100 free 200 free 400/500 free 800/1000 free 1500/1650 free 50 back 100 back 200 back 50 brst	R Peel 1991 19.83 R Peel 1991 44.39 K Switzer 1988 1:40.16 K Switzer 1988 4:32.71 P Asmuth 1985 9:33.93 B Patten 1990 15:46.91 M Rhodenbaugh 1991 23.23 A Gill 1992 49.83 R Hauck 1991 1:50.49 G Rhodenbaugh 1991 25.34 D Lundberg 1990 56.21	R Peel	23.16 51.74 1:54.00 4:04.50 8:29.19 16:23.21 27.25 58.42 2:09.12 28.81 1:04.91	K DeForrest 1983 22.59 J Montgomery 1981 51.25 J Keppeler 1992 1:52.17 C Reid 1987 4:07.73 J Erwin 1992 8:36.83 C Reid 1987 16:28.69 1 J C Britt 1989 27.48 J Keppeler 1992 58.24 J Keppeler 1992 2:07.57 D Wyatt 1992 29.77 D Lundberg 1989 1:04.60	22.59 51.25 1:52.17 4:06.99 8:36.83 6:28.69 27.39 58.24 2:07.57 29.88 1:04.60
50 free 100 free 200 free 400/500 free 800/1000 free 1500/1650 free 50 back 100 back 200 back 50 brst 100 brst 200 brst	R Peel 1991 19.83 R Peel 1991 44.39 K Switzer 1988 1:40.16 K Switzer 1988 4:32.71 P Asmuth 1985 9:33.93 B Patten 1990 15:46.91 M Rhodenbaugh 1991 23.23 A Gill 1992 49.83 R Hauck 1991 1:50.49 G Rhodenbaugh 1991 25.34 D Lundberg 1990 56.21 D Soltis 1988 2:03.69	R Peel	23.16 51.74 1:54.00 4:04.50 8:29.19 16:23.21 27.25 58.42 2:09.12 28.81 1:04.91 2:24.68	K DeForrest 1983 22.59 J Montgomery 1981 51.25 J Keppeler 1992 1:52.17 C Reid 1987 4:07.73 J Erwin 1992 8:36.83 C Reid 1987 16:28.69 1 J C Britt 1989 27.48 J Keppeler 1992 58.24 J Keppeler 1992 2:07.57 D Wyatt 1992 29.77 D Lundberg 1989 1:04.60 M Chatfield 1982 2:30.96	22.59 51.25 1:52.17 4:06.99 8:36.83 6:28.69 27.39 58.24 2:07.57 29.88 1:04.60 2:26.73
50 free 100 free 200 free 400/500 free 800/1000 free 1500/1650 free 50 back 100 back 200 back 50 brst 100 brst 200 brst	R Peel 1991 19.83 R Peel 1991 44.39 K Switzer 1988 1:40.16 K Switzer 1988 4:32.71 P Asmuth 1985 9:33.93 B Patten 1990 15:46.91 M Rhodenbaugh 1991 23.23 A Gill 1992 49.83 R Hauck 1991 1:50.49 G Rhodenbaugh 1991 25.34 D Lundberg 1990 56.21 D Soltis 1988 2:03.69 C Cobb 1991 22.27	R Peel	23.16 51.74 1:54.00 4:04.50 8:29.19 16:23.21 27.25 58.42 2:09.12 28.81 1:04.91 2:24.68 25.77 57.07	K DeForrest 1983 22.59 J Montgomery 1981 51.25 J Keppeler 1992 1:52.17 C Reid 1987 4:07.73 J Erwin 1992 8:36.83 C Reid 1987 16:28.69 J C Britt 1989 27.48 J Keppeler 1992 58.24 J Keppeler 1992 2:07.57 D Wyatt 1992 2:07.57 D Lundberg 1989 1:04.60 M Chatfield 1982 2:30.96 DeForrest/Bottom 83/84 25.16 M Bottom 1984 56.34	22.59 51.25 1:52.17 4:06.99 8:36.83 6:28.69 27.39 58.24 2:07.57 29.88 1:04.60 2:26.73 25.16
50 free 100 free 200 free 400/500 free 800/1000 free 1500/1650 free 50 back 100 back 200 back 50 brst 100 brst 200 brst 50 fly	R Peel 1991 19.83 R Peel 1991 44.39 K Switzer 1988 1:40.16 K Switzer 1988 4:32.71 P Asmuth 1985 9:33.93 B Patten 1990 15:46.91 M Rhodenbaugh 1991 23.23 A Gill 1992 49.83 R Hauck 1991 1:50.49 G Rhodenbaugh 1991 25.34 D Lundberg 1990 56.21 D Soltis 1988 2:03.69 C Cobb 1991 22.27 S Knowles 1991 49.71	R Peel	23.16 51.74 1:54.00 4:04.50 8:29.19 16:23.21 27.25 58.42 2:09.12 28.81 1:04.91 2:24.68 25.77 57.07	K DeForrest 1983 22.59 J Montgomery 1981 51.25 J Keppeler 1992 1:52.17 C Reid 1987 4:07.73 J Erwin 1992 8:36.83 C Reid 1987 16:28.69 J C Britt 1989 27.48 J Keppeler 1992 58.24 J Keppeler 1992 2:07.57 D Wyatt 1992 2:07.57 D Undberg 1989 1:04.60 M Chatfield 1982 2:30.96 DeForrest/Bottom 83/84 25.16 M Bottom 1984 56.34 J Belardi 1982 2:06.88	22.59 51.25 1:52.17 4:06.99 8:36.83 6:28.69 27.39 58.24 2:07.57 29.88 1:04.60 2:26.73 25.16 56.34
50 free 100 free 200 free 400/500 free 800/1000 free 1500/1650 free 50 back 100 back 200 back 50 brst 100 brst 200 brst 50 fly 100 fly 200 fly	R Peel 1991 19.83 R Peel 1991 44.39 K Switzer 1988 1:40.16 K Switzer 1988 4:32.71 P Asmuth 1985 9:33.93 B Patten 1990 15:46.91 M Rhodenbaugh 1991 23.23 A Gill 1992 49.83 R Hauck 1991 1:50.49 G Rhodenbaugh 1991 25.34 D Lundberg 1990 56.21 D Soltis 1988 2:03.69 C Cobb 1991 22.27 S Knowles 1991 49.71 B Patten 1990 1:49.21	R Peel	23.16 51.74 1:54.00 4:04.50 8:29.19 16:23.21 27.25 58.42 2:09.12 28.81 1:04.91 2:24.68 25.77 57.07	K DeForrest 1983 22.59 J Montgomery 1981 51.25 J Keppeler 1992 1:52.17 C Reid 1987 4:07.73 J Erwin 1992 8:36.83 C Reid 1987 16:28.69 J C Britt 1989 27.48 J Keppeler 1992 58.24 J Keppeler 1992 2:07.57 D Wyatt 1992 2:07.57 D Undberg 1989 1:04.60 M Chatfield 1982 2:30.96 DeForrest/Bottom 83/84 25.16 M Bottom 1984 56.34 J Belardi 1982 2:06.88 C Reid 1987 2:09.21	22.59 51.25 1:52.17 4:06.99 8:36.83 6:28.69 27.39 58.24 2:07.57 29.88 1:04.60 2:26.73 25.16 56.34

MEN 30-34	SC-Yards Year USMS	SC-Meters Year USMS	World	LC-Meters Year USMS	World
50 free	J Smith 1992 20.90	J Montgomery 198923.98	22.82	R Gaines 1990 23.21	23.21
100 free	J Montgomery 1985 45.29	J Montgomery 198951.86	50.51	R Gaines 1991 51.50	51.50
200 free	J Montgomery 1988 1:39.97	D Stephenson 19891:53.66	1:50.91	R Gaines 1990 1:54.04	1:54.04
400/500 free	S Fisher 1992 4:39.38	D Goerke 19894:13.61	4:02.66	J Montgomery 1986 4:08.70	4:08.70
800/1000 free	C Reid 1991 9:38.13	D Stephenson 19898:34.26	8:34.26	J Montgomery 1986 8:46.99	8:46.99
1500/1650 free	J Kegley 1988 . 16:06.55	M Clark 199017:11.56	17:11.56	R Neugent 1991 . 16:42.28	16:42.28
50 back	J C Britt 1992 23.39	J C Britt 1991 27.18	27.18	D Ozier 1988 27.32	27.32
100 back	J C Britt 1992 50.21	J C Britt 199158.12	58.12	D Lundberg 1992 1:00.19	1:00.19
200 back	W Specht 1991 ,. 1:54.42	F Lehman 19892:15.67	2:15.67	T Wolf 1987 2:11.77	2:11.77
50 brst	D Lundberg 1991 25.88	R Hofstetter 1989 30.11	30.03	D Guthrie 1992 29.42	29.42
100 brst	D Lundberg 1991 56.58	M Schuman 19881:08.10	1:05.97	D Lundberg 1991 1:05.65	1:05.65
200 brst	D Lundberg 1991 2:02.32	J Shore 19892:30.18	2:24.92	D Lundberg 1991 2:24.06	2:24.06
50 fly	R Placak 1989 22.66	M Bottom 198925.06	25.06	M Bottom 1988 25.31	25.31
100 fly	W Specht 1989 49.84	M Bottom 198956.43	56.43	M Bottom 1988 56.64	56.64
200 fly	S Gregg 1987 1:50.67	M Schuman 19882:13.62	2:13.62	J Belardi 1987 2:07.71	2:07.71
100 IM	D Lundberg 1991 50.98	J C Britt 1992 59.95	59.95		
200 IM	D Lundberg 1991 1:50.45	T Weissert 19882:12.33	2:12.33	D Lundberg 1991 2:09.69	2:09.69
400 IM	T Fristoe 1991 4:00.04	M Schuman 19884:55.11	4:55.11	D Lundberg 1992 4:40.44	4:40.44
		1		•	
				1	
MEN 35-39	SC-Yards Year USMS	SC-Meters Year USMS	World	LC-Meters Year USMS	World
MEN 35-39 50 free	SC-Yards Year USMS S Marvin	SC-Meters Year USMS B Vickery 1989 23.98	World 23.98	LC-Meters Year USMS R Hess	World 24.56
50 free	S Marvin 1991 21.19	B Vickery 198923.98	23.98	R Hess 1990 24.72	24.56
50 free 100 free	S Marvin 1991 21.19 S Marvin 1991 46.43	B Vickery 198923.98 B Vickery 198953.94	23.98 53.94	R Hess	24.56 54.28
50 free 100 free 200 free	S Marvin	B Vickery 1989 23.98 B Vickery 1989 53.94 L Wood 1989 1:59.38	23.98 53.94 1:59.38	R Hess	24.56 54.28 1:57.95
50 free 100 free 200 free 400/500 free	S Marvin	B Vickery 1989 23.98 B Vickery 1989 53.94 L Wood 1989 1:59.38 R Copeland 1991 4:18.22	23.98 53.94 1:59.38 4:18.22 9:11.41	R Hess	24.56 54.28 1:57.95 4:15.49 9:09.59
50 free 100 free 200 free 400/500 free 800/1000 free	S Marvin	B Vickery 1989 23.98 B Vickery 1989 53.94 L Wood 1989 1:59.38 R Copeland 1991 4:18.22 J Stewart 1992 9:11.41	23.98 53.94 1:59.38 4:18.22 9:11.41	R Hess	24.56 54.28 1:57.95 4:15.49 9:09.59
50 free 100 free 200 free 400/500 free 800/1000 free 1500/1650 free	S Marvin	B Vickery 1989 23.98 B Vickery 1989 53.94 L Wood 1989 1:59.38 R Copeland 1991 4:18.22 J Stewart 1992 9:11.41 R Copeland 1991 17:25.79	23.98 53.94 1:59.38 4:18.22 9:11.41 17:25.79	R Hess	24.56 54.28 1:57.95 4:15.49 9:09.59 17:26.29
50 free 100 free 200 free 400/500 free 800/1000 free 1500/1650 free 50 back	S Marvin	B Vickery 1989 23.98 B Vickery 1989 53.94 L Wood 1989 1:59.38 R Copeland 1991 4:18.22 J Stewart 1992 9:11.41 R Copeland 1991 17:25.79 M Nash 1989 28.05	23.98 53.94 1:59.38 4:18.22 9:11.41 17:25.79 28.05	R Hess	24.56 54.28 1:57.95 4:15.49 9:09.59 17:26.29 28.04
50 free 100 free 200 free 400/500 free 800/1000 free 1500/1650 free 50 back 100 back	S Marvin	B Vickery 1989 23.98 B Vickery 1989 53.94 L Wood 1989 1:59.38 R Copeland 1991 4:18.22 J Stewart 1992 9:11.41 R Copeland 1991 17:25.79 M Nash 1989 28.05 T Wolf 1990 1:01.45	23.98 53.94 1:59.38 4:18.22 9:11.41 17:25.79 28.05 1:01.45	R Hess	24.56 54.28 1:57.95 4:15.49 9:09.59 17:26.29 28.04 1:01.60
50 free 100 free 200 free 400/500 free 800/1000 free 1500/1650 free 50 back 100 back 200 back	S Marvin	B Vickery 1989 23.98 B Vickery 1989 53.94 L Wood 1989 1:59.38 R Copeland 1991 4:18.22 J Stewart 1992 9:11.41 R Copeland 1991 17:25.79 M Nash 1989 28.05 T Wolf 1990 1:01.45 T Wolf 1990 2:15.47	23.98 53.94 1:59.38 4:18.22 9:11.41 17:25.79 28.05 1:01.45 2:15.47	R Hess	24.56 54.28 1:57.95 4:15.49 9:09.59 17:26.29 28.04 1:01.60 2:13.83
50 free 100 free 200 free 400/500 free 800/1000 free 1500/1650 free 50 back 100 back 200 back 50 brst	S Marvin	B Vickery 1989 23.98 B Vickery 1989 53.94 L Wood 1989 1:59.38 R Copeland 1991 4:18.22 J Stewart 1992 9:11.41 R Copeland 1991 17:25.79 M Nash 1989 28.05 T Wolf 1990 1:01.45 T Wolf 1990 2:15.47 R Rachner 1988 31.64	23.98 53.94 1:59.38 4:18.22 9:11.41 17:25.79 28.05 1:01.45 2:15.47 31.94	R Hess	24.56 54.28 1:57.95 4:15.49 9:09.59 17:26.29 28.04 1:01.60 2:13.83 31.52
50 free 100 free 200 free 400/500 free 800/1000 free 1500/1650 free 50 back 100 back 200 back 50 brst 100 brst 200 brst	S Marvin	B Vickery 1989 23.98 B Vickery 1989 53.94 L Wood 1989 1:59.38 R Copeland 1991 4:18.22 J Stewart 1992 9:11.41 R Copeland 1991 17:25.79 M Nash 1989 28.05 T Wolf 1990 1:01.45 T Wolf 1990 2:15.47 R Rachner 1988 31.64 J Roemer 1990 1:08.87	23.98 53.94 1:59.38 4:18.22 9:11.41 17:25.79 28.05 1:01.45 2:15.47 31.94 1:08.30	R Hess	24.56 54.28 1:57.95 4:15.49 9:09.59 17:26.29 28.04 1:01.60 2:13.83 31.52 1:07.90
50 free 100 free 200 free 400/500 free 800/1000 free 1500/1650 free 50 back 100 back 200 back 50 brst 100 brst 200 brst 50 fly	S Marvin	B Vickery 1989 23.98 B Vickery 1989 53.94 L Wood 1989 1:59.38 R Copeland 1991 4:18.22 J Stewart 1992 9:11.41 R Copeland 1991 17:25.79 M Nash 1989 28.05 T Wolf 1990 1:01.45 T Wolf 1990 2:15.47 R Rachner 1988 31.64 J Roemer 1990 1:08.87 G Harrison 1989 2:28.35	23.98 53.94 1:59.38 4:18.22 9:11.41 17:25.79 28.05 1:01.45 2:15.47 31.94 1:08.30 2:28.35	R Hess . 1990 . 24.72 J Montgomery . 1992 . 54.28 D Stephenson . 1992 . 1:57.95 D Stephenson . 1992 . 4:15.49 B Bittler . 1988 . 9:09.59 J McConica . 1989 . 17:26.29 T Mann . 1978 . 28.04 T Wolf . 1990 . 1:01.85 T Wolf . 1990 . 2:13.83 D Malcolm . 1992 . 30.79 M Schuman . 1992 . 1:07.90 M Schuman . 1992 . 2:33.05	24.56 54.28 1:57.95 4:15.49 9:09.59 17:26.29 28.04 1:01.60 2:13.83 31.52 1:07.90 2:33.05
50 free 100 free 200 free 400/500 free 800/1000 free 1500/1650 free 50 back 100 back 200 back 50 brst 100 brst 200 brst 50 fly	S Marvin	B Vickery 1989 23.98 B Vickery 1989 53.94 L Wood 1989 1:59.38 R Copeland 1991 4:18.22 J Stewart 1992 9:11.41 R Copeland 1991 17:25.79 M Nash 1989 28.05 T Wolf 1990 1:01.45 T Wolf 1990 2:15.47 R Rachner 1988 31.64 J Roemer 1990 1:08.87 G Harrison 1989 2:28.35 R Hess 1991 25.96 T Perrin 1989 1:00.62	23.98 53.94 1:59.38 4:18.22 9:11.41 17:25.79 28.05 1:01.45 2:15.47 31.94 1:08.30 2:28.35 25.96	R Hess . 1990 . 24.72 J Montgomery . 1992 . 54.28 D Stephenson . 1992 . 4:5.7.95 D Stephenson . 1992 . 4:15.49 B Bittler . 1988 . 9:09.59 J McConica . 1989 . 17:26.29 T Mann . 1978 . 28.04 T Wolf . 1990 . 1:01.85 T Wolf . 1990 . 2:13.83 D Malcolm . 1992 . 30.79 M Schuman . 1992 . 1:07.90 M Schuman . 1992 . 2:33.05 P Munger . 1987 . 26.35	24.56 54.28 1:57.95 4:15.49 9:09.59 17:26.29 28.04 1:01.60 2:13.83 31.52 1:07.90 2:33.05 26.35 58.08
50 free 100 free 200 free 400/500 free 800/1000 free 1500/1650 free 50 back 100 back 200 back 50 brst 100 brst 200 brst 50 fly 100 fly 200 fly	S Marvin	B Vickery 1989 23.98 B Vickery 1989 53.94 L Wood 1989 1.59.38 R Copeland 1991 4:18.22 J Stewart 1992 9:11.41 R Copeland 1991 17:25.79 M Nash 1989 28.05 T Wolf 1990 1:01.45 T Wolf 1990 1:01.45 T Wolf 1990 2:15.47 R Rachner 1988 31.64 J Roemer 1990 1:08.87 G Harrison 1989 2:28.35 R Hess 1991 25.96 D Vandam 1990 2:17.46	23.98 53.94 1:59.38 4:18.22 9:11.41 17:25.79 28.05 1:01.45 2:15.47 31.94 1:08.30 2:28.35 25.96 1:00.67	R Hess	24.56 54.28 1:57.95 4:15.49 9:09.59 17:26.29 28.04 1:01.60 2:13.83 31.52 1:07.90 2:33.05 26.35
50 free 100 free 200 free 400/500 free 800/1000 free 1500/1650 free 50 back 100 back 200 back 50 brst 100 brst 200 brst 50 fly 100 fly 200 fly 100 IM	S Marvin	B Vickery 1989 23.98 B Vickery 1989 53.94 L Wood 1989 1:59.38 R Copeland 1991 4:18.22 J Stewart 1992 9:11.41 R Copeland 1991 17:25.79 M Nash 1989 28.05 T Wolf 1990 1:01.45 T Wolf 1990 2:15.47 R Rachner 1988 31.64 J Roemer 1990 1:08.87 G Harrison 1989 2:28.35 R Hess 1991 2:596 T Perrin 1989 1:00.62 D Vandam 1990 2:17.46 R Hess 1991 1:01.06	23.98 53.94 1:59.38 4:18.22 9:11.41 17:25.79 28.05 1:01.45 2:15.47 31.94 1:08.30 2:28.35 25.96 1:00.67 2:17.46 1:01.06	R Hess . 1990 . 24.72 J Montgomery . 1992 . 54.28 D Stephenson . 1992 . 1:57.95 D Stephenson . 1992 . 4:15.49 B Bittler . 1988 . 9:09.59 J McConica . 1989 . 17:26.29 T Mann . 1978 . 28.04 T Wolf . 1990 . 1:01.85 T Wolf . 1990 . 2:13.83 D Malcolm . 1992 . 30.79 M Schuman . 1992 . 30.79 M Schuman . 1992 . 2:33.05 P Munger . 1987 . 26.35 J Belardi . 1992 . 58.08 J Belardi . 1992 . 2:09.18	24.56 54.28 1:57.95 4:15.49 9:09.59 17:26.29 28.04 1:01.60 2:13.83 31.52 1:07.90 2:33.05 26.35 58.08 2:09.18
50 free 100 free 200 free 400/500 free 800/1000 free 1500/1650 free 50 back 100 back 200 back 50 brst 100 brst 200 brst 50 fly 100 fly 200 fly	S Marvin	B Vickery 1989 23.98 B Vickery 1989 53.94 L Wood 1989 1:59.38 R Copeland 1991 4:18.22 J Stewart 1992 9:11.41 R Copeland 1991 17:25.79 M Nash 1989 28.05 T Wolf 1990 1:01.45 T Wolf 1990 2:15.47 R Rachner 1988 31.64 J Roemer 1990 1:08.87 G Harrison 1989 2:28.35 R Hess 1991 2:28.35 R Hess 1991 2:5.96 T Perrin 1989 1:00.62 D Vandam 1990 2:17.46 R Hess 1991 1:01.06 C Evans 1989 2:15.67	23.98 53.94 1:59.38 4:18.22 9:11.41 17:25.79 28.05 1:01.45 2:15.47 31.94 1:08.30 2:28.35 25.96 1:00.67 2:17.46	R Hess . 1990 . 24.72 J Montgomery . 1992 . 54.28 D Stephenson . 1992 . 1:57.95 D Stephenson . 1992 . 4:15.49 B Bittler . 1988 . 9:09.59 J McConica . 1989 . 17:26.29 T Mann . 1978 . 28.04 T Wolf . 1990 . 1:01.85 T Wolf . 1990 . 2:13.83 D Malcolm . 1992 . 30.79 M Schuman . 1992 . 30.79 M Schuman . 1992 . 2:33.05 P Munger . 1987 . 26.35 J Belardi . 1992 . 58.08 J Belardi . 1992 . 2:09.18 M Schuman . 1992 . 2:09.18	24.56 54.28 1:57.95 4:15.49 9:09.59 17:26.29 28.04 1:01.60 2:13.83 31.52 1:07.90 2:33.05 26.35 58.08

MEN 40-44	SC-Yards Year	USMS	SC-Meters	Year USMS	World	LC-Meters	Year	USMS	World
50 free	T Whatley 1992	. 21.72	A McPherson	. 198824.91	24.91	T Whatley	1992	24.93	25.25
100 free	A McPherson 1991	. 48.54	A McPherson	. 198855.35	55.35	T Garton	1983	56.36	56.01
200 free	P O'Keefe 1991 1	1:47.90	K Polansky	. 19892:01.01	2:01.01	K Polansky	1990 2	2:04.82	2:04.82
400/500 free	D Gray 1987 4	4:50.80	K Polansky	. 19894:18.45	4:18.45	K Polansky	1990 4	:26.60	4:26.60
800/1000 free	K Polansky 1992 . 10	0:17.35	K Polansky	. 19899:01.20	9:01.20	K Polansky	1990 9	19.37	9:19.37
1500/1650 free	K Polansky 1990 . 17	7:02.40	D Gray	. 198717:38.17	17:38.17	K Polansky	1990 . 17	:30.13	17:30.13
50 back	J Heidenreich 1991	. 25.61	J Heidenreich	. 199128.93	28.93	P O'Keefe	1990	29.38	29.38
100 back	P O'Keefe 1991	. 54.15	R Cooley	. 19891:04.50	1:04.50	P O'Keefe	1990 1	:03.39	1:03.39
200 back	P O'Keefe 1991 2	2:01.54	T Spieker	. 19892:22.17	2:22.17	P O'Keefe	1990 2	2:18.17	2:18.17
50 brst	C Miltenberger 1992	. 27.45	P Henne	. 198931.33	31.33	P Dahlberg	1992	30.82	30.82
100 brst	C Miltenberger 1992 1	1:00.10	P Henne	. 19891:11.22	1:10.70	P Dahlberg	1992 1	:09.95	1:09.95
200 brst	R Colella 1992 2	2:12.85	R Strand	. 19902:38.99	2:38.16	P Dahlberg	1992 2	2:32.17	2:32.17
50 fly	D Thompson 1991	. 23.63	J Heidenreich	. 199126.67	26.67	J Foote	1991	27.04	27.04
100 fly	P O'Keefe 1991	. 53.91	A McPherson	. 19891:00.79	1:00.79	L Larson	1980 1	:02.05	1:02.05
200 fly	B Gallas 1990 2	2:02.09	B Gallas	. 19892:16.15	2:16.15	B Gallas	1988 2	:23.05	2:23.05
100 IM	T Whatley 1992	. 55.59	R Cooley	. 19891:02.30	1:02.30				
200 IM	P O'Keefe 1991 2	2:03.31	J Calvert	. 19892:18.73	2:18.73	R Colella	1992 2	:18.92	2:18.92
400 IM	J Calvert 1988 4		J Calvert		5:00.76	R Colella	1992 4	:57.46	4:57.46
		1							
MEN 45-49	SC-Yards Year	USMS	SC-Meters	Year USMS	World	LC-Meters	Year	USMS	World
MEN 45-49 50 free	SC-Yards Year R Abrahams 1990		SC-Meters R Abrahams		World 25.46	LC-Meters R Abrahams			World 25.30
		. 21.87		. 199125.07		CANADA CONTRACTOR CONT	1990	25.30	
50 free	R Abrahams 1990	. 21.87 . 48.13	R Abrahams	. 199125.07 . 198956.64	25.46	R Abrahams	1990 1992	25.30 57.04	25.30
50 free 100 free	R Abrahams 1990 A McPherson 1992	. 21.87 . 48.13 1:49.27	R Abrahams K Lodwig	. 199125.07 . 198956.64 . 19882:05.81	25.46 56.64	R Abrahams A McPherson	1990 1992 1990 2	25.30 57.04 :07.18	25.30 57.04
50 free 100 free 200 free	R Abrahams 1990 A McPherson 1992 A McPherson 19921	. 21.87 . 48.13 1:49.27 5:03.69	R Abrahams K Lodwig E Cazalet	. 199125.07 . 198956.64 . 19882:05.81 . 19894:33.39	25.46 56.64 2:05.81	R Abrahams A McPherson T Garton	1990 1992 1990 2	25.30 57.04 ::07.18 ::27.70	25.30 57.04 2:07.18
50 free 100 free 200 free 400/500 free	R Abrahams 1990	. 21.87 . 48.13 1:49.27 5:03.69 0:46.40	R Abrahams K Lodwig E Cazalet E Cazalet	. 199125.07 . 198956.64 . 19882:05.81 . 19894:33.39 . 19899:32.34	25.46 56.64 2:05.81 4:29.82 9:26.18	R Abrahams A McPherson T Garton B Momsen	1990 1992 1990 2 1992 4	25.30 57.04 :07.18 :27.70 :49.15	25.30 57.04 2:07.18 4:27.70 9:49.15
50 free 100 free 200 free 400/500 free 800/1000 free	R Abrahams	. 21.87 . 48.13 1:49.27 5:03.69 0:46.40 7:59.11	R Abrahams	. 199125.07 . 198956.64 . 19882:05.81 . 19894:33.39 . 19899:32.34 . 198718:27.36	25.46 56.64 2:05.81 4:29.82 9:26.18	R Abrahams A McPherson T Garton B Momsen D Gray	1990 1992 1990 1992 1991 1983 . 18	25.30 57.04 2:07.18 2:27.70 2:49.15 3:34.73	25.30 57.04 2:07.18 4:27.70 9:49.15
50 free 100 free 200 free 400/500 free 800/1000 free 1500/1650 free	R Abrahams 1990 A McPherson 1992 A McPherson 1992 B Momsen 1992 J Flanagan 1991 W Steuart 1983	. 21.87 . 48.13 1:49.27 5:03.69 0:46.40 7:59.11 . 25.65	R Abrahams	. 199125.07 . 198956.64 . 19882:05.81 . 19894:33.39 . 19899:32.34 . 198718:27.36 . 198929.33	25.46 56.64 2:05.81 4:29.82 9:26.18 18:10.24	R Abrahams A McPherson T Garton B Momsen D Gray E Hinshaw		25.30 57.04 2:07.18 2:27.70 2:49.15 3:34.73 30.67	25.30 57.04 2:07.18 4:27.70 9:49.15 18:34.73
50 free 100 free 200 free 400/500 free 800/1000 free 1500/1650 free 50 back	R Abrahams 1990 A McPherson 1992 A McPherson 1992 B Momsen 1992 J Flanagan 1991 W Steuart 1983 R Smith 1988	. 21.87 . 48.13 1:49.27 5:03.69 0:46.40 7:59.11 . 25.65	R Abrahams K Lodwig E Cazalet E Cazalet H Boyd H Winn R Smith	. 199125.07 . 198956.64 . 19882:05.81 . 19894:33.39 . 19899:32.34 . 198718:27.36 . 198929.33 . 19891:05.31	25.46 56.64 2:05.81 4:29.82 9:26.18 18:10.24 29.33	R Abrahams A McPherson T Garton B Momsen D Gray E Hinshaw R Burns		25.30 57.04 ::07.18 ::27.70 ::49.15 ::34.73 30.67 ::06.00	25.30 57.04 2:07.18 4:27.70 9:49.15 18:34.73 30.67
50 free 100 free 200 free 400/500 free 800/1000 free 1500/1650 free 50 back 100 back	R Abrahams 1990 A McPherson 1992 A McPherson 1992 B Momsen 1992 J Flanagan 1991 W Steuart 1983 R Smith 1988 R Smith 1988	. 21.87 . 48.13 1:49.27 5:03.69 0:46.40 7:59.11 . 25.65 . 56.14 2:05.50	R Abrahams K Lodwig E Cazalet E Cazalet R Boyd H Winn R Smith R Smith	. 199125.07 . 198956.64 . 19882:05.81 . 19894:33.39 . 19899:32.34 . 198718:27.36 . 198929.33 . 198929.33 . 19891:05.31	25.46 56.64 2:05.81 4:29.82 9:26.18 18:10.24 29.33 1:05.31	R Abrahams A McPherson T Garton B Momsen D Gray E Hinshaw R Burns H Wilder		25.30 57.04 1:07.18 1:27.70 1:49.15 1:34.73 30.67 1:06.00 1:26.91	25.30 57.04 2:07.18 4:27.70 9:49.15 18:34.73 30.67 1:06.00
50 free 100 free 200 free 400/500 free 800/1000 free 1500/1650 free 50 back 100 back 200 back	R Abrahams 1990 A McPherson 1992 A McPherson 1992 B Momsen 1992 5 J Flanagan 1991 10 W Steuart 1983 17 R Smith 1988 R Smith 1988 J Calvert 1992	. 21.87 . 48.13 1:49.27 5:03.69 0:46.40 7:59.11 . 25.65 . 56.14 2:05.50	R Abrahams K Lodwig E Cazalet E Cazalet R Boyd H Winn R Smith R Smith J Calvert	. 199125.07 . 198956.64 . 19882:05.81 . 19894:33.39 . 19899:32.34 . 198718:27.36 . 198929.33 . 19891:05.31 . 19912:24.87 . 199132.23	25.46 56.64 2:05.81 4:29.82 9:26.18 18:10.24 29.33 1:05.31 2:24.87	R Abrahams A McPherson T Garton B Momsen D Gray E Hinshaw R Burns H Wilder J Calvert	1990 1992 1990 1990 1990 1991 1983 1988 1992 1992 1992 1992	25.30 57.04 2:07.18 2:27.70 2:49.15 33.67 2:06.00 2:26.91 32.76	25.30 57.04 2:07.18 4:27.70 9:49.15 18:34.73 30.67 1:06.00 2:26.91
50 free 100 free 200 free 400/500 free 800/1000 free 1500/1650 free 50 back 100 back 200 back 50 brst	R Abrahams 1990 A McPherson 1992 A McPherson 1992 B Momsen 1992 J Flanagan 1991 W Steuart 1983 R Smith 1988 R Smith 1988 J Calvert 1992 R Nesbit 1991	. 21.87 . 48.13 1:49.27 5:03.69 0:46.40 7:59.11 . 25.65 . 56.14 2:05.50 . 28.32 1:02.48	R Abrahams K Lodwig E Cazalet R Boyd H Winn R Smith R Smith J Calvert P Henne	. 199125.07 . 198956.64 . 19882:05.81 . 19894:33.39 . 19899:32.34 . 198718:27.36 . 198929.33 . 19891:05.31 . 19912:24.87 . 199132.23 . 19911:10.70	25.46 56.64 2:05.81 4:29.82 9:26.18 18:10.24 29.33 1:05.31 2:24.87 31.95	R Abrahams A McPherson T Garton B Momsen D Gray E Hinshaw R Burns H Wilder J Calvert R Nesbit	1990 1992 1990 1990 1992 1993 1983 1988 1992 1992 1991 1992	25.30 57.04 2:07.18 2:27.70 2:49.15 33.67 2:06.00 2:26.91 32.76 12.98	25.30 57.04 2:07.18 4:27.70 9:49.15 18:34.73 30.67 1:06.00 2:26.91 32.76
50 free 100 free 200 free 400/500 free 800/1000 free 1500/1650 free 50 back 100 back 200 back 50 brst 100 brst 200 brst	R Abrahams 1990 A McPherson 1992 A McPherson 1992 B Momsen 1992 J Flanagan 1991 W Steuart 1983 R Smith 1988 J Calvert 1992 R Nesbit 1991 M Hull 1989 Hugge Hugge	. 21.87 . 48.13 1:49.27 5:03.69 0:46.40 7:59.11 . 25.65 . 56.14 2:05.50 . 28.32 1:02.48 2:18.68	R Abrahams K Lodwig E Cazalet E Cazalet H Winn R Smith R Smith J Calvert P Henne R Strand	. 199125.07 . 198956.64 . 19882:05.81 . 19894:33.39 . 19899:32.34 . 198718:27.36 . 198929.33 . 19891:05.31 . 19912:24.87 . 199132.23 . 199132.23	25.46 56.64 2:05.81 4:29.82 9:26.18 18:10.24 29.33 1:05.31 2:24.87 31.95 1:10.70	R Abrahams A McPherson T Garton B Momsen D Gray E Hinshaw R Burns H Wilder J Calvert R Nesbit R Strand	1990 1992 1990 1990 1990 1992 1993 1988 1992 1992 1992 1992 1992 1992 1992	25.30 57.04 2:07.18 2:27.70 2:49.15 3:34.73 30.67 2:06.00 2:26.91 32.76 2:12.98 2:41.88	25.30 57.04 2:07.18 4:27.70 9:49.15 18:34.73 30.67 1:06.00 2:26.91 32.76 1:12.98
50 free 100 free 200 free 400/500 free 800/1000 free 1500/1650 free 50 back 100 back 200 back 50 brst 100 brst 200 brst 50 fly	R Abrahams 1990 A McPherson 1992 A McPherson 1992 B Momsen 1992 J Flanagan 1991 W Steuart 1983 R Smith 1988 R Smith 1988 J Calvert 1992 R Nesbit 1991 M Hull 1989 R Strand 1991 R Strand 1991	. 21.87 . 48.13 1:49.27 5:03.69 0:46.40 7:59.11 . 25.65 . 56.14 2:05.50 . 28.32 1:02.48 2:18.68	R Abrahams K Lodwig E Cazalet E Cazalet R Boyd H Winn R Smith R Smith J Calvert P Henne R Strand R Strand	. 199125.07 . 198956.64 . 19882:05.81 . 19899:32.34 . 198718:27.36 . 198929.33 . 19891:05.31 . 19912:24.87 . 199132.23 . 19911:10.70 . 19912:41.02	25.46 56.64 2:05.81 4:29.82 9:26.18 18:10.24 29.33 1:05.31 2:24.87 31.95 1:10.70 2:41.02	R Abrahams A McPherson T Garton B Momsen D Gray E Hinshaw R Burns H Wilder J Calvert R Nesbit R Strand P Wisner	1990 1992 1990 1992 1992 1993 1993 1998 1992 1992 1992 1992 1992 1992 1992 1992	25.30 57.04 1:07.18 1:27.70 1:49.15 1:34.73 30.67 1:06.00 1:26.91 32.76 1:12.98 1:41.88 27.12	25.30 57.04 2:07.18 4:27.70 9:49.15 18:34.73 30.67 1:06.00 2:26.91 32.76 1:12.98 2:42.29
50 free 100 free 200 free 400/500 free 800/1000 free 1500/1650 free 50 back 100 back 200 back 50 brst 100 brst 200 brst 50 fly 100 fly	R Abrahams 1990 A McPherson 1992 A McPherson 1992 B Momsen 1992 J Flanagan 1991 W Steuart 1983 R Smith 1988 J Calvert 1992 R Nesbit 1991 Hull 1989 R Strand 1991 Hull 1989 Hull 1989	. 21.87 . 48.13 1:49.27 5:03.69 0:46.40 7:59.11 . 25.65 . 56.14 2:05.50 . 28.32 1:02.48 2:18.68 . 24.24	R Abrahams K Lodwig E Cazalet E Cazalet R Boyd H Winn R Smith J Calvert P Henne R Strand R Strand R Woodrow	. 199125.07 . 198956.64 . 19882:05.81 . 19899:32.34 . 198718:27.36 . 198929.33 . 198929.33 . 19891:05.31 . 19912:24.87 . 199132.23 . 19911:10.70 . 19912:41.02 . 198927.62 . 19901:03.48	25.46 56.64 2:05.81 4:29.82 9:26.18 18:10.24 29.33 1:05.31 2:24.87 31.95 1:10.70 2:41.02 27.62	R Abrahams A McPherson T Garton B Momsen D Gray E Hinshaw R Burns H Wilder J Calvert R Nesbit R Strand P Wisner D Thompson	1990 1992 1990 1990 1992 1991 1992 1992 1992 1992 1992 1992 1992 1992 1992 1992 1992	25.30 57.04 1:07.18 1:27.70 1:49.15 1:34.73 30.67 1:06.00 1:26.91 32.76 1:12.98 1:41.88 27.12 1:02.84	25.30 57.04 2:07.18 4:27.70 9:49.15 18:34.73 30.67 1:06.00 2:26.91 32.76 1:12.98 2:42.29 27.12
50 free 100 free 200 free 400/500 free 800/1000 free 1500/1650 free 50 back 100 back 200 back 50 brst 100 brst 200 brst 50 fly 100 fly 200 fly	R Abrahams 1990 A McPherson 1992 A McPherson 1992 B Momsen 1992 J Flanagan 1991 W Steuart 1983 R Smith 1988 J Calvert 1992 R Nesbit 1991 M Hull 1989 R Strand 1991 Hull 1989 M Hull 1989	. 21.87 . 48.13 1:49.27 5:03.69 0:46.40 7:59.11 . 25.65 . 56.14 2:05.50 . 28.32 1:02.48 2:18.68 2:4.24 . 24.24 . 54.27 2:04.32	R Abrahams K Lodwig E Cazalet E Cazalet R Boyd H Winn R Smith R Smith P Henne R Strand R Strand R Woodrow G Langendoen G Langendoen	. 199125.07 . 198956.64 . 19882:05.81 . 19894:33.39 . 19899:32.34 . 198718:27.36 . 198929.33 . 19891:05.31 . 19912:24.87 . 199132.23 . 19911:10.70 . 19912:41.02 . 19912:41.02 . 198927.62 . 19902:48 . 19902:28.48	25.46 56.64 2:05.81 4:29.82 9:26.18 18:10.24 29.33 1:05.31 2:24.87 31.95 1:10.70 2:41.02 27.62 1:03.48	R Abrahams A McPherson T Garton B Momsen D Gray E Hinshaw R Burns H Wilder J Calvert R Nesbit R Strand P Wisner D Thompson A McPherson	1990 1992 1990 1990 1992 1991 1992 1992 1992 1992 1992 1992 1992 1992 1992 1992 1992	25.30 57.04 1:07.18 1:27.70 1:49.15 1:34.73 30.67 1:06.00 1:26.91 32.76 1:12.98 1:41.88 27.12 1:02.84	25.30 57.04 2:07.18 4:27.70 9:49.15 18:34.73 30.67 1:06.00 2:26.91 32.76 1:12.98 2:42.29 27.12 1:02.84
50 free 100 free 200 free 400/500 free 800/1000 free 1500/1650 free 50 back 100 back 200 back 50 brst 100 brst 200 brst 50 fly 100 fly 200 fly 100 IM	R Abrahams 1990 A McPherson 1992 A McPherson 1992 B Momsen 1992 J Flanagan 1991 W Steuart 1983 R Smith 1988 J Calvert 1992 R Nesbit 1991 M Hull 1989 Hull 1989 Hull 1989 Hull 1989 Hull 1989 A Melamed 1991 R Smith 1988	. 21.87 . 48.13 1:49.27 5:03.69 0:46.40 7:59.11 . 25.65 . 56.14 2:05.50 . 28.32 1:02.48 2:18.68 . 24.24 54.27 2:04.32	R Abrahams K Lodwig E Cazalet E Cazalet R Boyd H Winn R Smith J Calvert P Henne R Strand R Strand R Woodrow G Langendoen	. 199125.07 . 198956.64 . 19882:05.81 . 19894:33.39 . 19699:32.34 . 198718:27.36 . 198929.33 . 19891:05.31 . 19912:24.87 . 199132.23 . 19911:10.70 . 19912:41.02 . 198927.62 . 19901:03.48 . 19901:03.48	25.46 56.64 2:05.81 4:29.82 9:26.18 18:10.24 29.33 1:05.31 2:24.87 31.95 1:10.70 2:41.02 27.62 1:03.48 2:28.48	R Abrahams A McPherson T Garton B Momsen D Gray E Hinshaw R Burns H Wilder J Calvert R Nesbit R Strand P Wisner D Thompson A McPherson	1990 1992 1990 1990 1990 1990 1992 1993 1988 1982 1992 1992 1992 1992 1992 1992 1992 1992 1992	25.30 57.04 1:07.18 1:27.70 1:49.15 1:34.73 30.67 1:06.00 1:26.91 32.76 1:12.98 1:41.82 27.12 1:02.84 1:30.80	25.30 57.04 2:07.18 4:27.70 9:49.15 18:34.73 30.67 1:06.00 2:26.91 32.76 1:12.98 2:42.29 27.12 1:02.84
50 free 100 free 200 free 400/500 free 800/1000 free 1500/1650 free 50 back 100 back 200 back 50 brst 100 brst 200 brst 50 fly 100 fly 200 fly	R Abrahams 1990 A McPherson 1992 A McPherson 1992 B Momsen 1992 J Flanagan 1991 W Steuart 1983 R Smith 1988 J Calvert 1992 R Nesbit 1991 M Hull 1989 R Strand 1991 Hull 1989 M Hull 1989	. 21.87 . 48.13 1:49.27 5:03.69 0:46.40 7:59.11 . 25.65 . 56.14 2:05.50 . 28.32 1:02.48 2:18.68 . 24.24 . 54.27 2:04.32	R Abrahams K Lodwig E Cazalet E Cazalet R Boyd H Winn R Smith R Smith J Calvert P Henne R Strand R Strand R Woodrow G Langendoen R Smith	. 199125.07 . 198956.64 . 19882:05.81 . 19894:33.39 . 19899:32.34 . 198718:27.36 . 198929.33 . 19891:05.31 . 19912:24.87 . 199132.23 . 19911:10.70 . 19912:41.02 . 198927.62 . 19901:03.48 . 19902:28.48 . 19901:06.13 . 19912:24.45	25.46 56.64 2:05.81 4:29.82 9:26.18 18:10.24 29.33 1:05.31 2:24.87 31.95 1:10.70 2:41.02 27.62 1:03.48 2:28.48 1:06.13	R Abrahams A McPherson T Garton B Momsen D Gray E Hinshaw R Burns H Wilder J Calvert R Nesbit R Strand P Wisner D Thompson A McPherson J Lindley	1990 1992 1990 1990 1990 1990 1991 1993 1998 1992 1992 1992 1992 1992 1992 1992 1992 1992 1992 1992	25.30 57.04 ::07.18 ::27.70 ::49.15 ::34.73 30.67 ::06.00 ::26.91 32.76 ::12.98 ::41.88 27.12 ::02.84 ::30.80	25.30 57.04 2:07.18 4:27.70 9:49.15 18:34.73 30.67 1:06.00 2:26.91 32.76 1:12.98 2:42.29 27.12 1:02.84 2:30.80

50 free D Hill	Year USMS	World
100 free J Geoghegan 1992 51.86 R Proebsting 1989 59.80 59.21 D Hill	1983 26.16	26.16
	1983 59.25	59.25
200 free J Geoghegan 1992 1:55.33 G Hopkins	1988 2:14.39	2:14.39
400/500 free E Hinshaw 1990 5:13.80 B Jones 1985 4:45.96 4:45.96 E Cazalet	1992 4:50.97	4:50.97
800/1000 free E Hinshaw 1987 . 11:00.03 D Gallagher 1989 9:50.17 9:50.17 E Hinshaw	1988 . 10:04.71	10:04.71
1500/1650 free B Jones 1985 . 18:53.29 B Jones 1985 . 19:16.63 19:04.02 B Jones	1985 . 19:28.41	19:28.41
50 back J Smith	1988 30.93	30.93
100 back J Smith 1991 1:00.88 J Smith	1988 1:10.14	1:10.14
200 back L Larson	1985 2:35.44	2:35.44
50 brst M Sanguily 1984 29.70 M Sanguily 1987 34.15 33.09 M Sanguily	1983 33.85	33.38
100 brst M Sanguily 1984 1:05.29 D Gallagher 1989 1:14.72 1:14.72 M Sanguily	1983 1:15.60	1:15.60
200 brst D Gallagher 1989 2:28.78 D Gallagher 1989 2:45.11 2:45.11 M Sanguily	1983 2:53.76	2:51.68
50 fly M Mealiffe 1991 25.50 R Proebsting 1988 29.34 29.34 M Mealiffe	1990 28.63	28.63
100 fly R Proebsting 1988 58.39 R Proebsting 1989 1:06.66 1:06.66 M Mealiffe	1990 1:07.04	1:07.04
200 fly J Geoghegan 1992 2:13.71 R Proebsting 1989 2:36.01 2:36.01 W Yorzyk	1983 2:33.79	2:33.79
100 IM D Gallagher 1989 1:00.66 D Gallagher 1989 1:07.60		
200 IM D Gallagher 1989 . 2:13.98 D Gallagher 1989 . 2:31.52 D Gallagher	1989 2:34.67	2:34.67
400 IM D Gallagher 1992 4:50.23 D Gallagher 1989 5:20.81 5:20.81 B Jones	1985 5:41.04	5:41.04
MEN 55-59 SC-Yards Year USMS SC-Meters Year USMS World LC-Meters	Year USMS	World
50 free D Hill	1988 27.42	27.42
100 free D Hill	1991 1:01.95	1:01.95
200 free B Jones 1988 2:02.93 B Jones 19902:21.68 2:21.68 B Jones	1990 2:21.53	2:21.33
400/500 free B Jones	1988 4:58.41	4:58.41
800/1000 free B Jones 1990 . 11:26.99 G Johnston 1987 . 10:35.62 10:35.62 B Jones	1988 . 10:27.08	10:27.08
1500/1650 free B Jones 1988 . 19:02.45 B Jones 199020:03.24 20:03.24 B Jones	1990 . 19:54.72	19:54.72
	1992 32.94	32.94
50 back Y Oyakawa 1991 28.15 Y Oyakawa 1989 32.69 32.69 Y Oyawaka		
50 back Y Oyakawa 1991 28.15 Y Oyakawa 1989 32.69 32.69 Y Oyawaka 100 back Y Oyakawa 1991 1:02.56 Y Oyakawa 1989 1:12.17 1:12.17 J Beattie	1990 1:13.15	1:13.15
1 · ·		1:13.15 2:42.37
100 back Y Oyakawa 1991 1:02.56 Y Oyakawa 19891:12.17 1:12.17 J Beattie	1988 2:42.37	
100 back Y Oyakawa 1991 1:02.56 Y Oyakawa 1989 1:12.17 1:12.17 J Beattie 200 back D Brown 1991 2:20.56 J Beattie 1989 2:41.11 2:41.11 D Brown	1988 2:42.37 1988 34.20	2:42.37
100 back Y Oyakawa 1991 1:02.56 Y Oyakawa 1989 1:12.17 1:12.17 J Beattie 200 back D Brown 1991 2:20.56 J Beattie 1989 2:41.11 2:41.11 D Brown 50 brst M Sanguily 1989 30.18 M Sanguily 1989 33.77 33.52 J Kortheuer	1988 2:42.37 1988 34.20 1988 1:17.87	2:42.37 33.58
100 back Y Oyakawa 1991 1:02.56 Y Oyakawa 1989 1:12.17 1:12.17 J Beattie	1988 2:42.37 1988 34.20 1988 1:17.87 1988 2:58.83	2:42.37 33.58 1:17.87
100 back Y Oyakawa 1991 1:02.56 Y Oyakawa 1989 1:12.17 1:12.17 J Beattie 200 back D Brown 1991 2:20.56 J Beattie 1989 2:41.11 2:41.11 D Brown 50 brst M Sanguily 1989 30.18 M Sanguily 1989 33.77 33.52 J Kortheuer 100 brst M Sanguily 1989 1:06.93 M Sanguily 1988 1:16.32 1:16.32 J Kortheuer 200 brst M Sanguily 1989 2:34.15 M Sanguily 1989 2:51.47 2:51.47 M Sanguily	1988 2:42.37 1988 34.20 1988 1:17.87 1988 2:58.83 1992 30 17	2:42.37 33.58 1:17.87 2:56.20
100 back Y Oyakawa 1991 1:02.56 Y Oyakawa 1989 1:12.17 1:12.17 J Beattie 200 back D Brown 1991 2:20.56 J Beattie 1989 2:41.11 2:41.11 D Brown 50 brst M Sanguily 1989 30.18 M Sanguily 1989 33.77 33.52 J Kortheuer 100 brst M Sanguily 1989 1:16.32 1:16.32 J Kortheuer 200 brst M Sanguily 1989 2:34.15 M Sanguily 1989 2:51.47 2:51.47 M Sanguily 50 fly B Bailie 1991 26.91 R Bailie 1990 30.15 R Proebsting	1988 2:42.37 1988 34.20 1988 1:17.87 1988 2:58.83 1992 30 17 1992 1:10.28	2:42.37 33.58 1:17.87 2:56.20 30.17
100 back Y Oyakawa 1991 1:02.56 Y Oyakawa 1989 1:12.17 1:12.17 J Beattie	1988 2:42.37 1988 34.20 1988 1:17.87 1988 2:58.83 1992 30 17 1992 1:10.28	2:42.37 33.58 1:17.87 2:56.20 30.17 1:10.28
100 back Y Oyakawa 1991 1:02.56 Y Oyakawa 1989 1:12.17 1:12.17 J Beattie 200 back D Brown 1991 2:20.56 J Beattie 1989 2:41.11 2:41.11 D Brown 50 brst M Sanguily 1989 30.18 M Sanguily 1989 33.77 33.52 J Kortheuer 100 brst M Sanguily 1989 1:06.93 M Sanguily 1988 1:16.32 1:16.32 J Kortheuer 200 brst M Sanguily 1989 2:34.15 M Sanguily 1989 2:51.47 2:51.47 M Sanguily 50 fly B Bailie 1991 26.91 R Bailie 1990 30.15 30.15 R Proebsting 100 fly W Dobler 1989 1:00.88 D Costill 1991 1:12.51 1:13.47 R Proebsting 200 fly B Yorzyk 1989 2:24.68 M Sanguily 1989 2:53.71 2:53.71 R Proebsting	1988 2:42.37 1988 34.20 1988 1:17.87 1988 2:58.83 1992 30 17 1992 1:10.28 1992 2:48.98	2:42.37 33.58 1:17.87 2:56.20 30.17 1:10.28

MEN 60-64	SC-Yards	Year	USMS	SC-Meters	Year	USMS	World	LC-Meters	Year	USMS	World
50 free	P Powlison	. 1985 .	25.19	F Piemme	1988	28.86	28.30	D H111	1992	27.86	27.86
100 free	P Powlison	. 1985 .	56.09	C Baldwin	1990	1:05.52	1:05.52	D H111	1992	1:02.80	1:02.80
200 free	P Powlison	. 1985 .	. 2:07.53	G Johnston	1991	2:21.77	2:21.77	D H111		2:23.11	2:23.11
400/500 free	G Johnston	. 1991 .	. 5:38.17	G Johnston	1992	5:03.13	5:03.13	G Johnston	1991	5:02.70	5:09.21
800/1000 free	G Johnston	. 1991 .	11:51.48	W Phillips	19891	1:14.13	11:14.13	G Johnston	1 1991	. 10:36.09	10:36.09
1500/1650 free	G Johnston	. 1992 .	19:41.57	W Wilson	19902	1:46.98	21:46.98	G Johnston	1 1991	. 20:06.80	20:06.80
50 back	P Hutinger	. 1985 .	30.65	P Hutinger	1986	34.81	34.81	P Hutinger		35.02	34.39
100 back	P Hutinger	. 1985 .	. 1:07.47	P Hutinger	1986	1:17.31	1:17.31	P Hutinger	1986	1:18.06	1:16.38
200 back	R Bennett	. 1991 .	. 2:28.45	R Franks	1989	2:49.82	2:49.82	R Franks .		2:52.67	2:49.36
50 brst	A Kahkonen	. 1992 .	31.76	J Kortheuer	1991	35.31	37.53	J Kortheue	ır 1991	35.91	35.91
100 brst	J Kortheuer	. 1991 .	. 1:10.37	J Kortheuer	1991	1:18.77	1:23.19	J Kortheue	er 1991	1:21.58	1:21.58
200 brst	J Kortheuer	. 1991 .	. 2:40.96	J Kortheuer	1991	3:00.71	3:06.66	H Kortheue	r 1991	3:08.59	3:08.59
50 fly	P Hutinger	. 1986 .	28.50	J Kortheuer	1991	32.34	32.09	F Piemme .		32.19	32.19
100 fly	J Kortheuer	. 1991 .	. 1:06.31	J Kortheuer	1991	1:15.69	1:16.56	W Wilson .		1:17.39	1:17.39
200 fly	J Masters	. 1991 .	. 2:38.59	C Moss	1989	3:06.04	3:06.04	J Masters	1990	3:00.99	3:00.99
100 IM	P Hutinger	. 1986 .	. 1:06.39	J Kortheuer	1991	1:14.68	1:15.84				
200 IM	G Johnston	. 1991 .	. 2:30.59	G Johnston	1991	2:46.69	2:46.69	G Johnston	1 1991	2:51.41	2:51.41
400 IM	G Johnston	. 1991 .	. 5:22.98	G Johnston	1992	6:03.45	6:03.45	G Johnston	1 1991	6:04.99	6:04.99
			İ				1				
MEN 65-69	SC-Yards	Year	USMS	SC-Meters	Year	USMS	World	LC-Meters	Year	USMS	World
MEN 65-69 50 free	SC-Yards P Powlison			SC-Meters F Piemme			World 29.63		Year 1 1987		World 28.94
		. 1987 .	25.62		1990	29.63		P Powlison		29.17	
50 free	P Powlison	. 1987 . . 1987 .	25.62 56.24	F Piemme	1990 1990	29.63 1:07.13	29.63	P Powlison J Welch		29.17	28.94
50 free 100 free	P Powlison P Powlison	. 1987 . . 1987 . . 1987 .	25.62 56.24 . 2:10.80	F Piemme	1990 1990	29.63 1:07.13 2:36.10	29.63 1:07.13	P Powlison J Welch P Powlison		29.17 1:08.15 2:32.90	28.94 1:08.15
50 free 100 free 200 free	P Powlison P Powlison P Powlison	. 1987 . . 1987 . . 1987 . . 1991 .	25.62 56.24 . 2:10.80 . 6:15.85	F Piemme F Piemme F Piemme	1990 1990 1990	29.63 1:07.13 2:36.10 5:37.93	29.63 1:07.13 2:36.10 5:37.93	P Powlison J Welch P Powlison J Welch		29.17 1:08.15 2:32.90 5:38.79	28.94 1:08.15 2:32.90 5:38.79
50 free 100 free 200 free 400/500 free	P Powlison P Powlison P Powlison F Piemme W Wilson	. 1987 . . 1987 . . 1987 . . 1991 .	25.62 56.24 . 2:10.80 . 6:15.85 13:02.54	F Piemme F Piemme F Piemme E Kerswill	1990 1990 1990 1991	29.63 1:07.13 2:36.10 5:37.93 1:55.05	29.63 1:07.13 2:36.10 5:37.93 11:55.05	P Powlison J Welch P Powlison J Welch R Franks .		29.17 1:08.15 2:32.90 5:38.79 . 11:55.35	28.94 1:08.15 2:32.90 5:38.79 11:35.97
50 free 100 free 200 free 400/500 free 800/1000 free	P Powlison P Powlison P Powlison F Piemme W Wilson	. 1987 . . 1987 . . 1987 . . 1991 . . 1992 .	25.62 56.24 . 2:10.80 . 6:15.85 13:02.54 22:00.93	F Piemme	1990 1990 1990 1991 19901	29.63 1:07.13 2:36.10 5:37.93 1:55.05 2:21.91	29.63 1:07.13 2:36.10 5:37.93 11:55.05	P Powlison J Welch P Powlison J Welch R Franks . W Wilson .		29.17 1:08.15 2:32.90 5:38.79 . 11:55.35 . 22:29.32	28.94 1:08.15 2:32.90 5:38.79 11:35.97
50 free 100 free 200 free 400/500 free 800/1000 free 1500/1650 free	P Powlison P Powlison P Powlison F Piemme W Wilson F Piemme	. 1987 . . 1987 . . 1987 . . 1991 . . 1992 . . 1991 .	25.62 56.24 . 2:10.80 . 6:15.85 13:02.54 22:00.93 31.39	F Piemme	1990 1990 1990 1991 19901 19902	29.63 1:07.13 2:36.10 5:37.93 1:55.05 2:21.91	29.63 1:07.13 2:36.10 5:37.93 11:55.05 22:21.91	P Powlison J Welch P Powlison J Welch R Franks . W Wilson . G Gandsey		29.17 1:08.15 2:32.90 5:38.79 . 11:55.35 . 22:29.32	28.94 1:08.15 2:32.90 5:38.79 11:35.97 22:29.32
50 free 100 free 200 free 400/500 free 800/1000 free 1500/1650 free 50 back	P Powlison P Powlison P Powlison F Piemme W Wilson F Piemme P Hutinger	. 1987 . . 1987 . . 1987 . . 1991 . . 1992 . . 1991 . . 1989 .	25.62 56.24 . 2:10.80 . 6:15.85 13:02.54 22:00.93 31.39 .1:10.45	F Piemme	1990 1990 1990 1991 1990 1990	29.63 1:07.13 2:36.10 5:37.93 1:55.05 2:21.91 35.54 1:20.13	29.63 1:07.13 2:36.10 5:37.93 11:55.05 22:21.91 36.36	P Powlison J Welch P Powlison J Welch R Franks . W Wilson . G Gandsey R Franks .		29.17 1:08.15 2:32.90 5:38.79 11:55.35 22:29.32 35.47 1:20.74	28.94 1:08.15 2:32.90 5:38.79 11:35.97 22:29.32 35.47
50 free 100 free 200 free 400/500 free 800/1000 free 1500/1650 free 50 back 100 back	P Powlison	. 1987 1987 1987 1991 1992 1991 1989 1992 1992 1992 1992	25.62 56.24 . 2:10.80 . 6:15.85 13:02.54 22:00.93 31.39 .1:10.45 .2:30.82	F Piemme	1990 1990 1990 1991 1990 1990 1990	29.63 1:07.13 2:36.10 5:37.93 1:55.05 2:21.91 35.54 1:20.13 2:54.25	29.63 1:07.13 2:36.10 5:37.93 11:55.05 22:21.91 36.36 1:23.24	P Powlison J Welch P Powlison J Welch R Franks . W Wilson . G Gandsey R Franks . R Franks .		29.17 1:08.15 2:32.90 5:38.79 1:55.35 22:29.32 35.47 1:20.74	28.94 1:08.15 2:32.90 5:38.79 11:35.97 22:29.32 35.47 1:20.74
50 free 100 free 200 free 400/500 free 800/1000 free 1500/1650 free 50 back 100 back 200 back	P Powlison	. 1987 1987 1987 1991 1992 1991 1992 1992 1992 1991 1991	25.62 56.24 . 2:10.80 . 6:15.85 13:02.54 22:00.93 31.39 . 1:10.45 . 2:30.82 33.24	F Piemme F Piemme E Kerswill F Piemme P Piemme P Hutinger P Hutinger P Hutinger	1990 1990 1990 1991 1990 1990 1990 1990	29.63 1:07.13 2:36.10 5:37.93 1:55.05 2:21.91 35.54 1:20.13 2:54.25 38.18	29.63 1:07.13 2:36.10 5:37.93 11:55.05 22:21.91 36.36 1:23.24 3:03.05	P Powlison J Welch P Powlison J Welch R Franks W Wilson . G Gandsey R Franks . R Franks . J Kurtzman		29.17 1:08.15 2:32.90 5:38.79 . 11:55.35 . 22:29.32 35.47 1:20.74 2:55.46	28.94 1:08.15 2:32.90 5:38.79 11:35.97 22:29.32 35.47 1:20.74 2:55.46
50 free 100 free 200 free 400/500 free 800/1000 free 1500/1650 free 50 back 100 back 200 back 50 brst	P Powlison P powlison P powlison P powlison F piemme W Wilson F Piemme P Hutinger R Franks J Kurtzman	. 1987 1987 1987 1991 1992 1991 1992 1992 1992 1991 1991 1991	25.62 56.24 . 2:10.80 . 6:15.85 13:02.54 22:00.93 31.39 .1:10.45 .2:30.82 33.24 .1:17.34	F Piemme F Piemme E Kerswill F Piemme F Piemme P Hutinger P Hutinger P Hutinger D Hutinger F Hutinger F Hutinger F Hutinger F Hutinger F Hutinger F Hutinger	1990 1990 1990 1991 1990 1990 1990 1990 1990	29.63 1:07.13 2:36.10 5:37.93 1:55.05 2:21.91 35.54 1:20.13 2:54.25 38.18 1:27.91	29.63 1:07.13 2:36.10 5:37.93 11:55.05 22:21.91 36.36 1:23.24 3:03.05 38.48	P Powlison J Welch P Powlison J Welch R Franks . W Wilson G Gandsey R Franks . R Franks . J Kurtzman J Kurtzman	1987 1983 1983 1987 1983 1992 1992 1989 1992 1992		28.94 1:08.15 2:32.90 5:38.79 11:35.97 22:29.32 35.47 1:20.74 2:55.46 38.28
50 free 100 free 200 free 400/500 free 800/1000 free 1500/1650 free 50 back 100 back 200 back 50 brst 100 brst	P Powlison P Powlison P Powlison P Follows P Huson P Hutinger R Franks R Franks J Kurtzman J Kurtzman	. 1987 1987 1987 1991 1992 1991 1992 1992 1991 1991 1990	25.62 56.24 . 2:10.80 . 6:15.85 13:02.54 22:00.93 31.39 .1:10.45 .2:30.82 33.24 .1:17.34 .2:54.27	F Piemme F Piemme E Kerswill F Piemme F Piemme F Piemme Hutinger	1990 1990 1990 1991 1990 1990 1990 1990 1990 1991 1989	29.63 1:07.13 2:36.10 5:37.93 1:55.05 2:21.91 35.54 1:20.13 2:54.25 38.18 1:27.91 3:20.02	29.63 1:07.13 2:36.10 5:37.93 11:55.05 22:21.91 36.36 1:23.24 3:03.05 38.48 1:27.85	P Powlison J Welch P Powlison J Welch K Franks . W Wilson . G Gandsey R Franks . R Franks . J Kurtzman J Kurtzman B Greenber	1987 1983 1987 1987 1987 1992 1992 1989 1992 1992 1991		28.94 1:08.15 2:32.90 5:38.79 11:35.97 22:29.32 35.47 1:20.74 2:55.46 38.28 1:28.91
50 free 100 free 200 free 400/500 free 800/1000 free 1500/1650 free 50 back 100 back 200 back 50 brst 100 brst 200 brst	P Powlison P Powlison P Powlison F Piemme Wilson F Piemme P Hutinger R Franks R Franks J Kurtzman J Kurtzman B Greenberg	. 1987 1987 1987 1987 1991 1992 1991 1992 1992 1991 1991 1990 1991 1991 1991 1991	25.62 56.24 . 2:10.80 . 6:15.85 13:02.54 22:00.93 31.39 .1:10.45 .2:30.82 33.24 .1:17.34 .2:54.27	F Piemme F Piemme E Kerswill F Piemme F Piemme F Piemme P Hutinger P Hutinger P Hutinger D Hutinger D Hutinger D Hutinger D Kurtzman B Greenberg B Greenberg	1990 1990 1990 1991 1990 1990 1990 1990 1990 1999 1989	29.63 1:07.13 2:36.10 5:37.93 1:55.05 2:21.91 35.54 1:20.13 2:54.25 38.18 1:27.91 3:20.02 33.63	29.63 1:07.13 2:36.10 5:37.93 11:55.05 22:21.91 36.36 1:23.24 3:03.05 38.48 1:27.85 3:15.28	P Powlison J Welch P Powlison J Welch R Franks W Wilson G Gandsey R Franks R Franks J Kurtzman B Greenber F Piemme	1987 1983 1983 1987 1983 1992 1992 1992 1992 1991 1991		28.94 1:08.15 2:32.90 5:38.79 11:35.97 22:29.32 35.47 1:20.74 2:55.46 38.28 1:28.91 3:16.90
50 free 100 free 200 free 400/500 free 800/1000 free 1500/1650 free 50 back 100 back 200 back 50 brst 100 brst 200 brst 50 fly	P Powlison P Powlison P Powlison F Piemme Wilson F Piemme P Hutinger R Franks R Franks J Kurtzman J Kurtzman B Greenbery F Piemme	. 1987 1987 1987 1987 1991 1992 1991 1992 1992 1991 1990 1991 1990 1991 1991 1991 1991 1991 1991	25.62 56.24 .2:10.80 .6:15.85 13:02.54 22:00.93 31.39 .1:10.45 .2:30.82 33.24 .1:17.34 .2:54.27 29.42 .1:09.77	F Piemme F Piemme F Piemme E Kerswill F Piemme F Piemme P Hutinger P Hutinger P Hutinger J Kurtzman B Greenberg B Greenberg F Piemme	1990 1990 1991 1990 1990 1990 1990 1990 1990 1990 1990 1991	29.63 1:07.13 2:36.10 5:37.93 1:55.05 2:21.91 35.54 1:20.13 2:54.25 38.18 1:27.91 3:20.02 33.63 1:21.66	29.63 1:07.13 2:36.10 5:37.93 11:55.05 22:21.91 36.36 1:23.24 3:03.05 38.48 1:27.85 3:15.28	P Powlison J Welch P Powlison J Welch R Franks W Wilson G Gandsey R Franks J Kurtzman J Kurtzman J Kurtzman J Kurtzman G Grenber F Piemme J Kurtzman	1987 1963 1987 1993 1992 1992 1992 1992 1992 1991 1991		28.94 1:08.15 2:32.90 5:38.79 11:35.97 22:29.32 35.47 1:20.74 2:55.46 38.28 1:28.91 3:16.90 33.34
50 free 100 free 200 free 400/500 free 800/1000 free 1500/1650 free 50 back 100 back 200 back 50 brst 100 brst 200 brst 50 fly 100 fly	P Powlison P Powlison P Powlison P Fiemme W Wilson F Piemme P Hutinger R Franks R Franks J Kurtzman J Kurtzman B Greenberg F Piemme J Kurtzman	. 1987 1987 1987 1987 1991 1992 1991 1992 1991 1991 1991 1991 1991 1991 1991 1991 1991 1991 1991 1991 1991 1991 1991 1991 1	25.62 56.24 .2:10.80 .6:15.85 .3:02.54 22:00.93 31.39 .1:10.45 .2:30.82 33.24 .1:17.34 .2:54.27 29.42 .1:09.77 .2:42.58	F Piemme F Piemme F Piemme E Kerswill F Piemme P Hutinger P Hutinger Hutinger J Kurtzman B Greenberg F Piemme J Kurtzman J Kurtzman	1990 1990 1991 1990 1990 1990 1990 1990 1990 1991 1989 1989 1991	29.63 1:07.13 2:36.10 5:37.93 1:55.05 2:21.91 2:54.25 35.54 1:20.13 2:54.25 38.18 1:27.91 3:20.02 33.63 1:21.66 3:10.49	29.63 1:07.13 2:36.10 5:37.93 11:55.05 22:21.91 36.36 1:23.24 3:03.05 38.48 1:27.85 3:15.28 33.63 1:21.66	P Powlison J Welch P Powlison J Welch R Franks W Wilson G Gandsey R Franks J Kurtzman J Kurtzman J Kurtzman J Kurtzman G Grenber F Piemme J Kurtzman	1987 1983 1983 1987 1989 1992 1992 1989 1992 1991 1991 1991		28.94 1:08.15 2:32.90 5:38.79 11:35.97 22:29.32 35.47 1:20.74 2:55.46 38.28 1:28.91 3:16.90 33.34 1:20.59
50 free 100 free 200 free 400/500 free 800/1000 free 1500/1650 free 50 back 100 back 200 back 50 brst 100 brst 200 brst 50 fly 100 fly 200 fly	P Powlison P Powlison P Powlison P Powlison F Piemme W Wilson F Piemme P Hutinger R Franks J Kurtzman J Kurtzman B Greenberg F Piemme J Kurtzman J Kurtzman J Kurtzman	. 1987 . . 1987 . . 1987 . . 1991 . . 1991 . . 1992 . . 1993 . . 1992 . . 1992 . . 1991 . . 1990 . . 1991 . . 1991 .	25.62 56.24 .2:10.80 .6:15.85 .2:200.93 31.39 .1:10.45 .2:30.82 33.24 .1:17.34 .2:54.27 29.42 .1:09.77 .2:42.58 .1:06.74	F Piemme F Piemme E Kerswill F Piemme P Hutinger P Hutinger J Kurtzman B Greenberg F Piemme F Piemma J Kurtzman J Kurtzman	1990 1990 1991 1990 1990 1990 1990 1990 1990 1990 1989 1989 1990 1991 1989	29.63 1:07.13 2:36.10 5:37.93 1:55.05 2:21.91 2:21.91 2:54.25 38.18 1:27.91 3:20.02 33.63 1:21.66 3:10.49 1:20.20	29.63 1:07.13 2:36.10 5:37.93 11:55.05 22:21.91 36.36 1:23.24 3:03.05 38.48 1:27.85 3:15.28 33.63 1:21.66	P Powlison J Welch P Powlison J Welch R Franks . W Wilson . G Gandsey R Franks . J Kurtzman J Kurtzman B Greenber F Piemme . J Kurtzman J Kurtzman	1987 1983 1983 1987 1989 1992 1992 1989 1992 1991 1991 1991		28.94 1:08.15 2:32.90 5:38.79 11:35.97 22:29.32 35.47 1:20.74 2:55.46 38.28 1:28.91 3:16.90 33.34 1:20.59
50 free 100 free 200 free 400/500 free 800/1000 free 1500/1650 free 50 back 100 back 200 back 50 brst 100 brst 200 brst 50 fly 100 fly 200 fly 100 IM	P Powlison P Powlison P Powlison P Powlison F Piemme Wilson F Piemme P Hutinger R Franks R Franks J Kurtzman J Kurtzman B Greenberg F Piemme J Kurtzman J Kurtzman D F Piemme J Kurtzman	. 1987 . 1987 . 1987 . 1987 . 1991 . 1992 . 1991 . 1992 . 1991 . 1991 . 1990 . 1991 1991	25.62 56.24 .2:10.80 .6:15.85 13:02.54 22:00.93 31.39 .1:10.45 .2:30.82 33.24 .1:17.34 .2:54.27 29.42 .1:09.77 .2:42.58	F Piemme F Piemme E Kerswill F Piemme F Piemme F Piemme P Hutinger P Hutinger D Hutinger B Greenberg B Greenberg F Piemme J Kurtzman J Kurtzman J Kurtzman R Taft	1990 1990 1990 1991 1990 1990 1990 1990 1990 1991 1989 1989 1991 1991	29.63 1:07.13 2:36.10 5:37.93 1:55.05 2:21.91 35.54 1:20.13 2:54.25 38.18 1:27.91 3:20.02 33.63 1:21.66 3:10.49 1:20.20 3:103.80	29.63 1:07.13 2:36.10 5:37.93 11:55.05 22:21.91 36.36 1:23.24 3:03.05 38.48 1:27.85 3:15.28 33.63 1:21.66 3:13.03 1:20.20	P Powlison J Welch P Powlison J Welch R Franks . W Wilson . G Gandsey R Franks . R Franks . J Kurtzman B Greenber F Piemme . J Kurtzman J Kurtzman J Kurtzman	1987 1983 1983 1986 1989 1992 1989 1992 1991 1991 1990 1992		28.94 1:08.15 2:32.90 5:38.79 11:35.97 22:29.32 35.47 1:20.74 2:55.46 38.28 1:28.91 3:16.90 33.34 1:20.59 3:08.79

						194						
MEN 70-74	SC-Yards	Year	USMS	SC-Meters	Year	USMS	World	LC-Meters		Year	USMS	World
50 free	K Lemmon	1982 .	27.45	R Hakomaki	1992	. 32.11	31.80	K Lemmon		1984	29.35	29.35
100 free	K Lemmon	1984 .	. 1:01.22	J Richards	19921	:12.57	1:12.57	K Lemmon	• • • • • • • • • • • • • • • • • • • •	1983.	1:11.61	1:11.61
200 free	K Lemmon			R Taft	19892	:46.86	2:46.86	K Lemmon	• • • • • • • • • • • • • • • • • • • •	1983.	2:44.86	2:44.86
400/500 free	F Taioli	1991 .	. 6:52.21	R Taft	19895	:56.06	5:56.06	R Taft		1989.	. 6:04.62	5:57.45
800/1000 free	F Taioli	1990 .	14:15.81	R Taft	198912	:15.49	12:15.49	F Taioli	• • • • • • • • • • • • • • • • • • • •	1991.	12:36.65	12:34.22
1500/1650 free	A Da Rosa	1988 .	23:44.48	A Da Rosa	198823	:59.12	23:59.12	F Taioli		1991.	24:28.27	23:59.01
50 back	J McCann	1992 .	34.33	R Taft	1989	. 38.44	38.44	R Taft		1989.	37.49	37.49
100 back	J Dilley	1991 .	. 1:15.70	R Taft	19891	:24.30	1:24.30	R Taft		1989.	. 1:25.35	1:25.35
200 back	J McCann	1992 .	. 2:52.28	R Taft	19893	:07.57	3:07.57	R Taft		1989.	. 3:13.25	3:13.25
50 brst	P Krup	1989 .	36.17	P Krup	1989	.40.81	40.02	B Allen		1984.	41.44	40.56
100 brst	A Da Rosa	1988 .	. 1:21.03	A Da Rosa	19881	:32.13	1:32.13	B Allen		1984.	. 1:33.20	1:33.20
200 brst	A Da Rosa	1988 .	. 3:03.29	A Da Rosa	19883	:24.66	3:24.66	A Da Ros	a	1988.	. 3:32.90	3:32.90
50 fly	B Davidson	1989 .	31.95	A Holden	1990	. 36.09	36.09	R Taft		1989.	35.65	35.65
100 fly	A Holden	1990 .	. 1:18.88	P Krup	19891	:31.20	1:31.20	A Holden		1990.	. 1:32.85	1:32.85
200 fly	A Cerer	1987 .	. 2:58.78	A Cerer	19893	3:31.97	3:31.97	A Holden		1990.	. 3:39.04	3:38.48
100 IM	R Taft	1989 .	. 1:13.66	R Taft	19891	:21.87	1:21.87					
200 IM	B Davidson	1989 .	. 2:47.68	R Taft	19893	:08.13	3:08.13	R Taft		1989.	. 3:11.42	3:11.42
400 IM	B Davidson	1989 .	. 6:14.18	R Taft	19896	:50.27	6:50.27	R Taft		1989.	. 6:59.24	6:59.24
1			1				- 1					
MEN 75-79	SC-Yards	Year	USMS	SC-Meters	Year	USMS	World	LC-Meter	s	Year	USMS	World
MEN 75-79 50 free	SC-Yards K Lemmon			SC-Meters K Lemmon		-	World 32.78		s			World 32.50
		1987 .	28.73		1988	. 32.78		L Collet		1983.	32.50	
50 free	K Lemmon	1987 . 1988 .	28.73 . 1:04.28	K Lemmon	1988 19881	.32.78 :15.94	32.78	L Collet K Lemmon		1983. 1987.	32.50	32.50
50 free 100 free	K Lemmon	1987 . 1988 . 1988 .	28.73 . 1:04.28 . 2:30.58	K Lemmon	19881 19881	.32.78 :15.94 :55.63	32.78 1:15.94	L Collet K Lemmon K Lemmon		1983. 1987. 1987.	32.50 . 1:14.86 . 2:53.73	32.50 1:14.86
50 free 100 free 200 free	K Lemmon K Lemmon K Lemmon	1987 . 1988 . 1988 . 1989 .	28.73 . 1:04.28 . 2:30.58 . 7:14.29	K Lemmon	19881 19881 19882 19896	.32.78 :15.94 :55.63 :23.81	32.78 1:15.94 2:59.20 6:23.81	L Collet K Lemmon K Lemmon A Rule		1983. 1987. 1987. 1981.	32.50 . 1:14.86 . 2:53.73 . 6:27.76	32.50 1:14.86 2:53.73 6:27.76
50 free 100 free 200 free 400/500 free	K Lemmon K Lemmon K Lemmon D Woodford D Woodford	1987 . 1988 . 1988 . 1989 . 1990 .	28.73 . 1:04.28 . 2:30.58 . 7:14.29 14:54.63	K Lemmon	19881 19882 19896 198913	. 32.78 :15.94 :55.63 :23.81	32.78 1:15.94 2:59.20 6:23.81 13:17.26	L Collet K Lemmon K Lemmon A Rule H Howe		1983. 1987. 1987. 1981.	32.50 . 1:14.86 . 2:53.73 . 6:27.76 13:35.96	32.50 1:14.86 2:53.73 6:27.76 13:35.96
50 free 100 free 200 free 400/500 free 800/1000 free	K Lemmon K Lemmon K Lemmon D Woodford D Woodford	1987 . 1988 . 1988 . 1989 . 1990 . 1989 .	28.73 . 1:04.28 . 2:30.58 . 7:14.29 14:54.63 25:05.88	K Lemmon	1988 19881 19882 19896 198913 198926	.32.78 :15.94 :55.63 :23.81 :17.26 :04.74	32.78 1:15.94 2:59.20 6:23.81 13:17.26	L Collet K Lemmon K Lemmon A Rule H Howe		1983. 1987. 1987. 1981. 1987.	32.50 . 1:14.86 . 2:53.73 . 6:27.76 13:35.96 25:41.55	32.50 1:14.86 2:53.73 6:27.76 13:35.96
50 free 100 free 200 free 400/500 free 800/1000 free 1500/1650 free	K Lemmon	1987 . 1988 . 1988 . 1989 . 1990 . 1989 .	28.73 . 1:04.28 . 2:30.58 . 7:14.29 14:54.63 25:05.88 37.10	K Lemmon	1988 19881 19882 19896 198913 198926 1990	. 32.78 :15.94 :55.63 ::23.81 ::17.26 ::04.74 . 43.13	32.78 1:15.94 2:59.20 6:23.81 13:17.26 25:15.05	L Collet K Lemmon K Lemmon A Rule H Howe H Howe		1983. 1987. 1987. 1981. 1987. 1987.	32.50 . 1:14.86 . 2:53.73 . 6:27.76 13:35.96 25:41.55 40.47	32.50 1:14.86 2:53.73 6:27.76 13:35.96 25:41.55
50 free 100 free 200 free 400/500 free 800/1000 free 1500/1650 free 50 back	K Lemmon	1987 . 1988 . 1988 . 1989 . 1990 . 1989 . 1991 .	28.73 . 1:04.28 . 2:30.58 . 7:14.29 14:54.63 25:05.88 37.10 . 1:21.83	K Lemmon	1988 1988 1988 1989 1989 1989 1990 1990	. 32.78 :15.94 :55.63 :23.81 :17.26 :04.74 .43.13 :34.84	32.78 1:15.94 2:59.20 6:23.81 13:17.26 25:15.05 41.90	L Collet K Lemmon K Lemmon A Rule H Howe H Howe A Hargray	ve	1983. 1987. 1987. 1981. 1987. 1987. 1982.	32.50 . 1:14.86 . 2:53.73 . 6:27.76 13:35.96 25:41.55 40.47 . 1:32.92	32.50 1:14.86 2:53.73 6:27.76 13:35.96 25:41.55 40.47
50 free 100 free 200 free 400/500 free 800/1000 free 1500/1650 free 50 back 100 back	K Lemmon	1987 . 1988 . 1989 . 1989 . 1990 . 1989 . 1991 . 1992 .	28.73 . 1:04.28 . 2:30.58 . 7:14.29 14:54.63 25:05.88 37.10 . 1:21.83 . 3:02.98	K Lemmon K Lemmon K Lemmon D Woodford D Woodford E Shea E Shea	1988 1988 1988 1989 1989 1989 1990 1990 1991	. 32.78 :15.94 ::55.63 ::23.81 ::17.26 ::04.74 .43.13 ::34.84 ::27.82	32.78 1:15.94 2:59.20 6:23.81 13:17.26 25:15.05 41.90 1:34.84	L Collet K Lemmon K Lemmon A Rule H Howe H Howe A Hargray A Hargray E Shea	ve	1983 . 1987 . 1987 . 1981 . 1987 . 1987 . 1982 . 1982 .	32.50 . 1:14.86 . 2:53.73 . 6:27.76 13:35.96 25:41.55 40.47 . 1:32.92 . 3:25.93	32.50 1:14.86 2:53.73 6:27.76 13:35.96 25:41.55 40.47 1:32.92
50 free 100 free 200 free 400/500 free 800/1000 free 1500/1650 free 50 back 100 back 200 back	K Lemmon	1987 . 1988 . 1989 . 1990 . 1989 . 1991 . 1992 . 1992 .	28.73 . 1:04.28 . 2:30.58 . 7:14.29 14:54.63 25:05.88 37.10 . 1:21.83 . 3:02.98 38.58	K Lemmon K Lemmon D Woodford D Woodford D Woodford E Shea E Shea E Shea	1988 1988 1988 1989 1989 1989 1990 1991 1989	. 32.78 :15.94 ::55.63 ::23.81 ::17.26 ::04.74 . 43.13 ::34.84 ::27.82 . 45.73	32.78 1:15.94 2:59.20 6:23.81 13:17.26 25:15.05 41.90 1:34.84 3:27.82	L Collet K Lemmon K Lemmon A Rule H Howe H Howe A Hargra A Hargra E Shea B Allen	veve	1983 . 1987 . 1987 . 1981 . 1987 . 1982 . 1982 . 1991 .	32.50 . 1:14.86 . 2:53.73 . 6:27.76 13:35.96 25:41.55 40.47 . 1:32.92 . 3:25.93 43.61	32.50 1:14.86 2:53.73 6:27.76 13:35.96 25:41.55 40.47 1:32.92 3:25.93
50 free 100 free 200 free 400/500 free 800/1000 free 1500/1650 free 50 back 100 back 200 back 50 brst	K Lemmon	1987 . 1988 . 1988 . 1989 . 1990 . 1991 . 1992 . 1992 . 1992 . 1982 .	28.73 . 1:04.28 . 2:30.58 . 7:14.29 14:54.63 25:05.88 37.10 . 1:21.83 . 3:02.98 38.58 . 1:27.44	K Lemmon K Lemmon K Lemmon D Woodford D Woodford D Woodford E Shea E Shea K Lemmon	1988 1988 1988 1989 1989 1989 1990 1991 1989	. 32.78 :15.94 ::55.63 ::23.81 ::17.26 ::04.74 . 43.13 ::34.84 ::27.82 . 45.73 ::42.06	32.78 1:15.94 2:59.20 6:23.81 13:17.26 25:15.05 41.90 1:34.84 3:27.82 42.99	L Collet K Lemmon K Lemmon A Rule H Howe A Hargra A Hargra E Shea B Allen K Lemmon	ve	1983	32.50 . 1:14.86 . 2:53.73 . 6:27.76 13:35.96 25:41.55 40.47 . 1:32.92 . 3:25.93 43.61 . 1:39.69	32.50 1:14.86 2:53.73 6:27.76 13:35.96 25:41.55 40.47 1:32.92 3:25.93 42.58
50 free 100 free 200 free 400/500 free 800/1000 free 1500/1650 free 50 back 100 back 200 back 50 brst 100 brst	K Lemmon	1987 . 1988 . 1988 . 1989 . 1990 . 1991 . 1992 . 1992 . 1987 . 1992 . 1987 . 1992 . 1987 . 1992 .	28.73 . 1:04.28 . 2:30.58 . 7:14.29 14:54.63 25:05.88 37.10 .1:21.83 .3:02.98 38.58 31.4.29	K Lemmon K Lemmon K Lemmon D Woodford D Woodford E Shea E Shea K Lemmon D McCullough	1988 1988 1989 1989 1989 1990 1990 1990 1990 1990 1990	. 32.78 :15.94 ::55.63 :23.81 :17.26 ::04.74 . 43.13 .:34.84 ::27.82 . 45.73 ::42.06 ::36.71	32.78 1:15.94 2:59.20 6:23.81 13:17.26 25:15.05 41.90 1:34.84 3:27.82 42.99 1:42.06	L Collet K Lemmon K Lemmon A Rule H Howe A Hargra E Shea B Allen K Lemmon D McCullo	veve	1983 . 1987 . 1987 . 1981 . 1987 . 1982 . 1982 . 1991 . 1989 . 1989 . 1991 . 1991 .	32.50 . 1:14.86 . 2:53.73 . 6:27.76 13:35.96 25:41.55 40.47 1:32.92 43.61 43.61 43.69 43.61	32.50 1:14.86 2:53.73 6:27.76 13:35.96 25:41.55 40.47 1:32.92 3:25.93 42.58 1:39.69
50 free 100 free 200 free 400/500 free 800/1000 free 1500/1650 free 50 back 100 back 200 back 50 brst 100 brst 200 brst	K Lemmon	1987 . 1988 . 1988 . 1989 . 1999 . 1991 . 1992 . 1982 . 1987 . 1992 . 1987 . 1998 . 1998 . 1987 . 1987 .	28.73 . 1:04.28 . 2:30.58 . 7:14.29 14:54.63 25:05.88 37.10 . 1:21.83 . 3:02.98 38.58 32.44	K Lemmon K Lemmon K Lemmon D Woodford D Woodford E Shea E Shea E Shea C K Lemmon D McCullough	1988 1988 1988 1989 1989 1989 1990 1990 1990 1990 1990 1990 1990 1990 1990 1	. 32.78 : 15.94 ::55.63 ::23.81 ::17.26 ::04.74 . 43.13 ::34.84 ::27.82 . 45.73 ::42.06 ::36.71 . 43.99	32.78 1:15.94 2:59.20 6:23.81 13:17.26 25:15.05 41.90 1:34.84 3:27.82 42.99 1:42.06 3:36.71	L Collet K Lemmon K Lemmon A Rule	veve	1983 . 1987 . 1987 . 1981 . 1987 . 1982 . 1982 . 1991 . 1989 . 1991 . 1987 . 1997 . 1987	32.50 . 1:14.86 . 2:53.73 . 6:27.76 . 13:35.96 25:41.55 40.47 . 1:32.92 . 3:25.93 43.61 . 1:39.69 . 3:44.71 41.25	32.50 1:14.86 2:53.73 6:27.76 13:35.96 25:41.55 40.47 1:32.92 3:25.93 42.58 1:39.69 3:44.71
50 free 100 free 200 free 400/500 free 800/1000 free 1500/1650 free 50 back 100 back 200 back 50 brst 100 brst 200 brst 50 fly	K Lemmon	1987 . 1988 . 1988 . 1989 . 1990 . 1991 . 1992 . 1992 . 1987 . 1992 . 1987 . 1998 . 1988	28.73 . 1:04.28 . 2:30.58 . 7:14.29 14:54.63 25:05.88 37.10 . 1:21.83 . 3:02.98 38.58 . 1:27.44 . 3:14.29 35.44 . 1:32.72	K Lemmon K Lemmon K Lemmon D Woodford D Woodford E Shea E Shea K Lemmon D McCullough D McCullough B Shott	1988 1988 1988 1989 1989 1989 1990 1991 1990 1990 1990 1990 1990 1990 1990 1990 1990 1990 1990	. 32.78 : 15.94 ::55.63 ::23.81 ::17.26 ::04.74 . 43.13 ::34.84 ::27.82 . 45.73 ::42.06 ::36.71 . 43.99 ::44.78	32.78 1:15.94 2:59.20 6:23.81 13:17.26 25:15.05 41.90 1:34.84 3:27.82 42.99 1:42.06 3:36.71 43.99	L Collet K Lemmon K Lemmon A Rule	veve	1983	32.50 . 1:14.86 . 2:53.73 . 6:27.76 13:35.96 25:41.55 40.47 . 1:32.92 . 3:25.93 43.61 139.69 41.25 41.25	32.50 1:14.86 2:53.73 6:27.76 13:35.96 25:41.55 40.47 1:32.92 3:25.93 42.58 1:39.69 3:44.71 41.25
50 free 100 free 200 free 400/500 free 800/1000 free 1500/1650 free 50 back 100 back 200 back 50 brst 100 brst 200 brst 50 fly 100 fly	K Lemmon	1987 . 1988 . 1988 . 1999 . 1991 . 1992 . 1982 . 1987 . 1992 . 1987 . 1988 . 1998 . 1998 . 1998 . 1998 . 1998 . 1998 . 1998 . 1998 . 1998 . 1999 .	28.73 . 1:04.28 . 2:30.58 . 7:14.29 14:54.63 25:05.88 37.10 . 1:21.83 3:02.98 38.58 1:27.44 3:14.29 35.44 3:14.29 35.44 3:17.53	K Lemmon K Lemmon K Lemmon D Woodford D Woodford D Woodford E Shea E Shea K Lemmon D McCullough D McCullough D McCullough D McCullough	1988 1988 1988 1988 1989 1989 1989 1990 1990 1990 1990 1990 1990 1990 1990 1990 1990 1990 1990	. 32.78 :15.94 :55.63 :23.81 :17.26 ::04.74 . 43.13 :34.84 :27.82 . 45.73 :42.06 :36.71 . 43.99 :44.78	32.78 1:15.94 2:59.20 6:23.81 13:17.26 25:15.05 41.90 1:34.84 3:27.82 42.99 1:42.06 3:36.71 43.99 1:44.78	L Collet K Lemmon K Lemmon A Rule	ve	1983	32.50 . 1:14.86 . 2:53.73 . 6:27.76 13:35.96 25:41.55 40.47 . 1:32.92 . 3:25.93 43.61 139.69 41.25 41.25	32.50 1:14.86 2:53.73 6:27.76 13:35.96 25:41.55 40.47 1:32.92 3:25.93 42.58 1:39.69 3:44.71 41.25 1:39.80
50 free 100 free 200 free 400/500 free 800/1000 free 1500/1650 free 50 back 100 back 200 back 50 brst 100 brst 200 brst 50 fly 100 fly 200 fly	K Lemmon	1987 . 1988 . 1988 . 1989 . 1990 . 1999 . 1991 . 1992 . 1992 . 1987 . 1987 . 1988 . 1992 .	28.73 . 1:04.28 . 2:30.58 . 7:14.29 14:54.63 25:05.88 37.10 . 1:21.83 . 3:02.98 38.58 . 1:27.44 . 3:14.29 35.44 . 1:32.72 . 1:16.57	K Lemmon K Lemmon K Lemmon D Woodford D Woodford D Woodford E Shea E Shea K Lemmon D McCullough D McCullough D McCullough D McCullough D McCullough	1988 1988 1988 1988 1989 1989 1990	. 32.78 :15.94 ::55.63 ::23.81 ::17.26 ::04.74 .43.13 ::34.84 ::27.82 .45.73 ::42.06 ::36.71 .43.99 ::44.78 ::44.78	32.78 1:15.94 2:59.20 6:23.81 13:17.26 25:15.05 41.90 1:34.84 3:27.82 42.99 1:42.06 3:36.71 43.99 1:44.78 4:01.10	L Collet K Lemmon K Lemmon A Rule H Howe H Howe A Hargra E Shea K Lemmon D McCull K Lemmon A Cerer A Cerer	ve	1983	32.50 .1:14.86 .2:53.73 .6:27.76 .3:35.96 .25:41.55 40.47 .1:32.92 .3:25.93 43.61 .1:39.69 .3:44.71 41.25 .1:39.80 .3:43.56	32.50 1:14.86 2:53.73 6:27.76 13:35.96 25:41.55 40.47 1:32.92 3:25.93 42.58 1:39.69 3:44.71 41.25 1:39.80

MEN 80-84	SC-Yards	Year	USMS	SC-Meters	Year	USMS	World	LC-Meters	Year	USMS	World
50 free	K Lemmon	1992 .	32.10	G Sobe1	1991	37.85	37.85	G Sobel	1990	36.62	36.62
100 free	G Sobel	1990 .	. 1:17.82	G Sobel	1991	1:27.87	1:27.87	G Sobel	1990	1:28.22	1:28.22
200 free	K Lemmon	1992 .	. 2:49.94	G Sobel	1991	3:22.37	3:22.37	G Langner	1983	3:31.79	3:31.79
400/500 free	G Langner	1985	. 8:03.55	G Langner	1986	7:32.64	7:05.20	G Langner	1983	7:23.09	7:23.09
800/1000 free	G Langner	1985 .	16:54.23	G Langner	19861	5:41.78	15:41.78	G Langner	1985	. 15:53.13	15:48.62
1500/1650 free	G Langner	1985 .	28:04.21	G Langner	19862	9:58.32	29:58.32	G Langner	1983	. 28:54.95	28:54.95
50 back	A Rule	1987	41.17	H Eisenschmidt	1987	50.13	46.85	A Hargrave	1987	45.69	45.69
100 back	A Hargrave	1987 .	. 1:35.29	H Eisenschmidt	1987	1:50.89	1:45.81	A Hargrave	1987	1:50.05	1:50.05
200 back	A Hargrave	1986 .	. 3:34.78	H Eisenschmidt	1987	4:01.12	4:01.12	C Salie	1992	3:58.25	3:58.25
50 brst	K Lemmon	1992	41.39	J Penfield	1989	55.32	45.52	B Shott	1990	49.49	46.59
100 brst	K Lemmon	1992 .	. 1:32.72	J Penfield	1989	2:09.01	2:09.01	H Perry	1992	1:57.51	1:51.25
200 brst	A Kallunki	1984 .	. 4:03.66	W Share	1989	5:03.34	4:45.98	H Perry	1992	4:25.69	4:25.69
50 fly	J Coon	1990	40.94	J Coon	1991	49.08	49.08	J Coon	1991	52.05	52.05
100 fly	J Coon	1991	. 1:50.88	J Coon	1991	2:07.29	2:07.29	J Coon	1991	2:21.06	2:21.06
200 fly	J Coon	1990	. 4:20.25	J Coon	1991	5:14.66	5:14.66	J Coon	1992	5:36.65	5:11.48
100 IM	J Penfield	1988	. 1:40.18	H Eisenschmidt	1987	1:53.59	1:53.59				
200 IM	H Eisenschmidt.	1987	. 3:48.22	H Eisenschmidt	1987	4:36.38	4:36.38	H Eisenschmid	t 1987	4:22.70	4:20.72
400 IM	H Eisenschmidt.	1989	. 8:27.54	H Eisenschmidt	1988	9:25.63	9:25.63	J Coon	1991	. 10:29.63	9:47.72
MEN 85-89	SC-Yards	Year	USMS	SC-Meters	Year	USMS	World	LC-Meters	Year	USMS	World
50 free	C Ross	1985 .	39.47	G Langner	1989	44.61	44.61	G Langner	1989	44.65	44.65
100 free	G Langner	1990 .	. 1:27.45	G Langner	1989	1:41.46	1:41.46	G Langner	1988	1:43.03	1:43.03
200 free	G Langner	1990 .	. 3:17.83	G Langner	1989	3:48.20	3:48.20	G Langner	1988	3:48.91	3:48.91
400/500 free	G Langner	1990	. 9:00.31	G Langner	1988	7:54.24	7:54.24	G Langner	1988	8:14.50	8:14.50
800/1000 free	G Langner	1989 .	18:18.29	G Langner	19881	6:53.90	16:53.90	G Langner	1988	. 17:11.21	17:11.21
1500/1650 free	G Langner	1990 .	31:02.36	G Langner	19883	2:20.20	32:20.20	G Langner	1989	. 33:08.42	33:08.42
50 back	P Jurczyk	1990	52.83	P Jurczyk	1990	57.97	59.79	P Jurczyk	1991	59.15	59.15
100 back	P Jurczyk	1990	. 1:54.21	P Jurczyk	1990	2:12.69	2:13.02	R Harrison	1989	2:18.74	2:18.74
200 back	P Jurczyk	1990 .	. 4:22.41	P Jurczyk	1990	4:55.62	5:23.27	P Jurczyk	1991	5:08.97	5:08.97
50 brst	A Kallunki	1990	52.51	G Langner	1988	1:05.82	1:05.80	A Kallunki	1989	1:01.47	1:01.47
100 brst	A Kallunki	1990 .	. 2:04.28	G Langner	1989	2:31.20	2:31.20	A Kallunki	1989	2:25.85	2:18.92
200 brst	A Kallunki	1990 .	. 4:34.29	G Langner	1988	5:30.76	5:30.76	A Kallunki	1989	5:35.03	5:09.86
50 fly	A Kallunki	., 1990	59.14	A Olanoff	1991	1:21.90	1:21.90	A Kallunki	1989	1:14.96	59.50
100 fly	H Eisenschmidt .	1992	. 2:32.32					A Olanoff	1991	3:23.06	3:23.06
							1				
200 fly							ı				
	A Kallunki		- 1	H Eisenschmidt			2:23.03				
200 fly		1990 .	. 2:00.04		1991	2:23.03	2:23.03 5:02.31		1986		5:33.20

MEN 90-94	SC-Yards	Year	USMS	SC-Meters	Year !	USMS W	or1d90+	LC-Meters	Year	USMS	World90+
50 free	J Whittemore	1990	. 1:06.72	P Spangler	19891:	14.28	50.57	C Wheeler	1984	59.88	59.88
100 free	P Spangler	. 1989 .	. 2:24.60	P Spangler			2:49.33	C Wheeler	. 1984	2:14.06	2:14.06
200 free	P Spangler	. 1990	. 5:22.61	P Spangler	19905:	51.45	5:51.45	P Spangler	. 1990	6:03.12	6:03.12
400/500 free	P Spangler	1989 .	13:13.36	P Spangler	198911:	09.76	11:09.76	• • • • • • • • • • • • • • • • • • • •			
800/1000 free	P Spangler	. 1989 .	28:04.65	*****************							
1500/1650 free	P Spangler	. 1989 .	51:31.39	P Spangler	199051:	43.20	51:43.20	P Spangler	. 1990 .	52:41.53	52:41.53
50 back	T Lane	1989	. 1:15.02	T Lane	19891:	29.99	1:29.99	T Lane	. 1989	1:16.30	1:16.30
100 back	T Lopez	. 1990 .	. 3:17.90					T Lopez	. 1991	4:45.88	3:19.14
200 back	T Lopez	. 1990 .	. 6:40.23					T Lopez	. 1990	8:59.53	8:59.53
50 brst	J Whittemore	. 1990	. 1:24.24	T Lane	19891:	50.16	1:50.16	T Lane	. 1989	1:36.87	1:36.87
100 brst				****************				L Magener	. 1982	5:16.03	5:16.03
200 brst				********							
50 fly											
100 fly				••••••							
200 fly				••••••							
100 IM				••••••							
200 IM				• • • • • • • • • • • • • • • • • • • •							
400 IM											
			1								
MEN 95+	SC-Yards	Year	USMS	SC-Meters	Year	USMS		LC-Meters	Year	USMS	
MEN 95÷ 50 free	SC-Yards 7 Lane			SC-Meters				LC-Meters T Lane			
		. 1990	. 1:14.35			••			. 1989	1:20.52	t and a state of the state of t
50 free	T Lane	. 1990 . 1990	. 1:14.35 . 3:20.38					T Lane	. 1989	1:20.52	Park Paladelli Association (Constitution (Co
50 free 100 free	T Lane	. 1990	. 1:14.35 . 3:20.38	***************************************				T Lane	. 1989	1:20.52	
50 free 100 free 200 free	T Lane	. 1990	. 1:14.35 . 3:20.38					T Lane	. 1989	1:20.52	
50 free 100 free 200 free 400/500 free	T Lane	. 1990 1990	. 1:14.35 . 3:20.38					T Lane	. 1989	1:20.52	
50 free 100 free 200 free 400/500 free 800/1000 free	T Lane	. 1990 1990	. 1:14.35			••		T Lane	. 1989	1:20.52	
50 free 100 free 200 free 400/500 free 800/1000 free 1500/1650 free	T LaneT Lane	. 1990	. 1:14.35 . 3:20.38 					T Lane	. 1989	1:20.52 1:18.91	
50 free 100 free 200 free 400/500 free 800/1000 free 1500/1650 free 50 back	T Lane	1990	. 1:14.35 . 3:20.38 . 1:08.20 . 3:05.81					T Lane	. 1989	1:20.52 1:18.91 3:19.14	Market also because the second
50 free 100 free 200 free 400/500 free 800/1000 free 1500/1650 free 50 back 100 back	T Lane	. 1990	. 1:14.35 . 3:20.38 . 1:08.20 . 3:05.81					T Lane T Lane T Lane	. 1989	1:20.52 1:18.91 3:19.14	
50 free 100 free 200 free 400/500 free 800/1000 free 1500/1650 free 50 back 100 back 200 back	T Lane	1990	. 1:14.35 . 3:20.38 . 1:08.20 . 3:05.81 . 1:27.94					T Lane T Lane T Lane	. 1989	1:20.52 1:18.91 3:19.14 2:03.52	
50 free 100 free 200 free 400/500 free 800/1000 free 1500/1650 free 50 back 100 back 200 back 50 brst	T Lane	1990 1990 1989 1989	. 1:14.35 . 3:20.38 . 1:08.20 . 3:05.81 					T Lane T Lane T Lane T Lene	. 1989	1:20.52 1:18.91 3:19.14 2:03.52	
50 free 100 free 200 free 400/500 free 800/1000 free 1500/1650 free 50 back 100 back 200 back 50 brst 100 brst	T Lane	1990	. 1:14.35 . 3:20.38 . 1:08.20 . 3:05.81 . 1:27.94					T Lane T Lane T Lane T Lane	. 1989	1:20.52 1:18.91 3:19.14 2:03.52	
50 free 100 free 200 free 400/500 free 800/1000 free 1500/1650 free 50 back 100 back 200 back 50 brst 100 brst 200 brst	T Lane	1990	. 1:14.35 . 3:20.38 . 1:08.20 . 3:05.81 					T Lane T Lane T Lane T Lane	. 1989	1:20.52 1:18.91 3:19.14 2:03.52	
50 free 100 free 200 free 400/500 free 800/1000 free 1500/1650 free 50 back 100 back 200 back 50 brst 100 brst 200 brst 50 fly	T Lane	. 1990	. 1:14.35 . 3:20.38 					T Lane T Lane T Lane	. 1989	1:20.52 1:18.91 3:19.14 2:03.52	
50 free 100 free 200 free 400/500 free 800/1000 free 1500/1650 free 50 back 100 back 200 back 50 brst 100 brst 200 brst 50 fly 100 fly	T Lane	. 1990	. 1:14.35 . 3:20.38 					T Lane T Lane T Lane T Lane	. 1989	1:20.52 1:18.91 3:19.14 2:03.52	
50 free 100 free 200 free 400/500 free 800/1000 free 1500/1650 free 50 back 100 back 200 back 50 brst 100 brst 200 brst 50 fry 100 fly	T Lane T Lane T Lane T Lane T Lane	. 1990 . 1990 . 1990 . 1989 . 1989 . 1989	. 1:14.35 . 3:20.38 . 1:08.20 . 3:05.81 					T Lane T Lane T Lane T Lane	. 1989	1:20.52 1:18.91 3:19.14 2:03.52	

WOMEN'S RELAYS

Y					
Women 19+/76+	SC-Yards (19+) Year USMS	SC-Meters (76+) Year USMS		LC-Meters (76+) Year USMS	
200 free relay	Holmes Lumber 1992 1:38.68	Univ. Houston 19881:59.79		Univ San Francisco 1992 1:59.29	
400 free relay	U San Francisco 1991 3:52.34	Longhorn 19904:45.47		Santa Cruz 1989 4:46.43	
800 free relay	U San Francisco 1992 8:12.80	Space Coast 198710:55.74		Santa Cruz 1989 . 11:36.22	
200 med relay	Raleigh 1992 1:52.20	Pacific NW 19902:22.24	- 1	Univ San Francisco 1992 2:12.59	
400 med relay	U San Francisco 1992 4:10.11	Empire State 19915:07.60	i	Lakeside	
			l		
Women 25+/100+	SC-Yards (25+) Year USMS	SC-Meters (100+) Year USMS	World	LC-Meters (100+) Year USMS	World
200 free relay	Lone Star 1989 1:37.40	Air Force 19911:59.29	1:58.02	Oregon 1992 1:52.47	1:53.20
400 free relay	Walnut Creek 1991 3:37.75	St. Louis 19874:34.65		Walnut Creek 1989 4:35.53	
800 free relay	Walnut Creek 1991 8:13.04	Air Force 19919:48.14		Walnut Creek 1989 9:50.91	
200 med relay	Houstonian 1991 1:49.19	San Diego 19862:20.92	2:11.99	Holmes Lumber 1988 2:06.67	2:06.67
400 med relay	U San Francisco 1992 4:09.85	St. Louis 19874:58.83		Los Altos 1989 5:11.31	
Women 35+/120+	SC-Yards (35+) Year USMS	SC-Meters (120+) Year USMS	World	LC-Meters (120+) Year USMS	World
200 free relay	New England 1992 1:43.16	St. Louis 19891:58.02	1:58.02	Lone Star 1987 1:53.05	1:53.05
400 free relay	Los Altos 1989 4:06.91	San Diego 19894:25.46		San Diego 1989 4:26.76	
800 free relay	Los Altos 1990 8:52.11	St. Louis 199110:15.91		San Diego 1990 9:48.97	
200 med relay	New England 1992 1:59.53	St. Louis 19892:13.77	2:11.99	DC Masters 1987 2:11.61	2:08.21
400 med relay	Los Altos 1990 4:38.42	O*H*I*O 19915:08.59		Walnut Creek 1991 5:00.94	
·					
Women 45+/160+	SC-Yards (45+) Year USMS	SC-Meters (160+)' Year USMS	World	LC-Meters (160+) Year USMS	World
200 free relay	Tamalpais 1989 1:55.87	DC Masters 19892:01.10	2:01.10	DC Mesters 1988 2:03.48	2:03.48
400 free relay	Tamalpais 1989 4:38.18	Longhorn 19905:13.59		San Diego 1991 . 4:52.91	
800 free relay	Tamalpais 1988 . 10:24.25	Industry Hills 198711:45.47	1	San Diego 1991. 10:33.64	
200 med relay	DC Masters 1991 2:12.67	DC Masters 19892:19.83	2:16.65	Rocky Mountain 1992 2:15.86	2:18.38
400 med relay	Tamalpais 1990 5:24.17	Escondido 19906:57.48		San Diego 1989 5:24.49	
-					
Women 55+/200+	SC-Yards (55+) Year USMS	SC-Meters (200+) Year USMS	World	LC-Meters (200+) Year USMS	World
200 free relay	New England 1991 2:14.01	Tamalpais 19892:11.64	2:11.64	Los Altos 1992 2:09.35	2:09.35
400 free relay	•	San Diego 19906:06.07	1	San Diego 1990 5:27.04	
800 free relay	Walnut Creek 1991 . 12:01.67	San Diego 199012:44.99	ı	San Diego 1990 . 11:58.26	
200 med relay	New England 1991 2:33.85	Tamalpais 19892:34.15	2:29.96	Los Altos 1992 2:28.26	2:27.18
400 med relay	Rinconada 1988 6:11.61	San Diego 19906:16.07	l	DC Masters 1991 5:48.73	

Women 65+/240+	SC-Yards (65+) Year USMS	SC-Meters (240+) Year USA	is World	LC-Meters (240+)	Year USMS	World
200 free relay	10122			New England		2:28.24
		San Diego 19906:19		Rinconada		2.20.24
400 free relay						
800 free relay	Santa Barbara 1989 . 12:14.80			Santa Barbara		
200 med relay	Santa Barbara 1989 2:55.36	San Diego 19903:05	53 3:05.53	St. Louis	1991 2:53.89	2:51.82
400 med relay	Santa Barbara 1989 6:47.55	San Diego 19897:12	.08	San Diego	1992 7:01.69	
Women 75+/280+	SC-Yards (75+) Year USMS	SC-Meters (280+) Year USA	1S World	LC-Meters (280+)	Year USMS	World
200 free relay	St Petersburg 1989 3:54.91	Walnut Creek 19893:16	.06 3:13.66	Walnut Creek	1992 3:17.96	3:09.01
400 free relay	*************	San Mateo 19898:00	.77	Walnut Creek	1989 8:01.05	
800 free relay		St. Louis 199115:49	.09	Walnut Creek	1989. 17:18.81	
200 med relay	St Petersburg 1990 5:14.33	Walnut Creek 19893:45	54 3:28.26	Rinconada	1987 3:45.37	3:41.70
400 med relay		St. Louis 19918:49	. 98	Walnut Creek	1991 9:27.69	
Women 85+/320+	SC-Yards (85+) Year USMS	SC-Meters (320+) Year USA	1S	LC-Meters (320+)	Year USMS	World
200 free relay			3:54.63			3:23.25
400 free relay						
800 free relay						
200 med relay				• • • • • • • • • • • • • • • • • • • •		
400 med relay					• • • • • • • • •	

MEN'S RELAYS

Men 19+/76+	SC-Yards (19+) Year USMS	SC-Meters (76+) Year USMS		LC-Meters (76+) Year USMS
200 free relay	Texas Aquatics 1992 1:26.77	Air Force 19911:49.48		DC Masters 1991 1:42.33
400 free relay	Los Altos 1991 3:20.51	Davis 19903:53.01	- 1	Empire State 1992 4:11.98
800 free relay	Stanford 1992 7:22.25	Space Coast 198711:48.18		Davis 1989 9:11.58
200 med relay	Texas Aquatics 1992 1:36.31	Pacific NW 19902:00.40	ļ	Univ San Francisco 1992 1:52.24
400 med relay	U San Francisco 1992 3:34.08	Davis 19904:56.13	1	Empire State 1992 4:40.23
Men 25+/100+	SC-Yards (25+) Year USMS	SC-Meters (100+) Year USMS	World	LC-Meters (100+) Year USMS World
200 free relay	Houstonian Club 1990 1:23.34	Lakeside 19891:40.98 1	:38.58	Houstonian 1990 1:36.15 1:37.40
400 free relay	So. Calif. Aqua 1992 3:14.35	Longhorn 19913:55.59	- 1	Santa Barbara 1988 3:51.43
800 free relay	Piedmont 1992 7:08.79	South Bay 19918:32.67	1	Lynbrook 1989 8:36.26
200 med relay	Lone Star 1991 1:31.54	Rosenberg 19881:52.59 1	:50.73	Houstonian 1990 1:48.46 1:49.84
400 med relay	U San Francisco 1992 3:35.60	South Bay 19914:21.93	1	Santa Barbara 1988 4:18.93

Men 35+/120+	SC-Yards (35+) Year USMS	SC-Meters (120+) Year USMS	World	LC-Meters (120+) Year USMS	World
200 free relay	Lone Star 1990 1:25.72	GCWP 19891:38.93	1:38.93	Lone Star 1986 1:37.4	
400 free relay	So. Calif. Aqua 1990 3:23.76	Davis		Texas Swimaster 1989 3:50.76	
800 free relay	Minnesota 1992 7:37.33	Heartland 19918:41.77	1	Heartland 1992 8:48.9	
200 med relay	Colonials 1776 1991 1:36.66	GCWP	1:50.73	Holmes Lumber 1988 1:50.90	
400 med relay	Walnut Creek 1992 3:46.87	Minnesota 19914:25.61		Texas Swimaster 1989 4:20.98	
			i		
Men 45+/160+	SC-Yards (45+) Year USMS	SC-Meters (160+) Year USMS	World	LC-Meters (160+) Year USMS	World
200 free relay	Tamalpais 1990 1:32.89	SWAM 19911:41.93	1:41.93	Holmes Lumber 1990 1:39.27	1:39.27
400 free relay	Los Altos 1991 3:42.14	Heartland 19924:04.88		Los Altos 1989 4:03.69	
800 free relay	Los Altos 1991 8:25.87	Minnesota 19928:58.69		DC Masters 1987 9:12.20	
200 med relay	Tamalpais 1990 1:46.68	SWAM 19911:55.51	1:55.51	Holmes Lumber 1990 1:54.57	1:54.57
400 med relay	Los Altos 1992 4:10.46	So. Calif. Aqua 19894:29.41	- 1	Cal Tech - PAC 1987 4:39.43	
Men 55+/200+	SC-Yards (55+) Year USMS	SC-Meters (200+) Year USMS	World	LC-Meters (200+) Year USMS	World
200 free relay	Olympic Club 1990 1:42.55	Los Altos 19891:48.34	1:48.34	Olympic Club 1992 1:47.65	1:47.65
400 free relay	Walnut Creek 1991 4:17.34	Oregon 19914:30.16		San Diego 1987 4:50.09	
800 free relay	Walnut Creek 1992 9:41.77	San Diego 199110:45.71		San Diego 1987 . 11:02.34	
200 med relay	So. Calif. Aqua 1987 1:57.74	Los Altos 19892:02.44	2:02.44	Olympic Club 1992 2:00.25	2:00.25
400 med relay	Walnut Creek 1991 4:55.98	Oregon		Los Altos 1989 5:07.62	
!					
Men 65+/240+	SC-Yards (65+) Year USMS	SC-Meters (240+) Year USMS	World	LC-Meters (240+) Year USMS	World
Men 65+/240+ 200 free relay	SC-Yards (65+) Year USMS So. Calif. Aqua 1990 1:55.12	SC-Meters (240+) Year USMS San Diego 19882:07.70	World 2:05.13	LC-Meters (240+) Year USMS GOST 1992 1:58.54	
Party and Company of the Company of					
200 free relay	So. Calif. Aqua 1990 1:55.12	San Diego 19882:07.70		GOST 1992 1:58.54	1:58.54
200 free relay 400 free relay	So. Calif. Aqua 1990 1:55.12 So. Calif. Aqua 1990 4:28.95	San Diego 19882:07.70 So. Calif. Aqua 19894:51.11		GOST	1:58.54
200 free relay 400 free relay 800 free relay	So. Calif. Aqua 1990 1:55.12 So. Calif. Aqua 1990 4:28.95 Oregon 1988 . 11:47.75	San Diego 19882:07.70 So. Calif. Aqua 19894:51.11 Holmes Lumber 198912:18.65	2:05.13	GOST 1992 1:58.54 Rinconada	1:58.54
200 free relay 400 free relay 800 free relay 200 med relay	So. Calif. Aqua 1990 1:55.12 So. Calif. Aqua 1990 4:28.95 Oregon 1988 . 11:47.75 So. Calif. Aqua 1990 2:12.78	San Diego	2:05.13	GOST	1:58.54
200 free relay 400 free relay 800 free relay 200 med relay	So. Calif. Aqua 1990 1:55.12 So. Calif. Aqua 1990 4:28.95 Oregon 1988 . 11:47.75 So. Calif. Aqua 1990 2:12.78 Colonials 1992 5:18.61 SC-Yards (75+) Year USMS	San Diego	2:05.13	GOST	1:58.54
200 free relay 400 free relay 800 free relay 200 med relay 400 med relay	So. Calif. Aqua. 1990 . 1:55.12 So. Calif. Aqua. 1990 . 4:28.95 Oregon 1988 . 11:47.75 So. Calif. Aqua. 1990 . 2:12.78 Colonials 1992 . 5:18.61 SC-Yards (75+) Year USMS DC Masters 1991 . 2:24.77	San Diego 1988	2:05.13	GOST 1992 1:58.54 Rinconada 1990 5:08.29 San Diego 1991 12:29.15 Lincoln 1991 2:21.20 Rinconada 1991 5:31.14 LC-Meters (280+) Year USMS LAM 1992 2:10.75	1:58.54 2:21.20 World
200 free relay 400 free relay 800 free relay 200 med relay 400 med relay Men 75+/280+	So. Calif. Aqua 1990 1:55.12 So. Calif. Aqua 1990 4:28.95 Oregon 1988 . 11:47.75 So. Calif. Aqua 1990 2:12.78 Colonials 1992 5:18.61 SC-Yards (75+) Year USMS	San Diego	2:05.13 2:21.09 World	GOST 1992 1:58.54 Rinconada 1990 5:08.29 San Diego 1991 12:29.15 Lincoln 1991 2:21.20 Rinconada 1991 5:31.14 LC-Meters (280+) Year USMS	1:58.54 2:21.20 World
200 free relay 400 free relay 800 free relay 200 med relay 400 med relay 400 free relay 400 free relay 800 free relay	So. Calif. Aqua. 1990 . 1:55.12 So. Calif. Aqua. 1990 . 4:28.95 Oregon 1988 . 11:47.75 So. Calif. Aqua. 1990 . 2:12.78 Colonials 1992 . 5:18.61 SC-Yards (75+) Year USMS DC Masters 1991 . 2:24.77 St. Petersburg 1992 . 6:02.78 St. Petersburg 1990 . 13:46.24	San Diego 1988	2:05.13 2:21.09 World	GOST 1992 1:58.54 Rinconada 1990 5:08.29 San Diego 1991 12:29.15 Lincoln 1991 2:21.20 Rinconada 1991 5:31.14 LC-Meters (280+) Year USMS LAM 1992 2:10.75 Rinconada 1991 5:43.78 Rinconada 1991 12:56.21	1:58.54 2:21.20 World
200 free relay 400 free relay 800 free relay 200 med relay 400 med relay 400 med relay 400 free relay 400 free relay	So. Calif. Aqua. 1990 . 1:55.12 So. Calif. Aqua. 1990 . 4:28.95 Oregon 1988 . 11:47.75 So. Calif. Aqua. 1990 . 2:12.78 Colonials 1992 . 5:18.61 SC-Yards (75+) Year USMS DC Masters 1991 . 2:24.77 St. Petersburg . 1992 . 6:02.78	San Diego 1988	2:05.13 2:21.09 World	GOST 1992 1:58.54 Rinconada 1990 5:08.29 San Diego 1991 12:29.15 Lincoln 1991 2:21.20 Rinconada 1991 5:31.14 LC-Meters (280+) Year USMS LAM 1992 2:10.75 Rinconada 1991 5:43.78	1:58.54 2:21.20 World

Men 85+/320+	SC-Yards (85+) Year USMS	SC-Meters (320+) Year USMS	LC-Meters (320+) Year USMS World
200 free relay		*******	Pacific Northwest 1992 3:07.37 3:07.37
400 free relay			
800 free relay	*******	*******	
200 med relay	*******	*******	
400 med relay			

MIXED RELAYS

Mixed 19+/76+	SC-Yards (19+) Year USMS	SC-Meters (76+) Year USMS		LC-Meters (76+) Year USMS	
200 free relay	Holmes Lumber 1991 1:31.65	Metairie 19892:03.73		Univ San Francisco 1992 1:48.50	
400 free relay	U San Francisco 1992 3:25.18	Pacific Northwest 19914:28.14		Santa Cruz 1989 4:23.58	
800 free relay	Davis 1992 7:48.42	Empire State 19919:58.40		Santa Cruz 1989 . 10:05.52	
200 med relay	H2ouston 1992 1:42.81	Riverside 19892:06.31		Univ San Francisco 1992 2:02.31	
400 med relay	U San Francisco 1991 3:58.70	Inland Empire 19875:26.32		Univ San Francicso 1991 4:36.72	
Mixed 25+/100+	SC-Yards (25+) Year USMS	SC-Meters (100+) Year USMS	World	LC-Meters (100+) Year USMS	World
200 free relay	So. Calif. Aqua 1990 1:29.40	Alaska 19891:47.91	1:46.19	Holmes Lumber 1988 1:45.58	1:43.89
400 free relay	U San Francisco 1992 3:27.39	Univ. Houston 19884:19.91		Walnut Creek 1989 4:13.70	
800 free relay	Walnut Creek 1991 7:41.32	South Bay Waves 19899:19.97		Santa Cruz 1989 9:17.66	
200 med relay	Lone Star 1991 1:39.01	Air Force 19912:01.83	1:58.28	Houstonian 1990 1:56.50	1:56.58
400 med relay	Walnut Creek 1991 3:51.18	Air Force Aqua 19904:48.01		Walnut Creek 1990 4:36.14	
Mixed 35+/120+	SC-Yards (35+) Year USMS				
111100 00.12501	SC-Yards (35+) Year USMS	SC-Meters (120+) Year USMS	World	LC-Meters (120+) Year USMS	World
200 free relay	And the second s	SC-Meters (120+) Year USMS Texas	1.48.60	LC-Meters (120+) Year USMS Lone Star 1987 1:44.84	World 1:44.83
	Lone Star 1991 1:34.75				
200 free relay	Lone Star 1991 1:34.75 Los Altos 1990 3:40.82	Texas 19891:48.60		Lone Star 1987 1:44.84	
200 free relay 400 free relay	Lone Star 1991 1:34.75 Los Altos 1990 3:40.82	Texas		Lone Star	
200 free relay 400 free relay 800 free relay	Lone Star	Texas	1 · 48 . 60	Lone Star	1:44.83
200 free relay 400 free relay 800 free relay 200 med relay	Lone Star	Texas 1989 1:48.60 So. Calif. Aqua 1989 4:05.98 San Diego 1989 9 12.88 Lakeside 1989 1:58.28	1 · 48 . 60	Lone Star	1:44.83
200 free relay 400 free relay 800 free relay 200 med relay 400 med relay	Lone Star	Texas 1989 1:48.60 So. Calif. Aqua 1989 4:05.98 San Diego 1989 9 12.88 Lakeside 1989 1:58.28	1 · 48 . 60	Lone Star	1:44.83
200 free relay 400 free relay 800 free relay 200 med relay 400 med relay	Lone Star	Texas	1:58.28	Lone Star	1:44.83
200 free relay 400 free relay 800 free relay 200 med relay 400 med relay Mixed 45+/160+	Lone Star	Texas	1:58.28 World	Lone Star	1:44.83 1:58.03
200 free relay 400 free relay 800 free relay 200 med relay 400 med relay Mixed 45+/160+ 200 free relay	Lone Star	Texas 1989 1:48.60 So. Calif. Aqua 1989 4:05.98 San Diego 1969 9 12.88 Lakeside 1989 1:58.28 Texas Swimaster 1988 4:56.95 SC-Meters (160+) Year USMS Greater Indiana 1989 1:50.55	1:58.28 World	Lone Star	1:44.83 1:58.03
200 free relay 400 free relay 800 free relay 200 mad relay 400 med relay Mixed 45+/160+ 200 free relay 400 free relay	Lone Star	Texas	1:58.28 World	Lone Star	1:44.83 1:58.03

Mixed 55+/200+	SC-Yards (55+) Year USMS	SC-Meters (200+) Ye	ear USMS	World	LC-Meters (200+)	Year USMS	World
200 free relay	So. Calif. Aqua 1987 1:56.25	Lincoln 19	9891:57.25	1:57.25	Los Altos	1992 1:58.15	1:58.15
400 free relay	Oiai	Oregon 19	9904:50.94		Lincoln	1990 4:56.69	
800 free relay	New England 1987 . 10:28.18	San Diego 19	98910:40.03		Multnomah	1989 . 11:10.75	
200 med relay	DC Masters 1992 2:10.35	Lincoln 19	9892:15.20	2:15.20	Los Altos	1992 2:14.58	2:14.58
400 med relay	Walnut Creek 1991 5:17.37	San Diego 19	9915:13.60]	Oregon	1988 5:32.10	
•				1			
Mixed 65+/240+	SC-Yards (65+) Year USMS	SC-Meters (240+) Ye	ear USMS	World	LC-Meters (240+)	Year USMS	World
200 free relay	Lincoln 1985 2:10.27	Los Altos 19	9912:17.29	2:17.29	Los Altos	1992 2:10.74	2:09.67
400 free relay	Connecticut 1987 5:15.84	Tamalpais 19	9885:55.13	[Oregon	1989 5:28.68	
800 free relay	Connecticut 1991 . 12:33.35	Lake Erie 19	99013:56.05		Los Altos	1989 . 12:21.32	
200 med relay	Lincoln 1985 2:27.90	Los Altos 19	9912:32.46	2:32.46	New England	1988 2:29.30	2:29.30
400 med relay	Rinconada 1991 5:54.09	San Diego 19	9896:37.62		St. Louis	1991 6:08.70	
				į			
Mixed 75+/280+	SC-Yards (75+) Year USMS	SC-Meters (280+) Ye	ear USMS	World	LC-Meters (280+)	Year USMS	World
200 free relay	Rinconada 1987 2:44.49	l			A		
	Kinconaga 196/ 2:44.49	Connecticut 19	9882:38.80	2:38.80	Oregon	1992 2:31.29	2:31.29
400 free relay	Walnut Creek 1992 7:04.46	San Mateo 19		2:38.80	San Mateo		2:31.29
400 free relay 800 free relay		San Mateo 19	9896:26.07	2:38.80	•	1989 6:08.62	2:31.29
	Walnut Creek 1992 7:04.46	San Mateo 19	9896:26.07 98720:36.33	3:11.32	San Mateo	1989 6:08.62 1989. 14:26.78	2:31.29
800 free relay	Walnut Creek 1992 7:04.46 St. Petersburg 1989 . 16:04.30	San Mateo 19 Space Coast 19	9896:26.07 98720:36.33 9873:19.26		San Mateo	1989 6:08.62 1989. 14:26.78 1992 2:57.24	
800 free relay 200 med relay	Walnut Creek 1992 7:04.46 St. Petersburg 1989 . 16:04.30 DC Masters 1992 3:11.96	San Mateo 19 Space Coast 19 Connecticut 19	9896:26.07 98720:36.33 9873:19.26		San Mateo	1989 6:08.62 1989. 14:26.78 1992 2:57.24	
800 free relay 200 med relay 400 med relay Mixed 85+/320+	Walnut Creek 1992 7:04.46 St. Petersburg 1989 . 16:04.30 DC Masters 1992 3:11.96 Rinconada 1991 9:27.58	San Mateo 19 Space Coast 19 Connecticut 15 Connecticut 19 SC-Meters (320+) Ye	9896:26.07 98720:36.33 9873:19.26 9887:42.99		San Mateo	1989 6:08.62 1989. 14:26.78 1992 2:57.24 1989 8:01.82 Year USMS	2:37.98
800 free relay 200 med relay 400 med relay Mixed 85+/320+ 200 free relay	Walnut Creek 1992 7:04.46 St. Petersburg 1989 . 16:04.30 DC Masters 1992 3:11.96 Rinconada 1991 9:27.58	San Mateo	9896:26.07 98720:36.33 9873:19.26 9887:42.99		San Mateo	1989 6:08.62 1989. 14:26.78 1992 2:57.24 1989 8:01.82 Year USMS	
800 free relay 200 med relay 400 med relay Mixed 85+/320+ 200 free relay 400 free relay	Walnut Creek 1992 7:04.46 St. Petersburg 1989 . 16:04.30 DC Masters 1992 3:11.96 Rinconeda 1991 9:27.58 SC-Yards (85+) Year USMS	San Mateo 19 Space Coast 19 Connecticut 15 Connecticut 19 SC-Meters (320+) Ye	9896:26.07 98720:36.33 9873:19.26 9887:42.99 Par USMS 9913:52.73	3:11.32	San Mateo	1989 6:08.62 1989 . 14:26.78 1992 . 2:57.24 1989 . 8:01.82 Year USMS 1992 . 3:46.53	2:37.98
800 free relay 200 med relay 400 med relay Mixed 85+/320+ 200 free relay 400 free relay 800 free relay	Walnut Creek 1992 7:04.46 St. Petersburg 1989 16:04.30 DC Masters 1992 3:11.96 Rinconada 1991 9:27.58 SC-Yards (85+) Year USMS	San Mateo	989 6:26.07 987 20:36.33 987 3:19.26 998 7:42.99 Pear USMS 991 3:52.73	3:11.32 3:52.73	San Mateo San Mateo Oregon Walnut Creek LC-Meters (320+) Pacific Northwest	1989 6:08.62 1989 . 14:26.78 1992 2:57.24 1989 8:01.82 Year USMS 1992 3:46.53	2:37.98
800 free relay 200 med relay 400 med relay Mixed 85+/320+ 200 free relay 400 free relay	Walnut Creek 1992 7:04.46 St. Petersburg 1989 16:04.30 DC Masters 1992 3:11.96 Rinconada 1991 9:27.58 SC-Yards (85+) Year USMS	San Mateo	989 6:26.07 987 20:36.33 987 3:19.26 988 7:42.99 ear USMS 991 3:52.73 	3:11.32	San Mateo San Mateo Oregon Walnut Creek LC-Meters (320+) Pacific Northwest	1989 6:08.62 1989 . 14:26.78 1992 . 2:57.24 1989 . 8:01.82 Year USMS 1992 . 3:46.53 	2:37.98

Long Distance Records

19-24	Women Year Record	Men Year Record
1 hour postal	L Peckenham 1992 5225Y	R Schmidt 1988 5625Y
6000Y postal		A 30.000 1308 1 30231
10K postal	S B Brownstein 19882:25:23.15	M Collins 1990 2:15:24.99
1-mile cable	K Bryan	J Barber 198321:20.86
2-mile cable	F Ramnath 1988 46:26.00	G Houck 1990 42:49.00
2-111110 02210		1
25-29	Women Year Record	Men Year Record
1 hour postal	W Cuckovich 1990 5415Y	B Placak 1987 5825Y
6000Y postal	L Ronacher 19911:27:15.88	J Peters 19911:18:32.00
10K postal	S Blaha 19852:22:40.00	M Volk 1989 2:04:50.00
1-mile cable	S Swayman198121:46.43	D Winant 1981 20:50.81
2-mile cable	D Cain	J Pearson 1992 39:36.39
20. 24	Women Year Record	Men Year Record
30-34	P Mattson 1988 5295Y	B Placak 1990 5750Y
1 hour postal	N Taylor 19911:50:17.00	J Matysek 1991 . 1:12:14.15
6000Y postal	P Mattson 19852:17:19.08	S Breiter 1987 2:08:13.89
10K postal	S Thomas	M Bernadino 1983 21:26.82
2-mile cable	S Thomas	J Kegley 198838:32.00
2-mile cable	3 Inomas	J Regiey 1988 38:32.00
35-39	Women Year Record	Men Year Record
1 hour postal	P Mattson 1989 5165Y	S MacDonald 1992 5565Y
6000Y postal	P Bayers19911:38:37.00	C Tribuzi 1991 1:22:53.00
10K postal	P Mattson 19882:16:22.59	J McConica 1988 2:07:09.01
1-mile cable	M Stevens 1988 23:04.20	R Walton 1988 21:23.33
2-mile cable	S Skiff	R Phillips: 1990 43:02.00
40.44	Women Year Record	Men Year Record
40-44 1 hour postal	B Dunbar 1990 5030Y	K Polansky 1992 5450Y
6000Y postal	K Watson 19911:45:23.45	S Craven 1991 1:14:24.70
10K postal	D Ogier-Poliard 19922:27:47.39	K Bell
1-mile cable	J Katz 1986 23:50.52	J Cooke
2-mile cable	B Dunbar 1990 43:06.00	K Bell
Z-mile Cable	B Danbar	1
45-49	Women Year Record	Men Year Record
1 hour postal	J Royer 1987 4490Y	H Winn
6000Y postal	A Greenhaw 19911:37:25.95	
10K postal	L Weir	A McPherson 1992 2:26:15.99
1-mile cable	B Zaremski198628:24.67	M Goldstein 1984 23:47.75
2-mile cable	H Buss	J Cooke 1992 47:12.09
50-54	Women Year Record	Men Year Record
1 hour postal	L Stoinoff 1983 4400Y	H Winn 1992 5075Y
6000Y postal		J Stubbs 19911:36:49.10
10K postal	N Whitehall 19842:47:12.49	B Jones 1985 2:31:50.00
1-mile cable	A Rockefeller 1984 31:21.91	S Kooistra 1978 23:11.86
2-mile cable	B Jordan 1991 55:10.00	T Haraszti 1991 45:28.00
		1

Page 114 LONG DISTANCE RECORDS

55-59	Women Year Record	Men Year Record
1 hour postal	L Stoinoff 1988 4415Y	B Sturtvant 1989 46757
6000Y postal		***************************************
10K postal	C Anderson 19923:12:13.99	R Beach
1-mile cable	B Russ 1986 30:06.41	J Schmidt 19?? 26:59.84
2-mile cable	J Lamott	C Lebourgeus 1992 48:21.63
L-mire capie	1	C Lebourgeus 1552 40.21.05
60-64	Women Year Record	Men Year Record
1 hour postal	C Walker 1988 4040Y	W Wilson 1989 4555Y
6000Y postal		
10K postal	R Manfredi 19863:58:01.00	N Berenyi 1992 2:56:16.51
1-mile cable	B Russ	J Schmidt 1989 33:27.29
2-mile cable	B Russ	W Phillips 1991 49:57.00
65-69	Women Year Record	Men Year Record
1 hour postal	C Walker 1991 3995Y	F Piemme 1991 4315Y
6000Y postal	•••••	D Keane 1991 1:49:32.84
10K postal	R Manfredi19893:58:55.00	A Da Rosa 19852:58:08.83
1-mile cable	K Brazil198753:05.88	J Schull 1984 28:55.62
2-mile cable	B Russ	C Barnes 1990 1:01:31.00
70-74	Women Year Record	Men Year Record
1 hour postal	M Kornfield 1992 3300Y	A Da Rosa 1989 4080Y
6000Y postal	PI KOTATIETA139233001	G Clemens 19911:51:10.71
10K postal	R Stewart 19884:54:25.78	H Howe 1984 2:57:58.03
	I Brown	J Schull 1985 28:31.42
1-mile cable	I Brown	F Murphy 1990 1:00:18.00
2-mile cable	1 Brown	F Murphy 1990 1:00:18.00
75-79	Women Year Record	Men Year Record
1 hour postal	J Dolce	G Weisenthal 1989 3535Y
6000Y postal		
10K postal	I Brown	
1-mile cable	E Landon 1979 49:11.96	J Irvine 1986 35:09.64
2-mile cable	E Bein	D Woodford 1989 1:01:19.99
	1	Men Year Record
80-84	Women Year Record	Men Year Record
1 hour postal	E Maurice 1985 2275Y	
6000Y postal		
10K postal		
1-mile cable		
2-mile cable		C Wood 1989 1:20:33.00
85-89	Women Year Record	Men Year Record
1 hour postal	E Kinney 19922150Y	C Ross 1985 3240Y
6000Y postal		
10K postal		
1-mile cable		
2-mile cable		
	•	•

No records have been established for women or men in the 90-94 and 95+ age groups.

APPENDIX B

INFORMATION FOR MEET DIRECTORS AND OFFICIALS

PREPARATION OF MEET RESULTS

Meet results must include the name of the meet; the location of the meet (name of pool, city, and state); the date of the meet; the name and address of the meet director; the name and certification status of the officials (Referee, Starter, and stroke and turn judges); and the sanction or approval number.

The results of each event shall be published in the following order.

Individual events:

- 1. Print women's results first, then men's results.
- Within each sex, print results by age group from youngest to oldest.
- Within each age group, print results in the following stroke order freestyle, backstroke, breaststroke, butterfly, and individual medley.
- 4. Within each stroke, print events in order from shortest to longest.

Relay events:

- Print women's relay results first, then men's relay results, then mixed relay results.
- Within each sex, print results in the following order: 200 freestyle relay, 200 medley relay, 400 freestyle relay, 400 medley relay, and 800 freestyle relay.
- Within each relay event, print results by age group from youngest to oldest.

Results, tapes, timing printouts, time cards, heat sheets, timers' heat sheets or swimmer lists, and other information used to compile results and records shall be kept for a minimum of one year after the conclusion of the meet.

DIFFERENCES BETWEEN USS AND USMS RULES

USMS follows Articles 101 and 102 of the U.S. Swimming Technical Rules with the following exceptions:

Starts, Strokes, and Relays

- * Forward start. The forward start may be taken from the starting block, the pool deck, or a push from the wall. The Starter shall direct the swimmers to assume a position with at least one foot at the front of the block, the edge of the deck, or on the wall before the command, "Take your mark." Those starting in the water must have at least one hand in contact with the wall or starting block.
- * Backstroke start. For short course yards events, the feet may be placed in any position on the wall or on the gutter of the pool, and the swimmer may assume any desired starting position which does not remove either foot completely from the water, or either hand from the starting grips or pool edge. Standing in or on the gutter is not permitted at any time before the start. For short course meters and long course meters events, USMS and USS follow the same rules.
- * Backstroke. Standing in or on the gutter (any course) and curling the toes over the lip of the gutter (short course meters and long course meters) is not permitted after the start.
- * Butterfly. The breaststroke or whip kick may be used exclusively or interchangeably with the dolphin kick at any time during the race. However, when the breaststroke or whip kick is used, the arms must be recovered over the top of the water at least once per breaststroke kick, except after the last such kick before the turn or finish.
- * Relays. Relay swimmers who cannot exit the water quickly enough to prevent interference with automatic officiating equipment may be allowed to hold on to the lane line until all relays have finished, allowing them to exit the pool more slowly or via the ladders at the conclusion of the race.

Swimming Competition

- * Officials. The minimum number of officials at USMS sanctioned or approved Masters Swimming meets shall include the following:
 - 1 Referee
 - 1 Starter
 - 2 Stroke and Turn Judges
 - 2 Timers per lane (if automatic timing is not being used)

The Referee and Starter may double as stroke and turn judges, but the Referee and Starter may not be the same person. One of the officials shall be a Referee, Starter, or stroke and turn judge certified by USS, YMCA, or any other USMS-approved certifying body.

- Warm-up. If there is no other warm-up/warm-down area available in pools of five lanes or more, one lane shall be set aside for warm-up/warm-down during the conduct of the meet. If there is no other warm-up/warm-down area available in pools of four or fewer lanes, swimmers shall be allowed to swim to the other end of the pool at the end of each heat and a warm-up/warm-down period must be offered at least once during each half-hour of competition.
- * Timed Finals. All Masters events shall be conducted on a timed final basis.
- Seeding. Age groups, sexes, and events of the same distance 200 yards or longer may be combined so that no swimmer has to swim alone and lanes may be filled.

It is recommended that when swimmers are seeded by time and not by age groups, the fastest two swimmers in each age group shall not be seeded into outside lanes. It is recommended that they be moved inward one lane, or given the center lane in the next slowest heat, whichever is the most appropriate placement.

Seeding at meets other than National Championship Meets may be either fast-to-slow or slow-to-fast. Seeding may differ for sprint and distance events. The meet announcement shall state the seeding for all events.

At the discretion of the meet director, competitors in the freestyle events over 200 meters may be required to swim two-to-a-lane when only one course is available for the event. When events are swum two-to-a-lane, obstructing another swimmer by swimming across the lane or otherwise interfering with the other swimmer may disqualify the offender, and the offender shall immediately be removed from the lane.

* Records. USMS records may only be established by USMS-registered swimmers in sanctioned or approved competition. Because swimmers from different age groups and sexes may compete in the same heat or event, a swimmer is not required to win his heat or event to establish a record.

Relay lead-off split times will not be considered for records or top ten times.

Required documentation for USMS records includes the Referee's signature, as well as the tape from the automatic or semi-automatic (with three buttons) timing equipment, or the time card bearing times and signatures from *three* timers.

- * Scratch Procedures. Any swimmer or relay team not reporting for or competing in an event shall not be penalized.
- * Eligibility. The eligibility of a participant for a particular age group will be determined by age as of the *last* day of the meet.

Long Distance Swimming

* Costume. Multiple swim caps and neoprene caps are allowed in any USMS long distance competition. Separate wetsuit divisions may be offered in non-National Championship events.

Page 118 APPENDIX B

USMS and World Record Applications

Documentation Requirements for USMS Records

- Completed "Application for USMS and/or World Record."
- * Copy of the tape from the electronic timing device bearing the signature of the meet referee <u>and/or</u> the time card bearing the times from three stopwatches, the signature of each timer, and the signature of the meet referee.

Documentation Requirements for World Records:

- * All documentation required for USMS Records.
- * Proof-of-age consisting of a copy of the swimmer's birth certificate or passport (this is a one-time requirement for each swimmer).
- * Completed "Pool Length Certification Form" (this is a one-time requirement for each pool).
- * The record application must be received within six months following the date of the performance.

Documentation Requirements for USMS Long Distance Records:

- * Completed "Application for USMS Long Distance Record."
- * Proof of achieved time or distance swum.
- * For postal events, a lap-count check-off sheet listing all split times and bearing the signature, name, address, and phone number of the lap counter/timer.
- * For cable swims, the technique used to measure the course and the signature, name, address, and phone number of the person who measured the course.

APPENDIX B Page 119

APPLICATION FOR USMS AND/OR WORLD RECORD

1.	Distance	0.1550	4.	Official	Time	mins secs hundre	
	**	0-1000	-				
2.	SC-yards, SC-meters, LC-meters		5.	Electron	ic timing	yes	_no
3.	Strokefree, back, brst fly IM FR, MR	-	6.	Three st	opwatche	syes	_no
7.	Individual events:						
	Name	Gender	Birthda	ate	Age	USMS Number	
8.	Relay team name						
	Names (in order of competing)	Gender	Birthda	ite	Age	USMS Number	
9.	Pool name		City			State	
	Last day of meet	S	anction#		LMS	c	
10. 11.	Is the swimmer's birth certificate on f (Required®nly for World Records) Is pool length certification on file with (Required only for World Records)					yes	
12.	Record application submitted by:						
	Name			Phone			
	Address						
	City		Stat	e	Zig	.	
	tructions: Complete the above form in it ctronic timing system and/or time card w ormation to WALTER REID. P O BOX 88	ith signature	s of all thr	ee timers :			

POOL LENGTH CERTIFICATION FORM

1.	Pool name				LMSC			
	Address			······································	· · · · · · · · · · · · · · · · · · ·			
	City				State			
2.	Measurement para	meters (circle	answer)					
	Pool length in meter	s			25	50		
	Moveable bulkhead				Yes	No		
	Measuring tape				Steel	Fibergi	ass	
	Number of touchpac	ds at time of m	easurement		None	One	Two	
3.	Measurements							
	Outside lane			_ or				
		feet	inches		meters	cent	imeters	
	Middle lane	feet	Inches	_ or	meters		imeters	
	Outside lane	1001		or	,,,,,,,,,	00		
	Outside lane	feet	Inches	_ 0,	meters	cent	imeters	
4.	Measured by:			Subm	itted by:			
	Name			Name				
	Title			Title				
	Address			Addre	ss			
	City			City				
	State			State_			Zlp	
	Date			Date_				

Send completed form to:

Walter Reid P O Box 8800A Stellacoom, WA 98388

Measurement procedures:

- * Measurements must be conducted using a steel or fiberglass tape
- The tape must be longer than the distance to be measured
- * Measurements may be reported in either the English system (feet/inches) or the metric system (meters/centimeters)
- * Measurements must be conducted for each outside lane and one of the center lanes
- * Measurements must be taken at water level from inside end wall to inside end wall
- * Measurements may be conducted with or without touch pads in place
- * Permanent courses need only be measured and submitted once unless structural changes have occurred since original measurement
- Pools with a moveable bulkhead should be measured as a permanent course and benchmarked Before each session of competition and at the conclusion of the meet, a responsible person must confirm the pool length by checking the benchmark as a reference point
- * Tolerance levels for pool measurements have not yet been established

APPLICATION FOR USMS LONG DISTANCE RECORD

1.	Event	mile esble	4.	Official	Time	urs mins secs hundredths
	• • •	IIIIa Cabie				
2.	25y, 25m, or 50m pool, 1/4-	mile cable	5.		eted Dist able)	ancespecify yards or meters
3.	Method of timing					
	electronic timing or three sto	pwatches				
6.	Individual events:					
	Name	Gender	Birthd	ate	Age	USMS Number
7.	Relay team name					
	<i>*</i>		Birthd		•	USMS Number
8.	Name of pool or body of water		City			State
	Date of swim	nction#	*****	LI	MSC	
9.	Lap counter/timer information (for pos Signature		••			
	Name			_ Phon	e	
	Address					
	City		Sta	te		Zip
10.	Course length certification (for open-w Measurement technique					
	Signature					
	Name					
	Address					
	City		Sta	te	:	Zip
11.	Record application submitted by:					
	Name			_	e	
	Address					
	City		Sta	te		Zip

Sen'd the completed record application form and all required documentation to ROB COPELAND, 245 BERGER STREET, SOMERSET, NJ 08873

APPENDIX C

NATIONAL AND INTERNATIONAL MASTERS SWIMMING SCHEDULE

USMS NATIONAL CONVENTIONS

- 1993 USMS Convention, Los Angeles, CA. September 19-26, 1993. Contact: Mel Goldstein, 6456 Broadway, Indianapolis, IN 46220. Phone: (317)253-3652.
- 1994 USMS Convention, Kansas City, KS. September 28 October 2, 1994. Contact: Mel Goldstein, 6456 Broadway, Indianapolis, IN 46220. Phone: (317)253-3652.

USMS NATIONAL CHAMPIONSHIP MEETS

- 1993 USMS Short Course Championships, Santa Clara International Swim Center, CA. May 20-23, 1993. Contact: Theresa Hessler, Santa Clara Swim Club, 2625 Patricia Drive, P.O. Box 2672 Mission Station, Santa Clara, CA 95055. Phone: (408) 246-5050, (408) 246-5055 (fax).
- 1993 USMS Long Course Championships, University of Minnesota Aquatic Center, MN. August 19-22, 1993. Contact: Wayde Mulhern, 570 96th Lane, Blaine, MN 55434. Phone: (612) 784-7020.
- 1994 USMS Short Course Championships, Arizona State University, Tempe, Arizona. May 13-16, 1994. Contact: Tempe Rio Salado, P.O. Box 27523, Tempe, AZ 85285-7523.
- **1994 USMS Long Course Championships**, Buffalo, New York. August 25-28, 1994. Contact: Gene Donner, 717 South Road, East Aurora, NY 14052.

USMS LONG DISTANCE NATIONAL CHAMPIONSHIP MEETS

- 1993 USMS 1 Hour Postal Championships, Pacific Masters. January 1-31, 1993. Contact: Michael Collins, POB 1366, Davis CA 95617.
- 1993 USMS 10 Kilometer Postal Championships, St. Louis Masters. May 15-September 30, 1993. Contact: Leo Letendre, 267 Glandore Dr., Manchester MO 63021.
- 1993 USMS 6000 Yard Postal Championships, Monroe Community College, September 1-November 30, 1993. Contact: George McVey, 477 Antlers Dr., Rochester NY 14618.

- 1993 USMS 1 Mile Open Water Championships, Southern California Aquatics. Late July 1993. Contact: Gerry Rodriquez, 5201 Broadway # 111, Santa Monica CA 90401.
- 1993 USMS 2 Mile Cable Championships, Virginia Masters. July 10, 1993. Contact: Linda McCowan, 13613 Prince William's Dr., Midlothian VA 23113.
- 1993 USMS 3 Mile Open Water Championships, Chicago Park District, September 12, 1993. Contact: Bob Young, 7050 W. 71st St., Bedford Park IL 60499.
- 1993 USMS 3.5-5 Mile Open Water Championships, Southern Pacific Masters. Early July, 1993. Contact: Rob Copeland, 246 Berger St., Somerset, NJ 08873.
- 1993 USMS 8.5 Mile Open Water Championships, Southern Pacific Masters. Mid-July, 1993. Contact: Seal Beach Rough Water, ^C/₀ Rocky Getner, POB 853. Seal Beach CA 90740.
- 1994 USMS 1 Hour Postal Championships, St. Louis Masters. January 1-January 31, 1994.
- 1994 USMS 10 Kilometer Postal Championships, Berkeley Aquatics Masters, NJ. May 15-September 30, 1994
- 1994 USMS 6000 yard Postal Championships, Southern Pacific Masters, Aliso Hills Swim Ranch. January 1-January 31, 1994
- 1994 USMS 1 Mile Open Water Championships, Ohio Masters. August 7, 1994.
- 1994 USMS 2 Mile Cable Championships, Virginia Masters. July 11, 1994
- 1994 USMS 1.5-3 Mile Open Water Championships, Adirondack Masters, Mirror Lake. July 1994.
- 1994 USMS 3.5-5 Mile Open Water Championships, Minnesota Masters, Lake Minnetonka. August 6, 1994.
- 1994 USMS 6+ Mile Open Water Championships, Southern Pacific Masters, Seal Beach. July 16, 1994.

FINA/MSI CHAMPIONSHIP MEETS

- 1993 MSI Pan Pacific Championships, Hamilton, New Zealand. April 10-17, 1993. Contact: Pan Pac Maswim 93, PO Box 86, Matamata 2271, New Zealand.
- **1994 FINA World Championships**, Montreal, Quebec, Canada. July 4-9, 1994. Contact: Rendez-vous 94 Montreal, 4545, avenue Pierre-de-Coubertin, Case postale 1000, Succursale <<M>>>, Montreal, Quebec, Canada, H1V 3R2.

APPENDIX D

ZONE AND LMSC BOUNDARIES

ZONES

Breadbasket - Colorado, Iowa, Midwestern, Minnesota, Missouri Valley, North Dakota, Ozark, South Dakota, Wyoming

Colonies - Adirondack, Connecticut, Delaware Valley, Maryland, Metropolitan, New England, New Jersey, Niagara, Potomac Valley, Virginia

Dixie - Florida, Florida Gold Coast, Georgia, North Carolina, South Carolina, Southeastern, Southern

Great Lakes - Allegheny Mountain, Central, Indiana, Kentucky, Lake Erie, Michigan, Ohio, West Virginia, Wisconsin

Northwest - Alaska, Inland Empire, Montana, Oregon, Pacific Northwest, Snake River, Utah

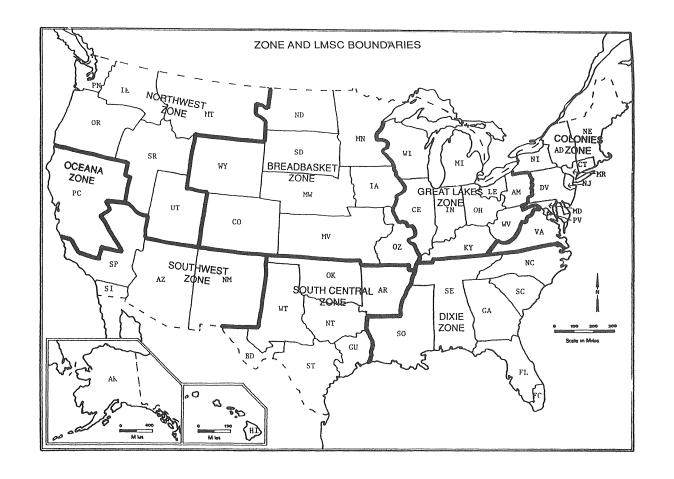
Oceana - Hawaii, Pacific

South Central - Arkansas, Border, Gulf, Oklahoma, North Texas, South Texas, West Texas

Southwest - Arizona, New Mexico, San Diego/Imperial, Southern Pacific

LMSC NUMERIC CODES AND ABBREVIATIONS

3	AD	Adirondack	7	NJ	New Jersey
56	AK	Alaska	42	NM	New Mexico
11	AM	Allegheny Mountain	4	NI	Niagara
48	AZ	Arizona	13	NC	North Carolina
23	AR	Arkansas	52	ND	North Dakota
53	BD	Border	26	NT	North Texas
21	CE	Central	17	OH	Ohio
32	CO	Colorado	27	OK	Oklahoma
5	CT	Connecticut	37	OR	Oregon
8	DV	Delaware Valley	22	OZ	Ozark
14	FL	Florida	38	PC	Pacific
50	FG	Florida Gold Coast	36	PN	Pacific Northwest
45	GA	Georgia	10	PV	Potomac Valley
25	GU	Gulf	44	SI	San Diego-Imperial
39	HI	Hawali	59	SR	Snake River
16	IN	Indiana	55	SC	South Carolina
35	IE	Inland Empire	54	SD	South Dakota
40	IA	lowa	43	ST	South Texas
41	KY	Kentucky	15	SE	Southeastern
18	LE	Lake Erie	24	SO	Southern
9	MD	Maryland	33	SP	Southern Pacific
6	MR	Metropolitan	34	UT	Utah
19	MI	Michigan	12	VA	Virginia
29	WW		46	WT	West Texas
30	MN	Minnesota	47	WV	West Virginia
28	MV	Missouri Valley	20	WI	Wisconsin
31	MT	Montana	58	WY	Wyoming
2	NE	New England			



LMSC BOUNDARIES

Adirondack - The State of New York east and north of Oswego, Onondaga, Cortland, Broome, Sullivan, Orange, and Dutchess Counties.

Alaska - The State of Alaska.

Allegheny Mountain - The State of Pennsylvania west of Potter, Clinton, Center, Huntingdon, and Bedford Counties. In the State of West Virginia the Counties of Marshall, Brooke, Ohio, and Hancock. In the State of Ohio the Counties of Columbiana, Belmont, and Jefferson.

Arkansas - The State of Arkansas. In the State of Texas the County of Bowie.

Arizona - The State of Arizona.

Border - In the State of Texas the Counties of El Paso, Hudspeth, Culberson, Jeff Davis, Presidio, Brewster, Terrell, and Crockett.

Central - The State of Illinois except the Counties of St. Clair, Calhoun, Greene, Jersey, Monroe, and Madison.

Colorado - The State of Colorado.

Connecticut - The State of Connecticut.

Delaware Valley - The State of New Jersey south of Mercer and Monmouth Counties. The State of Delaware. In the State of Maryland the County of Cecil. The State of Pennsylvania east of and including Potter, Clinton, Center, Huntingdon, and Bedford Counties.

Florida - The State of Florida except the Counties of Palm Beach, Broward, Dade, Monroe, and that part of Hendry County east of Route 833; and also excluding the Counties of Escambia, Santa Rosa, Okaloosa, Walton, Holmes, Washington, Bay, and that part of Calhoun and Jackson Counties west of the Apalachicola River.

Florida Gold Coast - In the State of Florida the Counties of Palm Beach, Broward, Dade, Monroe, and that part of Hendry County east of Route 833.

Georgia - The State of Georgia.

Gulf - That part of the State of Texas bounded on the north and including the Counties of Robertson, Leon, Houston, Angelina, Nacogdoches, and Shelby; on the east by the State of Louisiana; on the south by the Gulf of Mexico; and on the west by and including the counties of Fort Bend, Wharton, Colorado, Waller, Grimes, Robertson, Brazos, and Matagorda.

Hawaii - The State of Hawaii.

Indiana - The State of Indiana except the Counties of Floyd and Clark.

Inland Empire - In the State of Washington the Counties of Okanogan, Chelan, Douglas, Ferry, Stevens, Spokane, Lincoln, Grant, Kittitas, Asotin, Columbia, Yakima, Franklin, Adams, Whitman, Walla Walla, Garfield, Benton, Pend Oreille, and that portion of Klickitat County east of Highway 97 and including the City of Goldendale. In the State of Idaho the Counties of Bonner, Kootenai, Shoshone, Benewah, Latah, Lewis, Nez Perce, Idaho, Clearwater, and Boundary.

Iowa - The State of Iowa except the Counties of Lyon, Osceola, Sioux, O'Brien, Plymouth, Cherokee, Woodbury, Ida, Monona, Crawford, Harrison, Shelby, Pottawattamie, Mills, Montgomery, Freemont, and Page.

Kentucky - The State of Kentucky except the Counties of Campbell, Kenton, and Boone. In the State of Indiana the Counties of Floyd, and Clark.

Lake Erie - In the State of Ohio the Counties of Tuscarawas, Seneca, Crawford, Erie, Huron, Richland, Lorain, Ashland, Cuyahoga, Medina, Lake, Geauga, Portage, Stark, Ashtabula, Trumbull, Mahoning, Summit, and Wayne.

- Maryland The State of Maryland except the Counties of Cecil, Montgomery, and Prince Georges.
- Metropolitan The State of New York south of and including Sullivan, Orange, and Dutchess Counties.
- Michigan The State of Michigan.
- Midwestern The State of Nebraska. In the State of Iowa the Counties of Lyon, Osceola, Sioux, O'Brien, Plymouth, Cherokee, Woodbury, Ida, Monona, Crawford, Harrison, Shelby, Pottawattamie, Mills, Montgomery, Freemont, and Page.
- Minnesota The State of Minnesota. In the State of Wisconsin the Counties of St. Croix, Dunn, and Pierce.
- Missouri Valley The State of Kansas. The State of Missouri including and bounded by the Counties of Schuyler, Adair, Macon, Randolph, Audrain, Callaway, Cole, Moniteau, Morgan, Benton, Hickory, Polk, Greene, Christian, and Taney.
- Montana The State of Montana except the Counties of Dawson and Wibaux.
- New England The States of New Hampshire, Vermont, Massachusetts, Rhode Island, and Maine.
- New Jersey The State of New Jersey north of and including the Counties of Mercer and Monmouth.
- New Mexico The State of New Mexico.
- Niagara The State of New York west of and including the Counties of Oswego, Onondaga, Cortland, and Broome.
- North Carolina The State of North Carolina except the Counties of Camden, Currituck, and Pasquotank.
- North Dakota The State of North Dakota. In the State of Montana the Counties of Dawson and Wibaux.
- North Texas The State of Texas bounded on the south but not including the Counties of Callahan, Brown, Mills, Lampasas, Bell, Milan, Robertson, Leon, Houston, Angelina, Nacogdoches, and Shelby; on the east by the State of Louisiana, the State of Arkansas, and the County of Bowie, Texas; on the north by the State of Oklahoma and the County of Bowie, Texas; and on the west by the Counties of but not including Hardeman, Foard, Knox, Haskell, and Jones.
- Ohio The State of Ohio except the Counties of Seneca, Crawford, Columbiana, Erie, Huron, Richland, Lorain, Ashland, Cuyahoga, Medina, Lake, Geauga, Portage, Stark, Ashtabula, Trumbull, Mahoning, Summit, Wayne, Belmont, Lawrence, Washington, Jefferson, and Tuscarawus. In the State of Kentucky the Counties of Campbell, Kenton, and Boone.
- Oklahoma The State of Oklahoma.
- Oregon The State of Oregon except Malheur County. In the State of Washington the Counties of Cowlitz, Clark, Skamania, and that portion of Klickitat County west of Highway 97.
- Ozark The State of Missouri east of and including the Counties of Scotland, Knox, Shelby, Monroe, Pike, Montgomery, Osage, Miller, Camden, Dallas, Webster, Douglas, and Ozark. In the State of Illinois the Counties of Calhoun, Greene, Jersey, Madison, St. Clair, and Monroe.
- Pacific The State of California north of but not including the Counties of San Luis Obispo, Ventura, Los Angeles, and San Bernardino. In the State of Nevada the Counties of Humboldt, Washoe, Lyon, Storey, Mineral, Douglas, Churchill, Pershing, Lander, and Carson City.

- Pacific Northwest The State of Washington west of but not including the Counties of Okanogan, Chelan, Kittitas, and Yakima, and north of but not including the Counties of Cowlitz, Skamania, and Klickitat.
- Potomac Valley The District of Columbia. In the State of Maryland the Counties of Montgomery and Prince Georges. In the Commonwealth of Virginia the Counties of Arlington and Fairfax and the Cities of Alexandria, Fairfax, and Falls Church.
- San Diego-Imperial In the State of California the Counties of San Diego and Imperial.
- Snake River The State of Idaho except the Counties of Boundary, Bonner, Kootenai, Shoshone, Benewah, Latah, Clearwater, Nez Perce, Lewis, and Idaho. In the State of Nevada the Counties of Elko, White Pine, and Eureka. In the State of Oregon the County of Malheur.
- South Carolina The State of South Carolina.
- South Dakota The State of South Dakota.
- South Texas The State of Texas bounded on the east by and including the Counties of Milam, Burleson, Washington, Austin, Fayette, Lavaca, and Jackson; on the south by the Gulf of Mexico and the Republic of Mexico; on the west by and including the Counties of Val Verde, Sutton, and Schleicher; and on the north by and including the Counties of Menard, Mason, Llano, Burnet, Lampasas, and Bell.
- Southeastern The State of Alabama. The State of Tennessee. In the State of Florida the Counties of Escambia, Santa Rosa, Okaloosa, Walton, Holmes, Washington, and Bay, and that part of Jackson and Calhoun Counties west of the Apalachicola River.
- Southern The States of Louisiana and Mississippi.
- Southern Pacific In the State of California the Counties of San Luis Obispo, Ventura, Los Angeles, San Bernardino, Orange, Riverside, and Santa Barbara. In the State of Nevada the Counties of Clark, Esmeralda, Lincoln, and Nye.
- Utah The State of Utah.
- Virginia The Commonwealth of Virginia except the Counties of Arlington and Fairfax and the Cities of Alexandria, Fairfax, and Falls Church. In the State of North Carolina the Counties of Camden, Currituck, and Pasquotank.
- West Texas The State of Texas bounded on the south and including the Counties of Reeves, Pecos, Upton, Reagan, Irion, Tom Green, Concho, McCulloch, and San Saba; on the west by New Mexico; on the north by the State of Oklahoma; on the east by the State of Oklahoma and by and including the Counties of Hardeman, Foard, Knox, Haskell, Jones, Callahan, Brown, Mills, and San Saba.
- West Virginia The State of West Virginia except the Counties of Hancock, Brooke, Ohio, and Marshall. In the State of Ohio the Counties of Lawrence and Washington.
- Wisconsin The State of Wisconsin except the Counties of St. Croix, Dunn, and Pierce.
- Wyoming The State of Wyoming.

APPENDIX E

USMS DIRECTORY

USMS Executive Committee

President	Daniel Gruender
Vice President	Nancy Ridout
Secretary	Mel Goldstein
Treasurer	Suzanne Rague
Past President	Thomas D. Boak
Legal Counsel	Jack Geoghegan
Zone Chairman	Betsy Durrant

USMS National Office

Executive Secretary	Dorothy Donnelly
National Registrar	Diane and Bill Black

Zone Representatives and LMSC Chairmen

Breadbasket Zone - Todd Samland

Colorado	Jack Wegert
owa	Jack Mathews
Vlidwestern	Patrick Dibiase
Minnesota	Wayde Mulhern
Vissouri Valley	Fran Fields
North Dakota	Will Gosnold
Ozark	Leo Letendre
South Dakota	Kathy Dean
Wyoming	Thomas W. Bryant
MinnesotaMissouri Valley	Wayde MulhernFran FieldsWill GosnoldLeo LetendreKathy Dean

Colonies Zone - Tom Lyndon

	•
Adirondack	Betsy Owens
Connecticut	Jerianne Donnelly
Delaware Valley	Stephanie Walsh
Maryland	Jeanne Bostwick
Metropolitan	Lorraine Martinelli
New England	Diane Reed
New Jersey	Cathy Copeland
Niagara	Gene Donner
Potomac Valley	Thomas Denes
Virginia	Jim Miller

Dixie Zone - Scott Rabalais

Florida	June KrauserLisa WatsonDennis WatsonGeorge FisettePat Wilson
Great Lakes Zone - Frank L.	"Skip" Thompson
Allegheny Mountain Central Indiana Kentucky Lake Erie Michigan Ohio Wisconsin	Russ LymanMark R. LambertWilliam TingleyPierce BrayFrank L. "Skip" ThompsonPat Maley
Northwest Zone - Kathr	rine J. Casey
Alaska	Carolyn KentSteve HollowayJohn F. ZellStephen FreebornPaula HowardMichael Makarczyk
Hawaii	
Pacific	
South Central Zone - Kr	is Wingenroth
Arkansas	Doug RawnDon MehlJeff ThibodeauCraig TribuziPat WhitakerMarcia Marcantonio
Southwest Zone - Ste	ve Schofield
Arizona New Mexico San Diego - Imperial Southern Pacific	Edie Gruender Joseph Tesmer Bobbi Turcotte

USMS COMMITTEES (Chairman *):

Championship Committee

Bill Barthold * Catherine K. Kohn Laura Val
Bill Black Stu Marvin Stephanie Walsh
Judy Bonning Bob Merrick Medical Coordinator:
Gene Donner Bill Mulliken Jim Miller
Fmmett Hines Sandi Rousseau

Coaches Committee

Judy BonningClay EvansLeslie RonacherNancy BrownPaul FortoulTodd SamlandCarl ChittumCarolyn KentTori SmithMichael CollinsBob KroteeWilliam TingleyMarilyn EarlyDon Mehl *John F. Zell

Convention Committee

Jeanne Bostwick Janice Krauser Edna Spring
Carolyn Cunningham Marie Kreipe Joanne Tingley
Lil Haneman Pat Maley William Tingley *
Michael Heather * Art Mayer Paul Windrath
Sarah Hromada

Finance Committee

Robert Davidson Richard T. Smith Ex-Officio:
Nicholas G. Fazzano Fred Tan Roy Abramowitz
Marilyn Fink Lucy Johnson-Trapp * Suzanne Rague
Dave Gray Kris Wingenroth Freyda Faivus
John Maguire David Zander

Insurance Committee

Doug BroganMichael Laux *Jane MooreJack BuchannanJohn MaguireForrest SullivanJack GeogheganBob MerrickChristine WinnAndy Kramer

Internal Audit Committee

Jeanne Ensign Freyda Faivus * Richard T. Smith

International Committee

Thomas D. Boak F. Ted Haartz Manuel Sanguily
Peggy Buchannan Joseph Kurtzman Shannon Sullivan
D. Barr Clayson * Pat Maley Phil Whitten
Dorothy Donnelly Richard Monahan Ex-Officio:
Rowdy Gaines Walt Reid June Krauser

Legislation Committee

Hill Carrow Edie Gruender Hugh Winn
Leslie Laing-Cooper Marie Kriepe Elin Zander
Rob Copeland Libby Neufeld John F. Zell
Jeanne Crouse Julie Paque

Jerianne Donnelly * William Reid Ex-Officio:
Bill Earley Jeff Thibodeau - Jack Geoghegan

Darlynne Ferguson Frank Tillotson

Long Distance Committee

Peter CapanoCynthia JonesAdrienne PipesRob Copeland *Edna LaflinKevin PolanskyPeter CrumbineGary McDowellCraig TribuziSally Ann DillonGeorge McVeyLisa Watson

Lynn Hazelwood

Marketing/Publications Committee

Rich Burns * Terry Laughlin Melinda Schmitt
Laura Calwell Tom Lyndon MaryLou Schulz
Brooke Dick Linda McCowan Edna Spring
Zena Herrmann Carol Morgan Mary Lee Watson
Emmett Hines Gerry Rodriguez Jim Wheeler

Jayne Lambke

Nominating Committee

The Nominating Committee is the Zone Committee.

Planning Committee

Mike N. Calwell Lauren Hasselquist Mark Lambert
George Cunningham Sarah Hromada Nancy Miller
Barbara Frid Joseph Kurtzman Hugh Moore *
Bill Hall Edna Laflin Bob Shaw

Ransom Arthur Award Committee

Daniel Gruender Hamilton Anderson Harry Rawstrom Mildred Anderson Edie Gruender * Walt Reid F. Ted Haartz Meg Smath Cindy Baxter Bob Beach John Spannuth Paul Hutinger Thomas D. Boak June Krauser Ray Taft Michael Laux Zada Taft Dorothy Donnelly Enid Uhrich Jack Geoghegan Leslie Laing-Cooper

Records and Tabulation Committee

Lou AbelDave MorrowWalt Reid *Ceil BlackwellDan Per-LeeKim ShawBob EberwineGinger PiersonRick WindesLil HanemanBarbara ProtzmanPaul Windrath

Robert Mitchell

Registration Committee

Jack BuchannanDiane ReedMaury SchottJeanne EnsignNancy RidoutJoe TesmerRobert KoenigLeslie RonacherEx-Officio:Joann Leilich *Elleen SchappelDiane Black

Rule Book Editorial Board

Jeanne BostwickKathy Keffer-SharpeMeg SmathDorothy DonnellyDavid LevinsonMargaret StannardMarilyn FinkMaxine NellenMartha VredeveldStephen HoganJulie Paque *Christine Winn

Rules Committee

Carolyn Boak Bill Hall Clarice Rossi
Catie Cooper Janet Kavadas Margaret Stannard
David Diehl June Krauser * Bobbi Turcotte
F Ted Haartz Leo Letendre

Sports Medicine and Research Committee

Chris Allen Ann McDermott Alan Voisard
Barbara Bower Jane Moore * Jack Wegert
Edie Jacobsen Sandi Rousseau Bill Weir
Alan Levinson Manuel Sanguily Rhea Wilkins
Marcia Marcantonio Bill Uhrich Chris Zimmet

Zone Committee

Kathrine J. Casey Scott Rabalais "Skip" Thompson
Betsy Durrant * Todd Samland Jim Wheeler
Tom Lyndon Steve Schofield Kris Wingenroth

Ad Hoc Fitness Committee

Betty Barry Betsy Owens * Shannon Sullivan
Mark Clark Scott Rabalais Enid Uhrich
Terry Laughlin Dore Schwab Rhea Wilkins
Russ Lyman Greg Spire John F. Zell
Roxanne Motter

Page 134 APPENDIX E

Ad Hoc Officials Committee

Jayne BrunerCarolyn KentJoan SmithMike CalwellRon MarcickicJeff Thibodeau

Patricia Diehl Wayde Mulhern

Sally Ann Dillon * Krista Phillips Ex-Officio:
Judy Gillies Clarice Rossi Larry Rice

Joan Glaraton

Ad Hoc One Event Registration Committee

Michael Collins Joann Leilich Craig Tribuzi

Barbara Dunbar Jim Miller * Elleen Schappel

Zena Herrmann Barbara Protzman William Struthers

Sarah Hromada Gerry Rodriguez

Special Appointments and Liaisons

Controller - Roy Abramowitz

FINA Representative - June Krauser

Historian - Hamilton Anderson

International Swimming Hall of Fame Liaison - June Krauser

MSI Representative - Daniel Gruender

Swim Magazine Editors - Nancy Ridout, Suzanne Rague, and Tom Lyndon United States Aquatic Sports Representative - Daniel Gruender

United States Swimming Liaison - F. Ted Haartz

YMCA Liaison - Mel Goldstein

ALPHABETICAL DIRECTORY

Lou Abel, 12 Westchester Ave #2K, White Plains NY 10601 Roy Abramowitz, POB 40313, Portland OR 97240 Chris Allen, 1527 Florida St, San Francisco CA 94110-4851 Hamilton Anderson, 506 Bolivar, Bellaire TX 77401 Mildred Anderson, 506 Bolivar, Bellaire TX 77401 Cindy Ayers, 3 Greenblade Lane, The Woodlands TX 77350

Betty Barry, 1043 Victor Holcomb Rd, Victor NY 14564
Bill Barthold, 636 Columbia Dr, San Mateo CA 94402-3208
John Bauman, 11616 W Greenfield Ave, Apt. 23, West Allis WI 53214
Cindy Baxter, 740 Clara Dr, Palo Alto CA 94303
Bob Beach, 545 1st Ave N, Rm 400, St. Petersburg FL 33701
Bill Black, 7040 Hunters Knoll, NE, Atlanta GA 30328
Diane Black, 7040 Hunters Knoll, NE, Atlanta GA 30328
Ceil Blackwell, 5105 North Hills Dr, Raleigh NC 27612
Carolyn Boak, 1457 Tyler Pkwy, Mountain View CA 94040

Thomas D. Boak, 15 Sawmill Grove Lane, The Woodlands TX 77380

Judy Bonning, 12441 Royal Palm Blvd, Coral Springs FL 33065
Jeanne Bostwick, 2942 Timber Trails Court, Ellicott City MD 21042
Barbara Bower, 600 Haring Road, Metairie LA 70001
Doug Brogan, 398 Elmwood Rd, Bay Village OH 44140
Nancy Brown, 424 Riverside Dr, Pasadena MD 21122
Jayne Bruner, 320 Ft. Duquesne Blvd, Pittsburgh PA 15222
Thomas W. Bryant, 1260 N 18 St, Laramie WY 82070
Jack Buchannan, POB 599, Kittredge CO 80457
Peggy Buchannan, POB 599, Kittredge CO 80457
Rich Burns, 24 Barber Ave, San Anselmo CA 94960

Laura Calwell, 5250 W 94th Terr, Prairie Village KS 66207 Mike N. Calwell, 5250 W 94th Terr, Prairie Village KS 66207 Peter Capano, 5551 Lapwai Pl, Boise ID 83709 Hill Carrow, POB 19324, Raleigh NC 27619 Kathrine J. Casey, 11114 -111 St SW, Tacoma WA 98498 Carl Chittum, 7231 E Diamond St, Scottsdale AZ 85257 Bruce Clark, 46-459 Hololio St, Kaneohe HI 96744 Mark Clark, 111 Douglas Dr., Wylie TX 75098-3764 D. Barr Clayson, 60 Hidden Rd, Weston MA 02193 Michael Collins, POB 1366, Davis CA 95617 Catie Coopier, 2601 NW 23rd Blvd #104, Gainesville FL 32605-2931 Cathy Copeland, 246 Berger St, Somerset NJ 08873 Rob Copeland, 246 Berger St, Somerset NJ 08873 Jeanne Crouse, 600 Marcia Lane, Rockville MD 20851 Peter Crumbine, 3 Copper Beech Rd, Greenwich CT 06830 George Cunningham, 270 Sunnycroft Rd, Ben Lomond CA 95005 Carolyn Cunningham, 270 Sunnycroft Rd, Ben Lomond CA 95005

Robert Davidson, 11715 40th Ave N, Plymouth MN 55441-1320
Kathy Dean, 4004 S Louise Ave # 307, Sioux Falls SD 57106-2336
Thomas Denes, 3945 New Dale Rd # 34, Chevy Chase MD 20815-6829
Patrick Dibiase, 10707 Pacific St # 101, Omaha NE 68114-4700
Brooke Dick, 314 Park Ave, Capitola CA 95010
David Diehl, 12511 Littleton St, Silver Spring MD 20906
Patricia Diehl, 12511 Littleton St, Silver Spring MD 20906
Sally Ann Dillon, POB 9499, Truckee CA 96162
Dorothy Donnelly, 2 Peter Ave, Rutland MA 01543
Jerianne Donnelly, 2 Peter Ave, Rutland MA 01543
Gene Donner, 717 South Rd, East Aurora NY 14052
Barbara Dunbar, 5703 La Jolla Hermoa Ave, La Jolla CA 92.37
Betsy Durrant, 211 - 66th St, Virginia Beach VA 23451

Bill Earley, 475 C Ave, Coronado CA 92118-1822 Marilyn Early, 570 E Main St #1, Harbor Springs MI 49740 Bob Eberwine, 4458 West 136th St, Hawthorne CA 90250 Jeanne Ensign, POB 7338, Missoula MT 59807-7338 Clay Evans, 520 Broadway, Santa Monica, CA 90401

Page 136 APPENDIX E

Freyda Faivus, 460 W 24th St # 2E, New York NY 10011
Nicholas G. Fazzano, 259 Benefit St, Unit #3, Providence RI 02903
Darlynne Ferguson, PO Box 8005, Canton OH 44711
Fran Fields, 11408 E 20th St, Independence MO 64052
Marilyn Fink, 5518 Laramie Way, San Diego CA 92120
George Fisette, 1160-4 Village Creek, Mt Pleasant SC 29464
Paul Fortoul, 1370 St Nicholas Ave # 20 S, New York NY 10033
Stephen Freeborn, 29925 2nd Place SW, Federal Way WA 98023
Barbara Frid, 6105 Chapman Road, Lorton VA 22079

Rowdy Gaines, 6800 Hawaii-Kai Dr, Honolulu HI 96825
Bobby Gallegos, 340 Tremont West, Port Orchard WA 98366
Jack Geoghegan, 155 Osborn Rd, Rye NY 10580
Judy Gillies, 2596 N Ironwood Ridge Dr, Tucson AZ 85745
Joan Glaraton, 4590 Colonial Ave, Jacksonville FL 32210
Mel Goldstein, 6456 Broadway, Indianapolis IN 46220
Will Gosnold, RR2 Box 60G, Grand Forks ND 58201
David Gray, 742 Calderon Ave, Mountain View CA 94041-2314
Daniel Gruender, 3329 N Valencia Lane, Phoenix AZ 85018
Edie Gruender, 3329 N Valencia Lane, Phoenix AZ 85018

F. Ted Haartz, 155 Pantry Rd, Sudbury MA 01776-1112
Bill Hall, 1310 Chippewa, Richardson TX 75080
Lil Haneman, 1003 SE 6th St, Deerfield Beach FL 33441
Lauren Hasselquist, 11842 Inspiration Cir, Eagle River AK 99577
Lynn Hazlewood, 11714 Decade Ct, Reston VA 22091
Michael Heather, 434 Duarte Rd, Monrovia CA 91016
Zena Herrmann, 16204 135th Ave SE, Renton WA 98058-6905
Emmett Hines, 4361 Graduate Circle, Houston TX 77004
Stephen Hogan, 5826 First Landing Way, Burke VA 22015
Steve Holloway, Box 8412, Missoula MT 59807
Paula Howard, 1816 Empire Way, Boise ID 83709-3034
Sarah Hromada, 7501 W 101 St #118, Bloomington MN 55438
Paul Hutinger, 1755 Georgia Ave NE, St. Petersburg FLL 33703-4326

Edie Jacobsen, 1786 Maricopa Dr, Oshkosh WI 54904 Lucy Johnson-Trapp, P.O. Box 3368, Long Beach CA 90803 Cynthia Jones, 130 N Oak St, Elmhurst IL 60126

Janet Kavadas, 217 Alder St #305, Edmonds WA 98020
Kathy Keffer-Sharpe, 3002 NW 14th, Oklahoma City OK 73107
Carolyn Kent, 2712 Honeysuckle, Coeur d'Alene ID 83814
Robert Koenig, 24 E Sharon Rd, Cincinnati OH 45246
Catherine Kriegshauser Kohn, 840 S Meramec, Clayton MO 63105
Andy Kramer, 34 Rampart Dr, Wayne PA 19807
Janice Krauser, 1404 NE 23rd, Ft. Lauderdale FL 33305
June Krauser, 2308 NE 19th Ave, Ft. Lauderdale FL 33305
Marie Kreipe, 7138 SE 2nd St, Tecumseh KA 66542
Robert Krotee, 604 Lawrence, Westlawn PA 19609-2310
Joseph Kurtzman, 90 Chadwick Dr, Charleston SC 29407-7470

Edna Laflin, 19838 Star Ridge Dr, Sun City West AZ 85375
Leslie Laing-Cooper, 16536 Willow Glen, Grover, MO 63040
Mark R. Lambert, 1858 W 57th St, Indianapolis IN 46208
Jayne Lambke, 615 10th Ave NE, St Petersburgh FL 33701
Terry Laughlin, 381 Main St, Goshen NY 10924
Michael Laux, 8 Myrtle Ave, Westport CT 06880
Joann Leilich, 7209 Hansford Court, Springfield VA 22151
Leo Letendre, 267 Glandore Dr, Manchester MO 63021
Alan Levinson, 4301 Anderson Ave, Oakland CA 94619
David Levinson, 3375 Alma St # 172, Palo Alto CA 94306
Russ Lyman, 1236 Asbury Ave, Evanston IL 60202
Tom Lyndon, 9 Sunset Rd, Wellesley MA 02181

John Maguire, 4033-12th St NE, St. Petersburg FL 33703 Michael Makarczyk, 55 E 300 N, N Salt Lake UT 84054-2427 Pat Maley, 5450 Foley Rd, Cincinnati OH 45238 Marcia Marcantonio, 8340 Fathom Circle # 702, Austin TX 78750 Ronald Marcickic, 3671 Jennifer St, San Diego CA 92117-1812 Lorraine Martinelli, 174 Gelston Ave, Brooklyn NY 11209-7010 Stu Marvin, 6780 NW 31st Way, Ft. Lauderdale FL 33309 Jack Mathews, 816-10th Ave, Box 8, Grinnell IA 50112 Art Mayer, 1024 Elkton Rd, Newark DE 19711 Linda McCowan, 13613 Prince William Dr, Midlothian VA 23113 Ann McDermott, 306 Columbus Ave #2, Boston MA 02116 Gary McDowell, 19855 Archwood St, Winnetka CA 91306 George McVey, 447 Antlers Dr. Rochester NY 14618 Don Mehl, 600 Willow Glen Dr, El Paso TX 79922 Bob Merrick, 10572 Mahoney Dr., Sunland CA 91040 Jim Miller, 1471 Johnston-Willis Dr, Richmond VA 23235 Nancy Miller, 3741 Reeds Landing Circle, Midlothian VA 23113 Randy Miller, 8865-4 Independence Ave, Canoga Park CA 91304 Robert Mitchell, POB 204, El Toro CA 92630 Richard Monahan, 30 Beatty Ave, Greenlawn NY 11740 Hugh Moore, 1867 58th St NE, Tacoma WA 98422-1517 Jane A. Moore, 1867 58th St NE, Tacoma WA 98422-1517 Carol Morgan, 4650 Idlewild Rd, Salt Lake City UT 84124 Dave Morrow, 2105 Maryland Ave, Louisville KY 40205 Roxanne Motter, 108 Tiffany Rd, Bristol TN 37620 Wayde Mulhern, 570 96th Lane, Blaine MN 55434 Bill Mulliken, 7050 W 71st St, Chicago IL 60638-5902

Maxine Nellen, N Wading River Rd, Wading River NY 11792 Libby Neufeld, 26015 Apache Creek Rd, San Antonio TX 78258-5921

Betsy Owens, 194 Lenox Ave, Albany NY 12208

Julie Paque, 2203 Rock St, Mountain View CA 94043-2606 Dan Per-Lee, 28115 W Oakland Rd, Bay Village OH 44140 Krista Phillips, 2321 Glendale Ave, Durham NC 27704-4167 Ginger Pierson, 7655 SW Cedar Crest St, Portland OR 97223

Page 138 APPENDIX E

Adrienne Pipes, 12734 Torrey Bluff Dr #30, San Diego CA 92130 Kevin Polansky, 2433 Silver Fir, Loveland CO 80538 Stanley Prazer, 3805 Myrtle St, Erie PA 16508 Barbara Protzman, 7919 Main Falls Cir, Catonsville MD 21228 John Protzman, 7919 Main Falls Cir, Catonsville MD 21228

Scott Rabalais, 950 S Foster Dr #35, Baton Rouge LA 70806 Suzanne Rague, 21 Deeringwood Lane, Babylon, NY 11702 Doug Rawn, 12 Foxhunt Trail, Little Rock AR 72207-2403 Harry Rawstrom, 713 Colgate Lane, Newark DE 19711 Diane Reed, 1093 Main St, Norwell MA 02061 Walt Reid, POB 8800A, Steilacoom WA 98388 William T. Reid III, 128 Marlboro Co, Brooklyn MI 49230 Larry Rice, 507 Lakeview Way, Redwood City CA 94062 Nancy Ridout, 580 Sunset Parkway, Novato CA 94947 Gerry Rodriguez, 520 Broadway #111, Santa Monica CA 90401 Leslie Ronacher, 7622 Alcomita, Houston TX 77083 Clarice Rossi, 120 S Dee Rd #C, Park Ridge IL 60068 Sandi Rousseau, 23995 SW Drake Lane, Hillsboro OR 97123

Todd Samland, 12613 Burt St, Omaha NE 68154 Manuel Sanguily, 150 White Plains Road, Tarrytown NY 10591 Elleen Schappel, 932 W Outer Dr, Oak Ridge TN 37830 Melinda Schmitt, 4501 Wolf Pen Branch Way, Prospect KY 40059 Steve Schofield, 7914 Sadring St, West Hills CA 91304 Maury Schott, POB 4263, Greensboro NC 27404 MaryLou Schulz, 109 Westchester Dr N, Delmar NY 12054 Dore Schwab, Gray Oaks, Ross CA 94957-0772 Kim Shaw, 402 Santa Fe Trail #35, Irving TX 75063 Bob Shaw, 8930 Tintagel, San Antonio TX 78250 Meg Smath, 3511 Olympia Rd, Lexington KY 40517 Joan P. Smith, 4309 Surita St, Sacramento CA 95864 Richard T. Smith, 4309 Surita St, Sacramento CA 95864 Tori Smith, 111 Nort Post Oak Ln, Houston TX 77040 John Spannuth, POB 3279, Boynton Beach FL 33424 Greg Spire, 1620 Edgemont St, San Diego CA 92102 Edna Spring, 2801 N Oracle Rd #1204, Tucson AZ 75705 Margaret Stannard, 2529 California St, Denver CO 80205 William Struthers, 126 Fourth St, Ridgefield Park NJ 07660 Forrest Sullivan, 1752 N Woodhouse Rd, Virginia Beach VA 23454-1634 Shannon Sullivan, 8502 Gulana Ave, Playa Del Rey CA 90293

Ray Taft, 230 Gennessee St, San Francisco CA 94112-1345
Zada Taft, 230 Gennessee St, San Francisco CA 94112-1345
Fred Tan, 6910 East Point Ct, Dayton OH 45459
Joseph Tesmer, 408 Rover Blvd, Los Alamos NM 87544
Jeff Thibodeau, 1407 Shadowbend Dr, Houston TX 77043
Frank L. "Skip" Thompson, 2660 Littletell Ave, West Bloomfield MI 48324
Frank Tillotson, 2494 13th Ave N #46, St. Petersburg FL 33713
Joanne Tingley, 2107 Eastview Ave, Louisville KY 40205

William Tingley, 2008 Trevilian Way, Louisville KY 40205 Craig Tribuzi, 2302 Saharah Dr, Garland TX 75044 Bobbi Turcotte, 3098 Rue d'Orleans, San Diego CA 92110

Bill Uhrich, 1509 Bunker Hill Rd, Sun City Center FL 33573 Enid Uhrich, 1509 Bunker Hill Rd, Sun City Center FL 33573

Laura Val, 2922 Miles Dr, Santa Clara CA 95051 Alan Voisard, 4050-242 Rosenda Ct, San Diego CA 92122 Martha Vredeveld, 2981 Hearthstone Rd, Ellicott City, MD 21042

Stephanie Walsh, 27 E Central Ave #J-5, Paoli PA 19301
Dennis Watson, 2851 Burlwood Dr, Winston-Salem NC 27103-6205
Lisa Watson, 804 Howell Ct, Duluth GA 30136
Mary Lee Watson, 6613 Rolling Fork Drive, Nashville TN 37205
Jack Wegert, 8737 W Plymouth Ave, Littleton CO 80123
Bill Weir, 217 Maple Tree Drive, Bristol TN 37620
Jim Wheeler, 2298 First St # C, Livermore CA 94550
Pat Whitaker, 319 Sequoya Trail, Norman OK 73071
Rhea Wilkins, 1607 Darrell Dr, Midlothian VA 23113
Pat Wilson, 842 W Alabama St, Florence AL 35630
Paul Windrath, 2612 Eunice Ave, Red Wing MN 55066-4107
Rick Windes, 1527 Florida St, San Francisco CA 94110-4851
Kris Wingenroth, 3830 Drummond, Houston TX 77025
Christine Winn, 420 Fawn Dr, San Anselmo CA 94960
Hugh Winn, 420 Fawn Dr, San Anselmo CA 94960

David Zander, South 13927 Traver Lane, Valleyford WA 99036 Elin Zander, South 13927 Traver Lane, Valleyford WA 99036 John F. Zell, 4640 NE 36th Ave, Portland OR 97211 John N. Zell, POB 230125, Anchorage AK 99523 Chris Zimmet, 291 5th St, East Northport NY 11731-2816

APPENDIX F

USMS HISTORY

Recipients of the Ransom J. Arthur Award

This award is given in honor of Captain Ransom J. Arthur, M. D., who, by his sacrifice, perseverance, and dedication to improving the health of adults through swimming, established the Masters swimming program in the United States. The award is given annually to the person who has done the most to further the objectives of Masters Swimming.

1973	Ransom J. Arthur	1983	Dorothy Donnelly
1974	June Krauser	1984	Reg Richardson
1975	Hal Onnusseit	1985	Michael Laux
1976	F. Ted Haartz	1986	Judge Robert Beach
1977	Dr. Paul Hutinger	1987	Ross Wales
1978	Mildred Anderson	1988	John Spannuth
	Hamilton Anderson	1989	Daniel Gruender
1979	Zada Taft		Edie Gruender
1980	Enid Uhrich	1990	Jack Geoghegan
	Ed Reed, Sr.	1991	Thomas D. Boak
1981	Cindy Baxter	1992	Walter Reid
1982	Harry Rawstrom		

Recipients of the USMS Coach-of-the-Year Award

This award is presented annually to the coach who has done the most to further the objectives of Masters Swimming.

1986	Jim Miller	1990	Michael Collins
1987	Kerry O'Brien	1991	Judy Bonning
1988	Keith Bell	1992	Clay Evans
1989	William Tingley		Gerry Rodriguez

USMS National Championship Meets

	Short Course Championships			Long Course Championships		
Year	Date	Location	Swimmers	Date	Location	Swimmers
1970	May 2-3	Amarillo, TX	46			
1971	May 7-8	Amarillo, TX	108			
1972	May 19-21	San Mateo, CA	325	Aug 11-13	Bloomington, IN	188
1973	May 18-20	Santa Monica, CA	500	Aug 10-12	Chicago, IL	500
1974	May 17-19	Ft. Lauderdale, FL	561	Sept 6-8	Santa Clara, CA	584
1975	May 16-18	Ft. Lauderdale, FL	663	Aug 29-31	Knoxville, TN	394
1976	May 14-16	Mission Viejo, CA	800	Aug 27-29	St. Louis, MO	514
1977	May 13-15	Ft Lauderdale, FL	611	Aug 25-28	Spokane, WA	525
1978	May 19-21	San Antonio, TX	560	8/31-9/3	Providence, RI	540
1979	May 4-7	Mission Viejo, CA	1020	Aug. 23-26	Dearborn, MI	689
1980	May 16-18	Ft Lauderdale, FL	875	8/29-9/1	Santa Clara, CA	987
1981	May 23-26	Irvine, CA	1209	Aug 13-16	Canton, OH	741
1982	May 21-24	The Woodlands, TX	910	Aug 26-29	Portland, OR	915
1983	May 28-31	Ft. Lauderdale, FL	1208	Aug 25-28	Indianapolis, IN	908
1984	May 26-29	Industry Hills, CA	1227	Aug. 23-26	Raleigh, NC	840
1985	May 10-13	Milwaukee, WI	1021	Aug 17-20	Providence, RI	800
1986	May 15-18	Fort Pierce, FL	1231	Aug 21-24	Portland, OR	933
1987	May 15-18	Stanford Univ , CA	2328	Aug 21-24	The Woodlands, TX	872
1988	May 19-23	Austin, TX	1405	Aug 25-28	Buffalo, NY	1071
1989	May 4-7	Boca Raton, FL	1755	Aug 17-20	Grand Forks, ND	586
1990	May 18-21	Los Angeles, CA	1592	Aug 17-20	The Woodlands, TX	829
1991	May 16-19	Nashville, TN	1529	Aug 22-25	Elizabethtown, KY	720
1992	May 21-24	Chapel Hill, NC	1502	Aug 20-23	Federal Way, WA	1150
1993	May 20-23	Santa Clara, CA		Aug 19-22	Minneapolis, MN	
1994	May 13-16	Tempe, AZ		Aug 25-28	Buffalo, NY	

1994 Kansas City, KS

USMS Annual Meetings and National Officers

1971	Lake Placid, NY	
1972	Kansas City, KS	Ransom Arthur P, Robert Beach VP
1973	W. Yellowstone, MT	Ransom Arthur P, Robert Beach VP
1974	Washington DC	June Krauser P, David Beardsley S
1975	New Orleans, LA	June Krauser P, David Beardsley S
1976	Phoenix, AZ	June Krauser P, David Beardsley S
1977	Columbus, OH	June Krauser P, Ted Haartz S
1978	San Antonio, TX	Ted Haartz P, Enid Uhrich S
1979	Las Vegas, NV	Ted Haartz P, Don Rankin VP, Enid Uhrich S, Reg Richardson T
1980	Snow Bird, UT	Ted Haartz P, Mike Laux VP, Enid Uhrich S, Reg Richardson T
1981	Snow Bird, UT	Ted Haartz P, Mike Laux VP, Enid Uhrich S, Reg Richardson T
1982	Memphis, TN	Mike Laux P, Verne Scott VP, Dot Donnelly S, Reg Richardson T
1983	Cincinnati, OH	Mike Laux P, Verne Scott VP, Dot Donnelly S, Reg Richardson T
1984	Indianapolis, IN	Mike Laux P, Verne Scott VP, Dot Donnelly S, Reg Richardson T
1985	Phoenix, AZ	Mike Laux P, Verne Scott VP, Dot Donnelly S, Reg Richardson T
1986	Fort Worth, TX	Tom Boak P, Gail Dummer VP, Nancy Ridout S, Kevin Kelly T
1987	Atlanta, GA	Tom Boak P, Gail Dummer VP, Nancy Ridout S, Kevin Kelly T
1988	St Louis, MO	Tom Boak P, Gail Dummer VP, Nancy Ridout S, Kevin Kelly T
1989	Portland, OR	Tom Boak P, Gail Dummer VP, Nancy Ridout S, Kevin Kelly T
1990	Pittsburgh, PA	Dan Gruender P, Nancy Ridout VP, Mel Goldstein S, Suzanne Rague T
1991	Louisville, KY	Dan Gruender P, Nancy Ridout VP, Mel Goldstein S, Suzanne Rague T
1992	Minneapolis, MN	Dan Gruender P, Nancy Ridout VP, Mel Goldstein S, Suzanne Rague T
1993	Los Angeles, CA	

APPENDIX G

USMS ADAPTED SWIMMING GUIDELINES

Masters Swimming welcomes adults with disabilities who share the USMS goals of fun, fitness, and competition. USMS understands that there are other sports organizations that offer swimming competition for athletes with disabilities, but also recognizes that many persons with disabilities would like to participate in Masters Swimming programs with friends from their communities. The fun and fellowship associated with Masters Swimming is enriched by the participation of adults from all walks of life.

This appendix contains information which may help Masters swimmers, clubs, and meet personnel include swimmers with disabilities in USMS programs. Additional information is available from the following USOC-member organizations:

American Athletic Association of the Deaf (AAAD) 3701 Harrison Blvd. #4, Ogden, UT 84403

Dwarf Athletic Association of America (DAAA) c/o Len Sawisch, 3725 West Holmes, Lansing, MI 48911

National Handicapped Sports (NHS) (amputee sports) 451 Hungerford Drive, Suite 100, Rockville, MD 20850

National Wheelchair Athletic Association (NWAA) 3595 East Fountain Blvd., Suite L-1, Colorado Springs, CO 80901

Special Olympics International (SOI)
1350 New York Avenue NW, Suite 500, Washington DC 20005

United States Association for Blind Athletes (USABA)
33 N. Institute Street, Brown Hall, Suite 015, Colorado Springs, CO 80903

United States Cerebral Palsy Athletic Association (USCPAA) 34518 Warren Road, Suite 264, Westland, MI 48185

Disabilities

For purposes of this appendix, the term "disability" refers to a condition which limits an individual's ability to perform starts, strokes, or turns according to USMS rules. Disabilities which affect adults include, but are not limited to, physical impairments such as cerebral palsy, spinal cord injuries, amputations, multiple sclerosis, and rheumatoid arthritis; sensory impairments such as hearing loss, deafness, visual impairments, and blindness; learning difficulties such as mental retardation; and health conditions such as cancer or severe asthma. Temporary conditions such as pregnancy or injuries -such as tendinitis should not be considered disabilities. In general, the Referee should accept a swimmer's self-identification that he/she has a disability.

USMS Policies on Adapted Swimming

- * USMS actively encourages adults with disabilities to participate in Masters Swimming training programs, competition, and other activities.
- * Because it is important to the personal success of a swimmer with a disability to perform within the rules as much as possible, and because it is impossible to legislate rule changes to accommodate the unique needs of all swimmers with disabilities who participate in USMS competition, no specific rule changes shall be adopted to accommodate swimmers with disabilities.
- * Meet officials are allowed flexibility to interpret USMS swimming rules as needed to accommodate swimmers with disabilities. This appendix includes quidelines to aid meet officials in interpretation of rules.
- * Masters Swimming clubs and swimming meet officials are encouraged to use pools which are accessible to swimmers with disabilities for both training and competition, to remove barriers to accessibility, and to describe the accessibility of parking, locker room, and swimming pool facilities in meet announcements.
- * Meet officials are encouraged to request in meet announcements that swimmers with disabilities describe any special requirements for their participation in Masters Swimming meets before the first day of the meet.

Swimming Meet Guidelines

Rule Interpretations. According to Article 103.1.6, the Referee may modify swimming rules to accommodate swimmers with disabilities. Such modifications may be needed to ensure that no swimmer (including the swimmer with a disability) obtains unfair advantage over other competitors and to insure the safety of the swimmer.

The "unfair advantage" principle should be especially helpful to the Referee. For example, consider an individual who has limited functional use of the legs who enters a breaststroke event. If the swimmer cannot perform propulsive movements of the legs (but can maintain a legal body position and perform a legal arm stroke), he should not be disqualified because he has not obtained an unfair advantage. The

same swimmer should be disqualified if he uses an illegal, but propulsive, kicking action, because he is gaining an unfair advantage over swimmers who are not allowed to use the illegal kicking action.

Although it is impossible to suggest rule modifications that are appropriate for every swimmer with a disability, the following suggestions may be used as guidelines in rule interpretations:

Start: Masters Swimming rules permit the forward start to be taken from the starting block, the pool deck, or a push from the wall. Examples of possible modifications to the start rule may include using a strobe light or other visual stimulus for a swimmer with hearing impairment, or using a beeper or whistle start for a swimmer who may overreact to a gun start.

Relay Starts: Potential modifications include (a) permitting swimmers to begin subsequent relay legs from the optional deck or water start positions, which may require turning off electronic timing equipment in that lane after the start and until the last swimmer finishes, and (b) warning a swimmer with visual impairment when to dive with a verbal command and/or a tap on the heel.

Turns: Examples of rule interpretations include using a "bonker" (a soft ball at the end of a pole) to warn a swimmer with visual impairment of the end of the pool, or judging a swimmer with a physical disability based upon functional body parts. For example, a swimmer with only one arm or who is paralyzed on one side of the body should be judged based upon hand instead of hands, and arm instead of arms. Similarly, the stroke initiated upon leaving the wall should be judged in terms of the body extremities which are capable of performing the required movements.

Strokes: Rule interpretations should be concerned with the body extremities which are capable of performing the required movements. Flotation devices are not allowed in competition. A band placed around paralyzed limbs is acceptable.

Responsibilities of the Swimmer. The primary responsibility of the swimmer is communication. Article 103.1.6 requires the swimmer or his representative to notify the Referee of his disability before competing. The swimmer with a disability is encouraged to inform the host club in advance of any special needs related to his participation in the meet, and ask a teammate or friend for personal assistance at the meet if necessary.

Responsibilities of the Host Club. USMS has adopted two accessibility policies which serve as guidelines to the club or facility hosting a Masters Swimming competition. These policies emphasize using accessible facilities when possible, working to remove barriers to accessibility, describing the accessibility of facilities in meet announcements, and cooperating with swimmers who have disabilities regarding their participation in competition.

Preparation of the Facility. Masters Swimming rules require that meet directors investigate the use of appropriate emergency medical equipment and

Page 146 Appendix G

personnel for all meets. Meet directors should become familiar with the emergency action plan in effect at the meet facility. Specific preparations for competitors who have disabilities will depend in large part upon the information provided by the individual swimmer. Some suggestions include:

- * For swimmers with visual impairments, remove all hazards and nonessential equipment from the pool deck, either close or open all doors (be consistent!), and ask the swimmer to bring a friend to assist him around the facility.
- * For swimmers with hearing impairments, have a chalkboard on hand to indicate progress of the meet and use signs to indicate the location of meet officials and facilities.
- * For swimmers with physical impairments: (a) keep locker room and deck areas clear to enable easier access by wheelchair users, (b) place wheelchairs, crutches, or canes behind the timers during competition and return personal equipment to the swimmer after the race, and (c) assist the swimmer in and out of the water if necessary (ask the swimmer for instructions about the safest and most efficient way to assist).

Responsibilities of Meet Officials. The primary responsibilities of meet officials are to ensure fair competition and to time, judge, and record the results of that competition accurately. The responsibilities of meet officials do not change when athletes with disabilities are included in the competition.

Although the athlete with a disability may have some special requirements for his participation (e.g., help transferring from a wheelchair to the pool, amplification of an auditory starting device, or use of a visual starting signal in addition to an auditory signal), most persons with disabilities do not want to be treated differently. Do not seed athletes with disabilities in special (outside) lanes unless indicated by safety considerations. Do not observe their swims more closely or less closely than other swimmers in the heat. Do use common sense. Allow a little extra time between heats to permit safe entry and egress from the pool. Be certain that swimmers with hearing impairments are aware of your verbal instructions. If unsure whether a swimmer with a disability needs assistance, ask the swimmer.

Ad hoc committees 85	Awards 26
Ad hoc fitness committee 133	nat. long dist. champ. 72
Ad hoc officials committee 134	national championships 49
Ad hoc one event registration	ties 26
committee 134	Backstroke 17
Adapted swimming 143	finish 17
officiating 30	flags 56
responsibilities	lines 57
host club 145	start 17
officials 146	starting grips 56
swimmer 145	stroke 17, 116
rule interpretations 144	turns 17
USMS policies 144	Board of directors 80
Addresses 134	meetings 81
Administrative regulations 59	membership 80
Age groups 20	requirements 81
individual events 20	powers 81
long distance 69	quorum 81
relay events 20	term 80
All-American 50, 52	vacancies 81
long distance 73	voting privileges 81
Amendments	Breaststroke 16
adoption 89	finish 16
effective date 89	kick 16
emergency 89	start 16
modification 88	stroke 16
procedures 88	turns 16
proposed 88	Bulkhead 53, 54
submission 88	Butterfly 16
USS 89	finish 17
Announcer	kick 17, 116
duties 40	start 16
Annual meeting	stroke 17, 116
history 142	turns 17
Appeals 74	Bylaws 77
Approvals 13, 60	Championship committee 81, 131
requirements 61	Clerk of course 24
Approved meet 12	duties 40
Athlete	Closed competition 12
membership 59	Club 12
registration 59	
representation 59	Coaches committee 82 131
transfer 59	Coaches committee 82, 131 Committees 81
Athletes' rights 74	ad hoc 85
denial of 74	ad hoc fitness 133
investigation 74	ad hoc officials 134
executive secretary 74	ad hoc one event registration 134
review section 74	championship 81, 131
protection 74	coaches 82, 131
reporting 74	convention 82, 131
review section	executive 81, 129
composition 74	finance 82, 131

Page 148 Index

insurance 83, 131	Equal opportunity 74, 77
internal audit 83, 131	Events 20
international 83, 131	cancellation 27
jurisdiction 88	limit 21
legislation 84, 132	national championships 45
long distance 84, 132	long course 21
marketing/publications 84, 132	long distance 63
	postal 65
nominating 84, 132	time/distance 64
planning 84, 132	
Ransom Arthur award 132	short course meters 21
records and tabulation 84, 133	short course yards 20
registration 85, 133	Executive committee 81, 88, 129
rule book editorial board 133	Facilities
rules 85, 133	national championships 50
sports medicine and research 85,	standards 53
133	False start 31
standing 81	recall rope 57
zone 85, 133	Fees 86
Conduct	FINA representative 134
national championships 43	Finance committee 80, 82, 131
Controller 80, 86, 134	Finances
Convention committee 82, 131	fiscal year 85
Costume 27	nat. long dist. champ. 71
advertising 27	policy 85
design 27	Finishes
long distance 68, 117	long distance 68
nat. long dist. champ. 71	Freestyle 17
Counters 22, 25	finish 18
Deck equipment 55	start 17
Delay	stroke 18
deliberate 32	turns 18
Directory 129	Glossary 12
Disabilities 143, 144	Goals 11
Disqualifications 27	Health and Safety
deliberate delay 32	regulations 52
infraction signal 34	Hearings 74
long distance 69	appeal procedures 76
misconduct 32	formal 75
	procedures 75
relays 19 Discolution 96, 97	Heat sheets
Dissolution 86, 87	
Diving boards 55	national championships 44
Dual meet 12	Historian 134
Eligibility 19, 117	History 140
Entry	House of delegates 78
deadline	meetings 79
national championships 47	membership 78
fees 21	powers 78
nat. long dist. champ. 71	quorum 79
national championships 47	voting 79
form	Indemnification 86
nat. long dist. champ. 71	Individual medley 18
national championships 46	finish 18

start 18	results 72		
stroke 18	schedule 122		
turns 18	site selection 70		
Infraction signal 34	organization 63		
Insurance committee 83, 131	records 73		
Internal audit committee 80, 83, 131	relays 66		
International committee 83, 131	rules changes 88		
ISHOF liaison 134	safety 66		
Judges 33	starts 67		
chief 33	Marketing/publications committee 84		
relay take-off 33	132		
stroke 33	Marshals		
jurisdiction 33	duties 40		
turn 33	Medical		
jurisdiction 33	equipment 53		
Ladders 55	examination 52		
Lane	Meet		
assignments 22	committee 29		
lines 56	director 29, 115		
numbers 54, 56	Membership 59, 77		
Legal counsel 79	categories 77		
Legislation	mandatory 77		
changes 88	Misconduct 32		
committee 84, 88, 132	MSI representative 134		
Liability release 62	National championships 41		
long distance 63	awarding 41		
Liaisons 134	awards 49		
Lighting	bidding procedures 42		
national championships 55	categories 41		
Local masters swim committee 77	conduct of meet 43		
abbreviations 124	contract 43		
annual meeting 77	director 50		
annual reports 78	entry deadline 47		
boundaries 78, 124, 126	entry fees 47		
bylaws 77	entry form 46		
chairmen 129	entry procedures 46		
map 125	evaluation 43		
membership 77	event limit 45		
numeric codes 124	facilities 50		
officers 77	format rotation 45		
Long distance 63, 117	general meeting 43		
administration 63	heat sheets 44		
all-American 73	history 141		
committee 84, 88, 132	lighting 55		
costume 117	long distance 69		
events 63	officials 50		
national championships 69	personnel 50		
awards 72	program 44		
club scoring 72	protest 49		
eligibility 69	qualifying times 20, 45		
entry fees 71	report 43		
events 69	results 49		
- · · · · · · · · · · · · · · · · · · ·			

Page 150 Index

rotation system 41	Pace clocks 57
schedule 122	Places 25
scoring 48	Planning committee 84, 132
seeding 47	Pool
time standards 45	bottom lane markers 54
warm-up 44	end wall targets 54
National records 51	length 53
Nominating committee 84, 132	certification form 120
Objectives 11	walls 54
Officers	width 53
local masters swim committee 77	Preamble 11
USMS 79	Press steward
duties 79	duties 40
elections 79	Program
history 142	change 26
president 79	postponement 26
secretary 80	Protest 28
term 79	national championships 49
treasurer 80	Qualifying times 20, 45
vacancies 79	Quorum
vice-president 80	house of delegates 79
Official time 37, 39	Racing course
records 39	dimensions 53
Top Ten 39	ladders 55
world records 40	lighting 55
Officials 30, 116	markings 54
announcer 40	recirculation system 54
certified 29, 50	walls 54
clerk of course 40	water depth 54
duties 30	Ransom Arthur award 140
judges 33	committee 132
long distance 68	Recall rope operator 33
marshals 40	Recall starter
minimum 29	duties 33
nat. long dist. champ. 71	Recorder 35
press steward 40	Recorder of records
recall rope operator 33	duties 40
recall starter 33	Records 50, 91, 117
recorder 35	applications 118
recorder of records 40	long distance 73, 118
referee 30	national 51
relay take-off judges 33	requirements 50, 118
required 29	world 52, 118
starter 31	Records and tabulation committee 84
timers 34	133
Officiating equipment	Referee
automatic 57	duties 30
display board 58	Registration
national championships 50	athlete 59
touch pads 58	committee 85, 133
Open competition 13	fee 59
Open water (see Long distance), 64	forms 59

liability release 59	principles 22		
long distance 63	two-to-a-lane 23		
year 59	etiquette 24		
Relays 18, 21	methods 24		
cards 21	timing 24		
disqualifications 19	Smoking 30, 55		
exit from water 116	Sports medicine and research		
freestyle 18	committee 85, 133		
long distance 66	Standing committees 81		
medley 18	Start		
mixed 19	backstroke 15, 116		
rules 19	false starts 31		
Representation	forward 15, 116		
athlete 59	long distance 67		
transfer 59	Starter		
unattached 60	duties 31		
Results	recall 33		
meet 115	Starting		
nat. long dist. champ. 72	commands 31		
national championships 49	loudspeaker system 57		
Review section 74	platform 55		
authority 75	Swim magazine editors 134		
composition 74	Time		
jurisdiction 75	determination 37		
procedures 75	official 37, 39		
Rule book editorial board 133	standards 45		
Rules	Timed finals 117		
changes 88, 89	Timers		
committee 85, 88, 133	chief 34		
Safety	duties 34		
electrical 58	head lane 34		
long distance 66	judge 35		
regulations 52	lane 34		
Sanctions 13, 60	Timing		
long distance 63	accuracy 37		
requirements 60	adjustment 37		
Scoring 26	automatic 36		
club	equipment 36		
nat. long dist. champ. 72	automatic 36		
disqualifications 26	semi-automatic 36		
dual meets 26	equipment operator 35		
national championships 48	heat malfunction 38		
other meets 26	lane malfunction 37		
ties 26	manual 36		
triangular meets 26	primary system 36		
Scratches 21, 117	malfunction 37		
penalties 21	resolution 37		
Seeding 22, 117	secondary system 36		
50-meter course 23	systems 36		
distance events 23	tertiary system 36		
long distance 67	Top Ten times 50, 51		
national championships 47	reguirements ou		

Page 152 Index

Travel permits 60 Unattached 14, 60 USAS representative 134 **USMS** goals and objectives 11 national conventions 122 USS liaison 134 Warm-up/warm-down availability 20, 117 national championships 44 procedure 20 Warning signal 31 Water depth 53 temperature 55 World records 52 YMCA liaison 134 Zone 14 boundaries 124 committee 85, 133 map 125

representatives 129

Ist Place Is A Phone Call Away.



1-800-331-1383

A 1st Place finish is what its all about. After months of dedicated training, you and your athletes deserve the best custom medals available. The best die cast medals in the industry come from Maxwell Marketing.

You can see and feel our quality. And we offer 1st Place service to match.

- Low manufacturer prices . . . with no die charge.
- Low 50 piece minimum.
- In-house design talent with 48 hour turn-around time.
- On time delivery . . . guaranteed.
- Thousands of satisfied customers in all 50 states.

Call now for our **FREE** catalog, sample and smiling voice. With Maxwell Marketing custom medals you'll take 1st Place even before the competition begins.

• In Michigan 1-800-632-1188

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



PONTE VEDRA TRAVEL

&

ASSOCIATES

1-800 -833-SWIM

"United States Masters Swimming Favorite Travel Agency"

1993 will be another exciting swim travel year. Let Ponte Vedra Travel help you with your travel plans. Ponte Vedra Travel has an exciting travel Package to the Pan Pacific Masters Swimming Championships in Hamilton, New Zealand April 10-17, 1993 with exciting post meet excursions to Fiji for a tropical Island cruise and to New Zealand's beautiful South Island. Call or write now for details.

For more information on New Zealand or any of your travel needs, please call or write:

PONTE VEDRA TRAVEL & ASSOICATES
2280 SOUTH THIRD STREET, PABLO PLAZA
JACKSONVILLE BEACH, FLORIDA 32250
1 800 833-SWIM FOR FAX 904 241-4206

BRING OUT THE -CAUCKLE ET CAUCKLE IN YOUR SWIMMERS

With Competitor Swim Products-The Six-Time Choice Of The Olympics.



Competitor® Racing Lanes

The official choice of the Olympic Games in 1968, '76, '80, '84, '88, and again in 1992, in Barcelona, Spain. Competitor Racing Lanes are designed for optimum control of the water surface. Each lane comes completely assem-

bled and is offered in a variety of colors and sizes to meet any need. Variable lengths can be obtained from the same lane using the disconnect assembly.



Stor-Lane® Reel

The Competitor Stor-Lane® Reel accommodates up to 540 feet of racing lanes on a durable, lightweight, electroplated aluminum frame that supports a thermoformed plastic reel assembly. Fiveinch swivel casters with individual brakes make movement around the pool deck easy.



Competitor® Pace Clocks

Available in 31-inch and 15-inch models with electric or battery power. Octagonal shape allows for maximum visibility when in use. Pace Clocks are water-resistant with a clear Plexiglass lens protecting the clock face and hands. 31-inch clocks come in white; 15-inch clocks come in white or red.



6" Racing Lane Disks

- Increased wave control
- Approved by all major swimming organizations
- Offers 25% more reflective surface area than any other brand
- Official lane of the 1992 Summer Olympic Games

Call 1-800-888-SWIM (7946) today for a FREE color brochure highlighting the entire Competitor line of swim products



Division of Richey Industries, Inc.

P.O. Box 928 • Medina, OH 44258-0928 (216) 725-4997 FAX (216) 722-3288

LEGAL LOOPHOLES

Gruender

Geoghegan

Kelly (1943-1992)

Laux

Located in Arizona, New York and Connecticut.

Irish and Australian Songs Upon Request.

Kevin, we hardly knew you.

SWITTSKIT. 1-800-341-0246 675 Forest Ave. Portland, ME 04103	TEAM BAGS
ADDRESS	\$29.50 ea. + \$4.00 shipping
SHIPPING \$4.00 TOTAL	Please include your team logo or a description of how your would like your bag printed.



JOHN P. MAGUIRE

Chairman

4033 12th STREET N.E. ST. PETERSBURG, FLORIDA 33703 813-823-7116

MEEGAN J. WILSON

Secretary

620 N.W. 27th WAY GAINESVILLE, FLORIDA 32607 904-373-0023

DICK AVERY

Treasurer

1111 CHERRY HILL DRIVE SUN CITY CENTER, FLORIDA 33573 813-633-3970

BILL UHRICH

Sanctions

1509 BUNKER HILL DRIVE SUN CITY CENTER, FLORIDA 33573 813-634-7564

CHARLES H. KOHNKEN

Registration

1258 FLUSHING AVENUE CLEARWATER, FLORIDA 34624 813-531-0008

CATHERINE COOPER

Records

2601 N.W. 23rd BLVD., #104 GAINESVILLE, FLORIDA 32605 904-373-0049 (unlisted)

FRANK TILLOTSON

Newsletter Editor

2494 13th AVENUE N., #46 ST. PETERSBURG, FLORIDA 33713 813-327-1492 Performance and Fitness Products:



Voomers

Innovation through Experience

toll free 800 / 852-2909 • telephone 415 / 364-0560 • facsimile 415 / 364-0509 Zoomers • 1755 E. Bayshore Road #24A • Redwood City, California 94063



2¼" Die Cast Swim Medal from **99¢** ea.

2" Custom Die Cast Medal from only **\$1.49** ea.

Your Source For All Swimming Awards

Trophies (over 1000 styles)

- Walnut Plaques Laminated Plaques
- Laser-engraved Plaques Pins & Key Tags Paperweights
 - Medals For All Sports & Activities
 - Custom Die Cast & Color Insert Medals

Official Supplier to the CSCAA US Masters Swimming Championships



CROWN TROPHY INCORPORATED

1 Odell Plaza, Dept. USMS3G Yonkers, NY 10701

800/227-1557

In NY: 914/963-0005 FAX: 914/963-0181



cicaa

Largest Award Supplier in the United States

Melvin Stewart, Olympic Gold Medalist - 200m Butterfly, Appears with Permission of U.S. Swimming



SONIC SUPER FLEX ANTI-FOG

This unique one-piece design was developed with the competitive swimmer in mind. The exclusive hydrodynamic shape of the Sonic Super Flex allows minimal drag while providing maximum comfort. It is an excellent goggle for competitive swimmers, triathletes or recreational swimmers.

THE FLEX FOR THE FIT Just open the goggle by flexing it out, fit the eyepieces into your eyesockets and the goggle will spring into place.

THE GASKET Made from soft, hypo-allergenic foam for comfort and a great seal.

THE HEADSTRAP Guaranteed for the life of the goggle.

THE ANTI-FOG SYSTEM Provides extended clear vision

THE ADJUSTMENT The T-Slot Clip allows for easy headstrap adjustment

COLORS AVAILABLE:

FRAME/LENS	GASKET/HEADSTRAP	CLIP
01-Clear	Black	Coral
37-Blue	Black	Purple
02-Smoke	Black	Yellow

PACKAGING: Transparent trifold; available in dozens.

For a free brochure or a dealer near you, please call: 1-800-345-3485



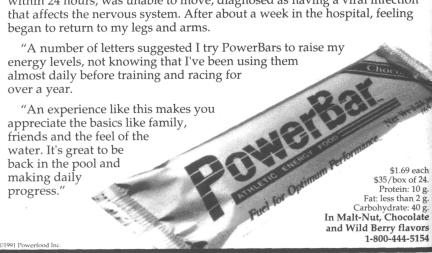




Olympic Gold Medalist, Rowdy Gaines, is fueled by PowerBar.

Healthful Fuel for Optimum Performance

"I was training hard for the Olympic trials. I woke up feeling weak and within 24 hours, was unable to move, diagnosed as having a viral infection that affects the nervous system. After about a week in the hospital, feeling



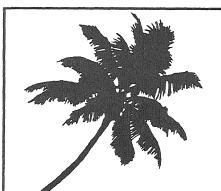
Thank You Masters



For your support of the International Swimming Hall of Fame Fort Lauderdale, Florida

Masters Swimming plays a vital and integral role in aquatic sports. Your contributions have helped the International Swimming Hall of Fame keep this spirit alive.

Be sure and visit our new museum, art gallery and library.





The International Swimming Hall of Fame Aquatic Complex Welcomes

Masters Swimmers!

We hope to see you in sunny Fort Lauderdale, Florida soon . . .

Call (305) 468-1580 for more information on training vacations and upcoming meets.

Page 165



United States Masters Swimming Publications

4220 South Park Ave. Blasdell, New York 14219

		QTY	Total
1993 Rulebook	\$6.00	-	
	A (32 Pages)\$5.00		
	to Z (24 Pages)\$5.00		
1993 Open Water S	Schedule * \$1.00		
Cable Swim Guide	(26 Pages)\$5.00		
USMS Window De	cals 4/\$1.00	-	
1992 Relay All Am	erican Patch		
and Certificate (o	nly those eligible)\$5.00		
*I	, nclude a stamp and self-addre:	ssed envel	one
	(available after April 15,		
NI-4° amal Man M	on Trimon Notional Dans	J. 0 V	W W
-	en Times, National Reco		
•	M 3 issues/\$12.00		
(available in April)	rs1 issue/\$6.00	-	
		SALES AND THE PERSONNELS AND THE	
Long Course Meter (available in Decemb	s		Mitalian Colorada de La California de Califo
Check Payable to:	"USMS"		
	(Amount of Enclosed Check	\$)
Send to:	USMS National Office 2 Peter Avene		
	Rutland, MA 01543		
Name		************	***************
Address		0 p 0 p 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	*********
City, State, Zip			****************



SWIM SOFTWARE

WRITTEN FOR SWIMMING PEOPLE
- NOT COMPUTER PEOPLE!

The Hy-Tek Swim Software System has been accepted world-wide and is used by more swim coaches and swim organizations than any other swim software.

Once you've had an opportunity to use Hy-Tek swim software, you'll wonder why you've waited so long.

If you're not using Hy-Tek, you're working too hard!

TEAM MANAGER Swimmer Stats Galore! WORKOUT MANAGER Coaching Tool Extraordinaire!

MEET MANAGER Automate ANY Meet! BUSINESS MANAGER Financial Swim Management!

COMMLINK Data Exchange! THE INTERFACE
Timing Console to Computer!

FYSTEK

Swim Software System

WRITTEN FOR YOU - BY YOU!

Hy-Tek's family of Swim Software products were written by listening to your needs. Ask for a brochure so you can decide for yourself which of the many time-saving features you need.

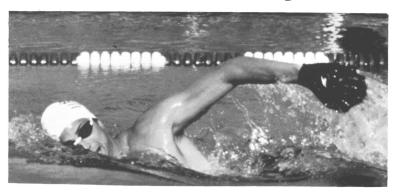
FREE DEMO

Just call and let us know which software you'd like to evaluate.

- HY-TEK QUALITY & SUPPORT We're always there for you.
- WORLD-WIDE ACCEPTANCE Used in more than 33 Countries!

CALL HY-TEK TODAY! (919) 633-5111

Pull it all together at Kast-A-Way.



caps • parkas • bags • polo shirts and other products featuring the USMS logo are available through Kast-A-Way!

We also carry training equipment, books, deck sandals, swimmer's chamois and more.

To place your order or to receive our free 48-page catalog, call

1-800-543-2763

KAST-A-WAY SWIMWEAR, INC.









We're known by the company we keep.



Exclusive supplier of deck apparel to the U.S. National Swim Teams (1985 9.)

Supplier to U.S. Divingand U.S. Synchronized Swimming Speedo® America. Van Nuys, C.A. Call 1, 800 547-8770

SYEEDO® registered trademark of and used under license from Speedo Holdings B.V.