

Technology & Troubleshooting

Saturday, September 26, 2026

2:30pm – 3:45pm MDT

Karin Wegner | Rick Osterberg | Alina de Armas | Jeff Strahota



RELAY2026
EVENT DEVELOPMENT
— DENVER —



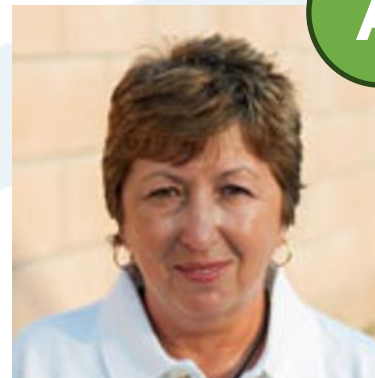
Karin Wegner (SP)

- Karin lives in Las Vegas
- Previously a Masters and Age Group Coach in New Jersey
- USMS event registration expert since 2008
- Masters swimmer on Team Redbird and USMS Meet Director



Rick Osterberg (NE)

- Rick lives in Boston
- Runs the NE LMSC SCY Champs since 2000
- Loves to tinker with technology to improve the swim meet experience
- LMSC & LSC volunteer for 25+ years



Alina de Armas (SP)

- Alina lives in Simi Valley
- Administrative Referee for 30+ years with USMS, USA, College & High School
- Administrative Referee for USMS Nationals 12 times
- On the USMS Officials Committee



Jeff Strahota (PV)

- Jeff is from the Washington DC area
- 25+ years of experience hosting, officiating and/or advising clubs & events in USMS, CCS & USAS
- On his LMSC Board and the CCS Advisory Board



RELAY2026
EVENT DEVELOPMENT
— DENVER —

Celebration Stories:

Things that we at Club Assistant and SwimPhone are proud of that made an event excel

- Flexibility to changes and emergencies.
- Responding to meet director during a challenging situation
 - Short advance notice
 - Snowstorm
 - Thunderstorm
 - Wildfires
 - Covid shut-downs
 - Pool pump down, pool heater down



RELAY2026
EVENT DEVELOPMENT
— DENVER —

42nd Annual Sunbelt Meet - Rescheduled to March 5-6



Saturday, March 5 - Sunday, March 6, 2016

USMS Sanction : 136-S003

Charlotte Swim Masters, Inc

Swim Meet Registration



This meet has been rescheduled due to ice and snow.

- The original meet dates were Jan 23-24, 2016.
- The new dates are March 5-6, 2016.

All entries have been moved from the original meet dates to the new meet dates. If a swimmer is unable to attend March 5-6 and would like to request a refund, please contact Jerry Clark by email with a written request for refund before Feb 5, 2016. jerryclarkswim@gmail.com

Sanctioned by North Carolina LMSC for USMS, Inc.

Meet Referee: Charlotte Swim Masters Inc.

Meet Referee: Marty Fehr

Facility: Huntersville Family Fitness & Aquatics (hffa.com). 11725 Verhoeff Drive, Huntersville NC 28078. (704) 766-2222. The pool is 50 meters by 25 yards, with a bulkhead dividing the competition area into an 8 lane 25 yd course. Continuous warm



RELAY2026
EVENT DEVELOPMENT
— DENVER —

Celebration Stories:

Things that we at Club Assistant and SwimPhone are proud of that made an event excel

- Helping meet director
 - Understand options
 - Get business advice
 - Make decisions from all perspectives
 - Facility schedule limits
 - Swimmers, local, long-distance
 - Credit card processing, handling chargebacks

				Entry Time			
#	Sex	Event		min	sec	hun	
1	Mixed	400 M	Free (max 32 entries)		:	.	SCM
2	Mixed	800 M	Free (max 24 entries)		:	.	SCM
3	Mixed	400 M	IM (max 24 entries)		:	.	SCM



Transactions

\$137.70 USD Dispute won ✓

Charged to [REDACTED], 2215944

You won the dispute

You won this dispute on Mar 20, 2025.
The disputed amount of \$137.70 USD
will be returned to you.

Relevant documents

[View dispute claim](#)

[Learn more about preventing chargebacks →](#)

Recent activity

- **Won dispute** Mar 20, 2025, 4:11 AM
The issuing bank resolved this dispute in your favor. The disputed amount of \$137.70 USD has been returned to you.
- **Payment disputed as fraudulent** Mar 16, 2025, 4:14 AM
- **Payment succeeded** Mar 12, 2025, 3:01 AM
- **Payment started** Mar 12, 2025, 3:01 AM



RELAY2026
EVENT DEVELOPMENT
— DENVER —

Celebration Stories:

Things that we at Club Assistant and SwimPhone are proud of that made an event excel

- Support meet director with
 - Publication/website
 - Email announcements
 - Marketing to past meet attendees
 - Installation of entry limits
 - Management of waitlist



Compose Email Form

Meet Attendees

☐ Do not filter by meet attendees.
☒ Filter by meet attendees.

Email Recipients
98 Results

Select which meet attendees to include:
display: ☒ past ☐ archive
(50 Meets)

☐ 11/07/2026- 11/08/2026 2026 Shark Tank SCM Meet	Roster
☐ 06/20/2026- 06/21/2026 2026 Bumpy Jones Classic Long Course Meet	Roster
☐ 11/15/2025- 11/16/2025 2025 Shark Tank SCM Meet	Roster
☐ 06/07/2025- 06/08/2025 2025 Bumpy Jones Classic Long Course Meet	Roster
☒ 11/02/2024- 11/03/2024 2024 Shark Tank SCM Meet	Roster
☐ 06/08/2024- 06/09/2024 2024 Bumpy Jones Classic Long Course Meet	Roster



Celebration Stories:

Things that we are proud of that made an event excel

- Whatever it takes!
- It may be your first time, but it's certainly not ours.

Swim Competitions

Swim Competition Setup Status

5,498 Recent Past and Upcoming Swim Competitions

[View Archive](#)

Show 100 entries

#	Client	LMSC	Sanction Number	Affiliations	Type	Event Name	Event Start Date	Event End Date	Date Cl
1	College Club Swimming			Other	Pool	2027 TYR College Club Swimming National Championship	04/10/2027	04/12/2027	Thu, 03
2	North Shore Masters	IL 21		USMS WG	Pool	Copy of NORTH SHORE MASTERS SPRING CLASSIC – SECOND SHOT MEET 2027	04/10/2027	04/10/2027	Thu, 04
3	Central Illinois Masters Swim Team Meets	IL 21	217-S024	USMS	Pool	2027 Spring Classic	03/07/2027	03/07/2027	Sat, 03

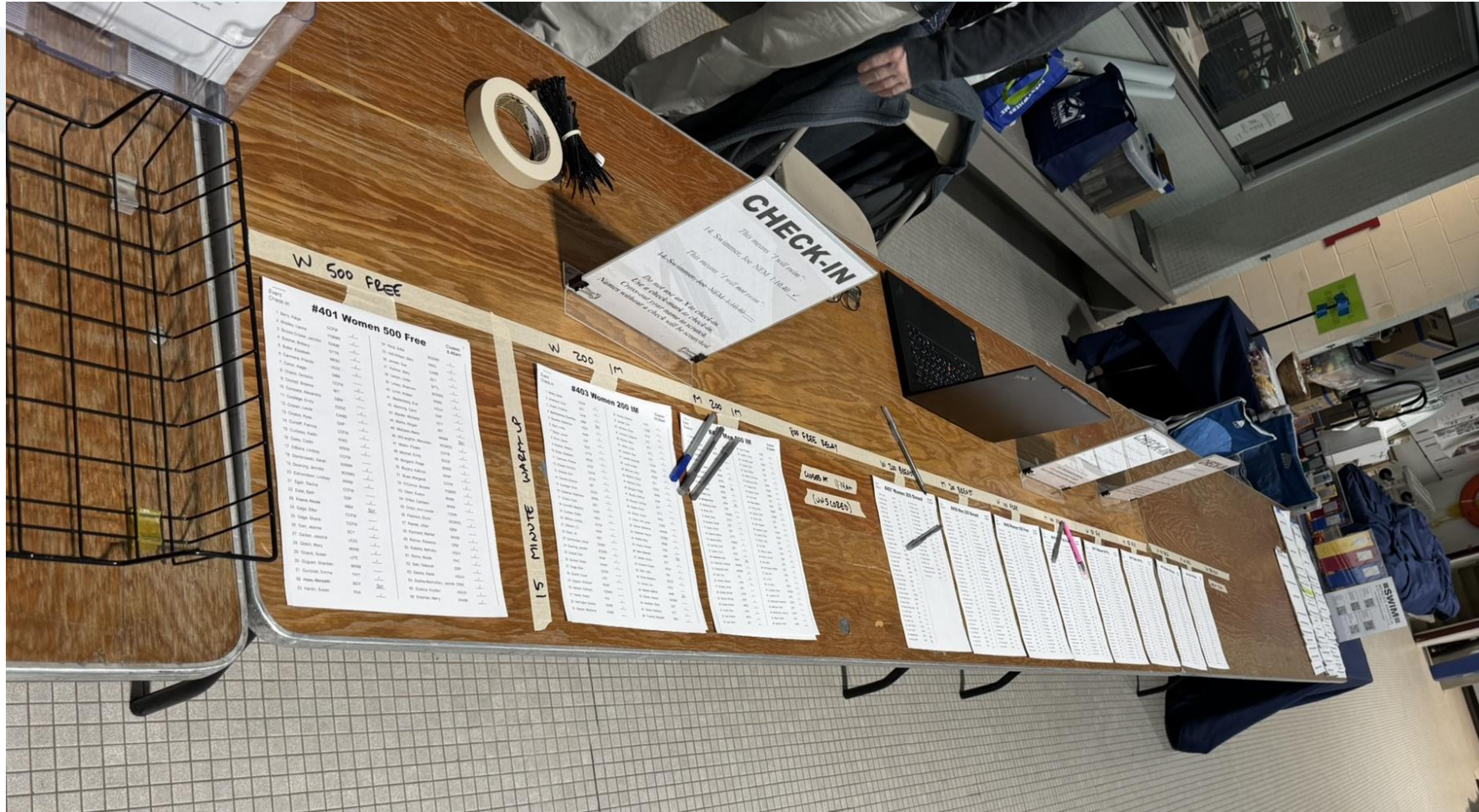


Positive Check-In: Seed-as-you-go

- NE LMSC SCY Champs: 600 - 900 swimmers; 25 - 30 hours of competition time; 4 days.
 - Goals: No-shows:↓ Lane usage:↑ Session length:↓ Competition:↑
 - Each no-show causes 28 seconds of wasted session length. (Average)
 - Every event is positive check-in. Check-in on-site and day-of only.
 - Clerk of Course table on deck: *Each event closes and is seeded 1 hour before it swims.*
 - Heat sheets posted on deck and online (Meet Mobile).
 - Timing booth upstairs: Manages the event in the water, prints results and award stickers.
 - Impact:
 - 2025 NE LMSC SCM Champs: 1303 splashes, with 88 empty lanes. (6.8%)
 - 2026 USMS LCM Nationals: 5433 splashes, with 458 empty lanes. (8.4%)
 - 2026 NE LMSC SCY Champs: 2799 splashes, only 27 empty lanes. (1.0%)
- ➔ *How can we improve the check-in experience and still seed-as-we-go?*



Positive Check-In: Seed-as-you-go



Typical NE LMSC SCY Champs Clerk of Course / Check-In Table



Hybrid online/on-deck positive check-in

The old way:

- Everyone checks-in on deck.
- Big rush before warmup.
- Is that a check-in or a scratch?

Positives:

- We know you are here! (Probably)
- Keep options open: Check-in later for a later event.
- Long session and changed your mind? Scratch out of a later event.
- Very few no-shows.

Harvard University - Site License
CHECK-IN 2024 New England LMSC SCY Championships, Sanction #: 024-S001
March 9 and 15-16, 2024 - BSI-Wellesley & Harvard
Psych Sheet - Friday (Blodgett Pool, Harvard)

HY-TEK's MEET MANAGER 8.0 - Page 1
CHECK-IN

Event 8 Men 200 Yard IM							
	Name	Age	Team	Seed Time			
1	Ahrens, Miles	69	CT Masters-CT	3:03.00	✓	30	Hersh, Craig
2	Barnard, Jim	44	CC Firefish-NE	2:33.00		31	Holt, Steve
3	Bartl, Roland	67	Mount Wachusett-NE	3:30.00	✗	32	Ivey, Kyle
4	Bartlett, Fred	68	South County Y-NE	2:53.19	✓	33	Jeang, John
5	Beauregard, Cameron	28	Pineapples-MR	2:28.54		34	Johnston, Robert
6	Burbank, Gerald	65	CT Masters-CT	2:41.00	✓	35	Keil, Mark
7	Burkhardt, Justin	44	DC Aquatics-PV	2:12.65	✓	36	Kelso, Stephen
8	Burks, Vincent	63	South County Y-NE	2:42.00	✓	37	Lai, Shi Lun
9	Carchedi, David	69	South County Y-NE	3:30.00	✓	38	Laukaitis, Joseph
10	Carpino, Chris	31	King Fins AC-NE	2:50.00	✓	39	Lin, Arthur
11	Cecere, David	43	Charles River-NE	2:40.00	✓	40	Lovitz, Lee
12	Chamak, Joshua	24	Pineapples-MR	1:59.99	✓	41	Matthews, Jonathan
13	Charles, Bradford	67	Unattached DV-DV	3:05.00	✓	42	McGahie, Ted
14	Chatinover, Jonathan	62	MV Masters-NE	2:38.00	✓	43	Moody, Alexander
15	Chatinover, Keith	24	MV Masters-NE	2:36.55	✗	44	Morse, Benjamin
16	Chertok, Zachary	35	Boston LANES-NE	3:23.00	✗	45	Neikirk, Joseph
17	Cooke, Andrew	80	Maine Masters SC-NE	3:58.00	✗	46	O'Brien, Douglas
18	Cromarty, Stuart	59	SwimRI-NE	2:18.01	✓	47	Ols, John
19	D... ..	44	South County Y-NE	2:35.59	✓	48	Ota, Kosuke
						49	Parker, Courtland
						50	Penguins-NE
						51	Mount Wachusett-NE
						52	AGUA Masters-MR
						53	Unattached NE-NE
						54	Maine Masters SC-NE
						55	Penguins-NE
						56	King Fins AC-NE
						57	ABC Masters-NE
						58	Tech Masters-NE
						59	Maine Masters SC-NE
						60	South County Y-NE
						61	CT Masters-CT
						62	Worcester Area-NE
						63	Tech Masters-NE
						64	Maine Masters SC-NE
						65	Wild Crab-NE
						66	King Fins AC-NE
						67	Worcester Area-NE
						68	BU Masters-NE
						69	Mount Wachusett-NE

Tech stack: Hy-Tek Meet Manager Pro (networked)



RELAY2026
EVENT DEVELOPMENT
— DENVER —

Hybrid online/on-deck positive check-in

The new way:

- Online check-in via SwimPhone
- Opens day before at noon.
- Closes 30 minutes before warmup.
- Switches to on-deck check-in during warmup. Online check-in preserved!
- Still closes/seeds 1 hour before swim.

Wins:

- We're still pretty sure you're here.
- No more check-in line before warmup. Most swimmers check-in online.
- You can still change your mind and scratch a later event.
- Not sure we got your online check-in? Confirm check-in status on deck.

Event
Check-In

#202 Men 500 Free

Closes: ¹
11:45am

1 Altman-Kurosaki, Mathias	AGUA	✓	34 Handin, Alex	BOSMS	—
2 Arseneault, Paul	WAM	✓	35 Hogg, Cole	CCFM	✓
3 Atkins, Steven	ADMS	—	36 Kahwaty, Anthony	AGUA	✓
4 Baden, Aaron	SRPM	✓	37 Kolluru, Maruti	SWMR	✓
5 Barnard, Jim	CCFM	✓	38 Kwa, Ken	CRM	✓
6 Barry, Maurice	CCFM	✓	39 Lehman, Brad	CAMB	✓
7 Bartlett, Fred	SRMS	✓	40 Marcantonio, Anthony	CCFM	✓
8 Becroft, Steven	YNS	✓	41 Marquardt, Spencer	CCFM	✓
9 Bernstein, Rich	AGUA	Scr	42 McCloskey, Paul	UC02	✓
10 Boensel, Chris	WWM	✓	43 McKenzie, Jared	SWMR	✓
11 Brown, Scott	CCFM	—	44 Meier, Bill	SRPM	✓
12 Burbank, Gerald	GSP	✓	45 Mooney, Ross	CCFM	✓
13 Carchedi, David	SCY	✓	46 Moreland, Michael	GVM	✓
14 Carr Jr., Andrue	MVMNE	✓	47 Morse, Benjamin	MESC	✓

Tech stack: Hy-Tek Meet Manager, SwimPhone, Excel, Crystal Reports.



RELAY2026
EVENT DEVELOPMENT
— DENVER —

Encourage good seed times with gamification

- Good seed times yield more efficient use of lane space. Better seed times → shorter sessions.
- If your meet has 400 heats, then saving just 10 seconds per heat saves 1 hour of meet time.
- We offered a “Seed Time Prize.” If you swam your seed time *exactly* (to the 0.01 second), you won a \$10 Starbucks gift card. Typically 2 - 9 winners per Championship Meet.
- We publish a full seed time analysis after our big meet.
 - Honorable Mention seeders (within 0.10 second)
 - Top 50 Seeders (sorted by percentage off)
 - Worst 50 Seeders (we spot-check this swimmers next year)
 - Overall seed accuracy ranking for all swimmers
- Tech stack: Meet Manager, local SQL database (many technical options)

Name	Age	Team	Seed Error per 100 yards	Seed Error Percentage	Number of Events	Rank
Abreu, Sarah	31	WWM-2	4.12	5.32%	9	386
Ahrens, Miles	71	CONN-5	1.24	1.51%	6	102
Alberton, Felipe	29	UC02	5.23	8.61%	4	476
Alcaide, Jessie	41	MESC-2	1.10	1.86%	8	146
Alcaide, Katrine	44	MESC-2	1.34	2.20%	6	189
Aldrich, Margaret	62	KING-2	20.93	20.32%	2	542



2026 NE LMSC SCY Champs
Seed Time Analysis Reports



Celebrate Achievement

NEW WORLD RECORD SET

Maureen Kornfeld set a new World Record in the 50 Backstroke.

AQUA had to create a new age group for the Record. Maureen is 105 years young.

MORAL OF THE STORY: It's great to be this young at heart.



Celebration

GUESTS IN THE POOL



Politely ask them to leave or swim around them.

MORAL OF THE STORY: You never know who is going to show up



RELAY2026
EVENT DEVELOPMENT
— DENVER —

Notes

While **Technology** is the first word in the title of this session, tech isn't always the source of the need to **troubleshoot**.

Here are some things that may or may not have happened at your event!



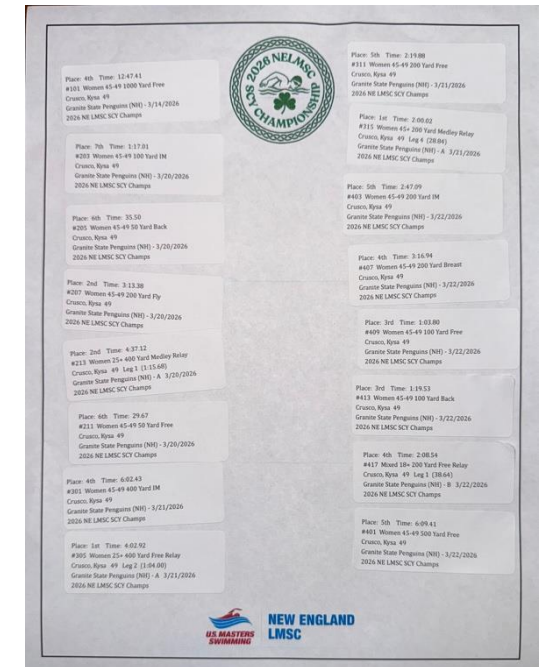
Stories of Celebration

Sources of Pride on event excellence

Problem: Awards won't make it/ No budget for awards

Solution:

- Sticker Sheets!
- Roughly \$30-50 cost, can be amortized over several meets
- Ordering \$2 medals or \$.30 ribbons can be a major hassle for event directors



RELAY2026
EVENT DEVELOPMENT
— DENVER —

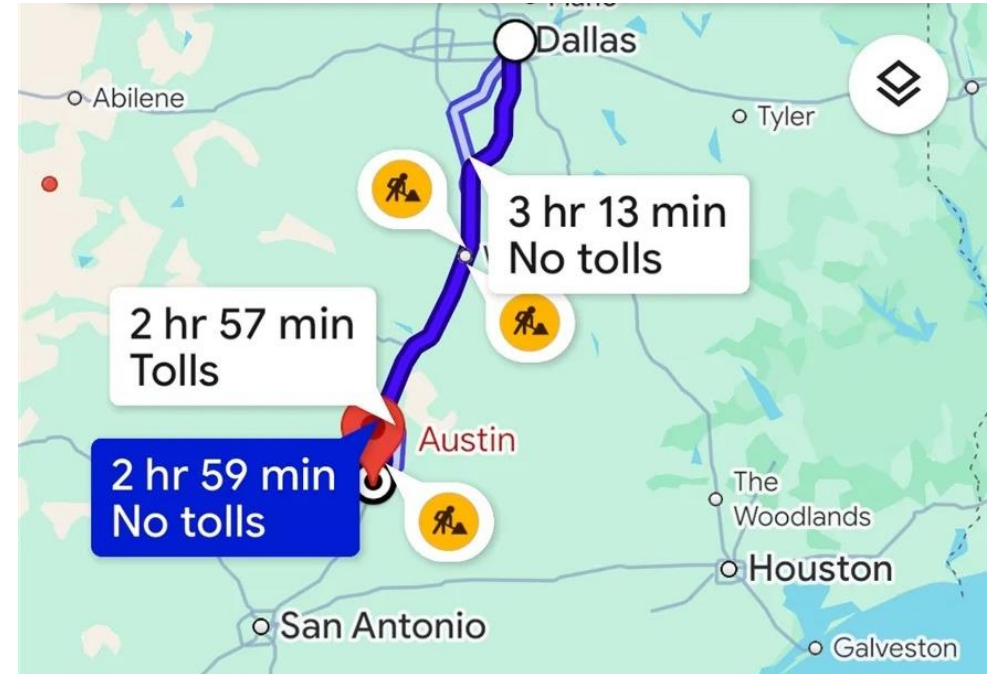
Stories of Celebration

Sources of Pride on event excellence

Problem: Swimmers don't want to travel too far for championship meet.

Solution: Host 2 duplicate championships!

- Split duties and cut (some) costs
- Reduce travel times
- Reduce session times for swimmers/officials



Stories of Celebration

Sources of Pride on event excellence

Problem: Large college facility hasn't hosted events in years

Solution:

- Take time to establish relationship with coach
- Co-Host event with team -- Team takes profits; USMS entity covers admin duties/costs, but benefits from having the meet
- Aim to turn over event to 100% team-run after 2-3 years



Uh-oh. The scoreboard died. Mostly.

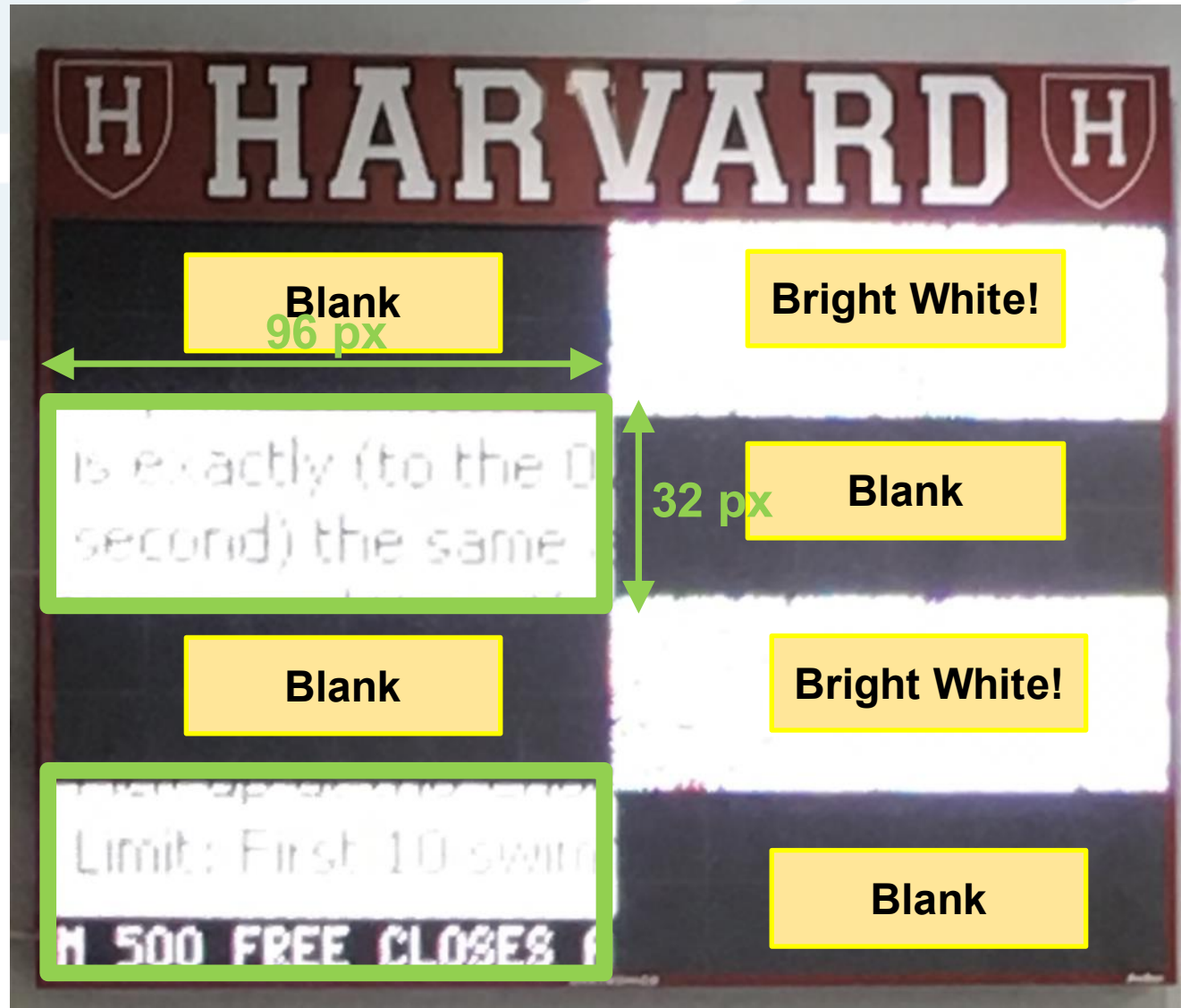
- Meet: 2017 NE LMSC SCY Championships at Harvard's Blodgett Pool.
- 800 swimmers. 4500 individual entries. 4 days of competition.
- Scoreboard: Daktronics ProStar matrix board, installed in 2004.
- Resolution: 192 x 128 pixels.
- Tech stack: Daktronics Venus V7000 scoreboard control software.



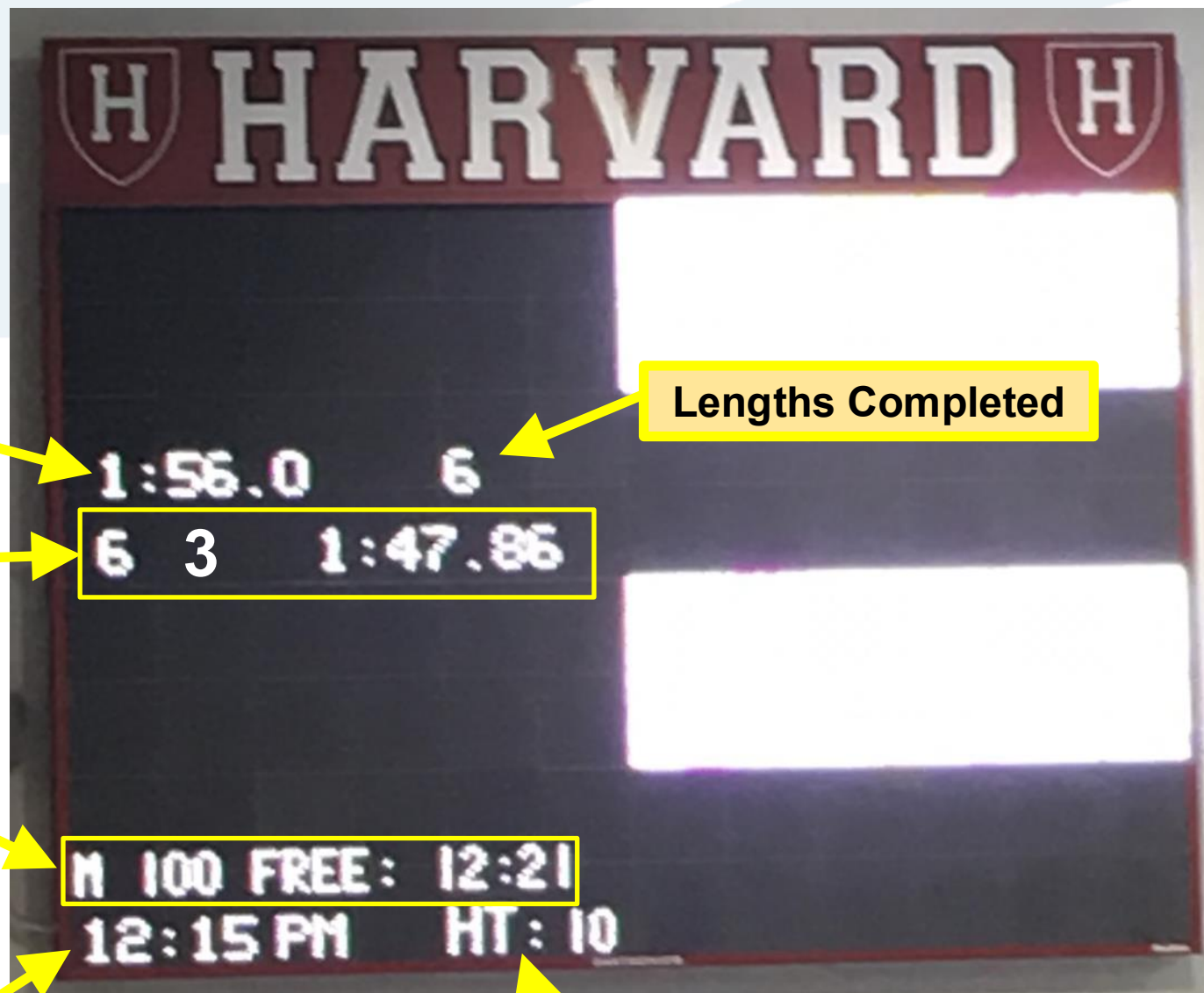
H HARVARD H				
Men 200 Free				
EV 11	HT 3	LEN 8	0.00	
1 8	Su, Kevin	PENN	1:37.29	
2 5	Rutter, Jonat	YALE	1:36.69	
3 3	Abdel Khalik,	HARV	1:36.24	
4 1	Farris, Dean	HARV	1:31.56	
5 2	Lin, Adrian	YALE	1:34.25	
6 3	Zyla, Michal	COL	1:36.24	
7 7	Bondarenko, N	COL	1:37.17	
8 6	Liu, Niansuo	COL	1:36.73	
2017 MEN'S Ivy CHAMPIONSHIPS			7:16	PM



RELAY2026
EVENT DEVELOPMENT
— DENVER —



RELAY2026
EVENT DEVELOPMENT
— DENVER —



Running Time

Lengths Completed

Single-Line Board:
Lane | Place | Time

Next Event to Close
for Check-In

Time of Day

Heat Number



RELAY2026
EVENT DEVELOPMENT
— DENVER —

Take advantage of scoreboard real estate

- In 2018, Harvard installed a new, larger Daktronics LED video board.
- Resolution: 1296 x 720 @ 6mm pixel spacing. Size: 28' wide x 15.5' tall.
- Added 908,544 pixels!
- Tech stack: Daktronics Show Control software, OmniSport 2000, Hy-Tek Meet Manager

HARVARD									
100 Butterfly									
Ivy Meet Record:		51.57	Alex Forrester (Yale) 2013						
Pool Record:		51.89	Miki Dahlke (Harvard) 2018						
NCAA Standard:		50.92							
NCAA B Standard:		53.76							
EVENT: 10		HEAT: 5	LENGTHS: 4	1:08	0.00				
1	8	Wong, Anthea	COL	29.79	55.77				
2	5	Baldari, Alessa	YALE	29.61	55.19				
3	3	Chidley, Nell	BRO	29.24	54.56				
4	1	Venema, Nikki	PRIN	28.20	53.63				
5	2	Reznicek, Jenna	BRO	28.45	54.00				
6	7	Healy, Marissa	YALE	29.75	55.69				
7	4	Kannan, Hannah	PENN	29.53	54.76				
8	6	Brenner, Mandy	HARV	29.61	55.42				
TEAM SCORES		1 HARV 547.5	3 YALE 397.0	5 COL 265.5	7 DART 223.0				
		2 PRIN 409.0	4 PENN 381.0	6 BROW 254.0	8 CORN 191.0				
						11:43 AM			

HARVARD									
WOMEN'S RECORDS					1:50 PM				
BLODGETT					MEN'S RECORDS				
					BLODGETT				
B. HINDLEY	22.34	'18	S. LI	22.46	'13	60 FREE	D. FARRIS	18.92	'19
M. DAHLKE	48.84	'18	M. DAHLKE	48.51	'19	100 FREE	D. FARRIS	40.80	'19
M. DAHLKE	1:45.00	'18	M. DAHLKE	1:44.28	'19	200 FREE	D. FARRIS	1:29.16	'19
K. ZIEGLER	4:37.84	'07	M. DAHLKE	4:40.29	'19	500 FREE	B. NOVAK	4:13.34	'18
K. ZIEGLER	9:28.49	'07	A. CLARKE	9:43.09	'09	1000 FREE	B. NOVAK	8:46.99	'18
K. LINEHAN	15:50.23	'81	A. CLARKE	16:10.25	'10	1600 FREE	J. COLE	14:39.71	'02
H. VANDERWEL	52.45	'18	D. LEE	52.77	'14	100 BACK	D. FARRIS	43.66	'19
Q. SCANNELL	1:54.64	'18	S. SHELTON	1:54.01	'19	200 BACK	D. FARRIS	1:38.99	'19
K. MEILI	59.54	'12	M. POPP	1:01.65	'16	100 BREAST	C. KATIS	52.49	'13
S. KIM	2:09.37	'10	J. YEGHER	2:11.72	'18	200 BREAST	S. MCNAMARA	1:53.82	'17
M. DAHLKE	51.89	'18	M. DAHLKE	51.89	'18	100 FLY	U. GURES	46.68	'19
M.T. MEAGHER	1:52.99	'81	K. MILLS	1:56.23	'09	200 FLY	J. JOHNSON	1:42.72	'19
T. CAULKINS	1:57.11	'81	S. WANG	1:57.73	'16	200 IM	J. JOHNSON	1:44.38	'19
T. CAULKINS	4:04.63	'81	C. OTTO	4:10.22	'12	400 IM	M. ZARIAN	3:42.70	'19
COLBY WALL, LI DAHLKE	1:30.50	'18	COLBY DAHLKE, J. LI, EMS	1:29.87	'17	200 FREE RELAY	MARCoux, FARRIS, GURES, GODDARD	1:16.43	'19
MILMAR, LARSON, McDONALD, VEITH	3:18.25	'15	COLBY, SHELTON, QUIST, DAHLKE	3:15.47	'19	400 FREE RELAY	FARRIS, MARCOUX, GURES, RAWLS	2:49.88	'19
DAHLKE, QUIST, ENOCH, POPP	7:05.06	'18	DAHLKE, QUIST, ENOCH, POPP	7:05.06	'18	800 FREE RELAY	FARRIS, NOVAK, REHMAN, RAWLS	6:11.73	'19
VANDERWEL, O'LEARY, ZIMMERMAN, HINDLEY	1:37.30	'18	COLBY WALL, UMBINGER, QUIST	1:39.34	'19	200 MEDLEY RELAY	FARRIS, CHANG, GURES, MARCOUX	1:24.33	'19
VANDERWEL, O'LEARY, ZIMMERMAN, HINDLEY	3:34.22	'18	CLUMFORD, LUCK, ANAYA, LI	3:38.21	'13	400 MEDLEY RELAY	MARCHESTER, MCNAMARA, YAKUBOVICH, FARRIS	3:06.98	'17
J. GREENE	324.15	'87	J. GREENE	324.15	'87	1M DIVING	M. MOSCA	387.05	'13
C. CHAMBERS	360.55	'15	S. PAPADAKIS	358.48	'07	3M DIVING	M. MOSCA	457.35	'15

HARVARD									
EASTERN CHAMPIONS									
1979, 1980, 1981, 1982, 1983, 1984, 1985, 1986, 1992, 1993, 1994, 1996, 1997, 1998, 1999, 2000, 2001, 2003, 2005, 2008									
IVY LEAGUE CHAMPIONS									
2014									
IVY LEAGUE DUAL MEET CHAMPIONS									
1978, 1979, 1981, 1982, 1983, 1996, 1999, 2000, 2002, 2008, 2011, 2013, 2014, 2015									

➔ So what does it look like for a USMS meet?



RELAY2026
EVENT DEVELOPMENT
— DENVER —

Women 100 Free

EVENT: 409 HEAT: 4 LENGTHS: 2

Core Scoreboard Data

31.9

Lap Counters
Appear
Automatically for
Distance Events

Lane
Assignments
for Next Heat

Upcoming
Session
Timeline
Information

Next Event
Check-In
Close Time

Time of day is
always visible

Team Scores

Branding!
Scoreboard
pics end up on
social media.

Timeline
Status

Miscellaneous
Messages



UP NEXT

Women 100 Free

EVENT: 409	HEAT: 5
1 Feldmann, Joel	NEM
2 Barry, Paige	CCFM
3 M	Y
4 D	Y
5 C	T
6 H	BM
7 G	Y
8 Murphy, Kathryn	WAM

Women Thru Event 407

1 GSP	1207.	11 SWMR	418.0
2 SCY	960.0	12 MESC	387.0
3 CCFM	900.0	13 EDGE	310.0
4		14 SFTL	307.0
5		15 LIFE	275.0
6		16 CRM	240.0
7		17 VM	228.0
8		18 J2	204.0
9 AGUA	508.0	19 YGBM	204.0
10 WCMS	428.0	20 NEM	190.0

#	Event	Closes	Starts
409	W 100 free	12:19p	1:19p
410	M 100 free	12:46p	1:46p (20)
411	W 50 fly	1:21p	2:21p (10)
412	M 50 fly	1:34p	2:34p

M 50 fly closes at 1:34pm

1:26 PM

Meet Setup

Arrive at meet and helpful facility staff ask what equipment to set up
Ask for pads and 2 buttons

What did we get:

Pad in the water and buttons on the deck.

Pad connected to Prime and buttons piggy backed onto A

Discovery – No B/C harness, but they put 2 buttons out



MORAL OF THE STORY: Always check the setup for yourself



Data Corrupted at start of meet

Meet Ready to start:

Power surge and database corrupted!

Programs had been printed, swimmers ready to go and no computer.

Timing system operational

What to do?

REMAIN CALM

Start the meet using printed program and save times on CTS (print out every race)

Restored a previous backup.

The Admin Team recreated all scratches and seeded the meet.

Manually changed every event to match the printed program

Retrieved all the races that had been run

ALL WITHOUT ANYONE OUTSIDE OF ADMIN KNOW ANYTHING HAD HAPPENED!

MORAL OF THE STORY: ALWAYS HAVE A BACKUP AND PRINTED PROGRAMS



Tales from the Trenches

When things go sideways...

How Club Assistant and SwimPhone turn it into success

- Pacific Masters Champs Spring 2026
 - pool heater down, no other pools available
 - full cancellation at 3 days out
 - 700 swimmers quickly informed
 - \$50k refunds processed

Payment Summary
1/1/2026-8/14/2026
1,402 Payments

Swim Meet: CANCELLED: 2026 Pacific Masters Swimming SCY Championships

Show 100 entries Search:

PID	SID	Member	Cardholder Name	Total Payment	Date	Invoice Items	Payment Method
2882274	2342464	Jonathan A Sample		\$60.00	03/27/2026	\$60.00 Meet Entry Fees: 2-4 Events	Credit Card
2888435	2342464	Jonathan A Sample		(\$60.00)	04/11/2026	(\$60.00) Meet Entry Fees: 2-4 Events	Credit Card
				\$0.00		1,402 Details Totaling \$0.00	



CANCELLED: 2026 Pacific Masters Swimming SCY Championships

Friday, April 10 - Sunday, April 12, 2026
USMS Sanction : 386-S014



Marin Aquatic Masters
Swim Meet Registration



Notice posted April 8, 2026, 6:41pm Pacific Time:
**THIS MEET HAS BEEN CANCELLED
DUE TO POOL EQUIPMENT PROBLEMS**

FULL REFUNDS WILL BE PROCESSED TO ALL SWIMMERS ENTERED
Refunds will initiate on April 11 with estimated funds clearing within 5-9
business days

Pacific Masters Swimming Short Course Yards Championship
April 10-12, 2026

Warm-up start time: Friday, April 10th 7:30 AM; Saturday, April 11th and Sunday, April 12th 7:00 AM

Meet start time: Friday, April 10th 8:30 AM; Saturday, April 11th and Sunday, April 12th 8:00 AM



RELAY2026
EVENT DEVELOPMENT
— DENVER —

Tales from the Trenches

When things go sideways...

How Club Assistant and SwimPhone turn it into success

- Big Shoulders Open Water Swim 2015
 - Dangerous waterspout and 8 ft waves on Lake Michigan just before race start time
 - 1200 unhappy customers
 - many chargebacks
 - subsequent year some entries arranged to be priority/early and some comps
 - Legacy list invented to honor the faithful attendees



Actual Event Picture



RELAY2026
EVENT DEVELOPMENT
— DENVER —

Tales from the Trenches

Turning sideways in to a win!

Your event may not seem smooth to you, but your preparation will make it such for participants

ABC – **A**lways **B**e **C**ontingency-planning, but *control what you can control*

- Volunteer shortage
- Official doesn't show
- Computers/printers/touchpads
- Medical Event



Remember, 99% of swimmers just want the opportunity to race!



Tales from the Trenches

Turning sideways in to a win!

Problem: Power has gone out!

Solution: Proceed manually if it is safe to do so

- Stopwatches are essential when electronic timing fails. (Rules 103.17)
- Use meet swimmers as backup timers if you don't already have enough. (103.18.9)
- Most swimmers will be happy as a clam if they are able to race!



Tales from the Trenches

Turning sideways in to a win!

Problem: Weather is threatening my event

Solution:

- Is there a backup plan? What is it?
- Host AND swimmers need to be flexible
- COMMUNICATE regularly leading to decision/event



RELAY2026
EVENT DEVELOPMENT
— DENVER —

Tales from the Trenches

Turning sideways into a win!

Problem: Swimmer Medical Emergency

Solution:

- Assess the scenario and your options.
- Use all your available people.
- Rules 102.11.4 deals with Cancellation and Postponement
- Whatever you decide (esp. if you have to cancel/postpone) will NOT satisfy everyone.
- COMMUNICATE! Any change in a multi-day event will have a ripple effect.



RELAY2026
EVENT DEVELOPMENT
— DENVER —

Preparing the Meet Manager file

- Enter the Meet Specific details
 - Very important to select USMS – US Masters as the ID Format
- Determine and enter the Age-Up Date
 - Yard meet – last day of the meet
 - Meter meet – December 31st
- Determine if seeding will be by time or by age group
- Enter any Pool, Meet, USMS and AQUA records

The screenshot shows the 'Meet Set-up' window with the following details:

- Meet Name:** CVMM 10th Malt Biondi Meet
- Facility Name:** Cal Lutheran University, Samuelson Aquatics
- Address:** (empty)
- City:** Thousand Oaks
- State / Province:** CA
- Country:** USA
- Postal Code:** 906000
- Sanction #:** (empty)
- Start Date:** 03/16/25
- End Date:** 03/16/25
- Age-Up Date:** 03/16/25
- Entry Open Date:** 01/18/15
- Entry Deadline:** 03/01/15
- ID Format:** ☒ USMS - US Masters
- Class:** ☒ Masters
- Meet Type:** ☒ Standard
- Meet Style:** ☒ Standard
- Course:** ☒ Yards
- Base Country:** USA
- Host LMSC:** SP
- Altitude in Feet:** (empty)
- Default Touch Pads at both ends:** ☐
- Timers Connected to this Computer:** ☒ One timer
- Timer 1 Name:** Gen 7
- Timer 2 Name:** CTS 6 boys
- DQ Codes:** Custom DQ Codes
- Time Adjustment Method:** ☒ FINA rules

Buttons at the bottom: Age-Up Athletes, OK, Cancel, Re-Convert Entries



Pro tips for Meet Managers

- If you are doing Hy-Tek Meet Manager Pro in networked mode, use wired networking, not wifi for a more reliable connection.
- If at all possible, whatever computer(s) you are using for Meet Manager, don't use it for anything else. Meet Manager, MS Office, Acrobat, and web browser. Nothing else.
- Keep your Meet Manager updated. Make sure you've updated about a week before your event. Don't upgrade the night before your meet starts.
- Do a backup, and a full database repair every day of your meet.
- An easy way to save a backup is to email it to yourself. Now you have a copy that's not just on your Hy-Tek computer.



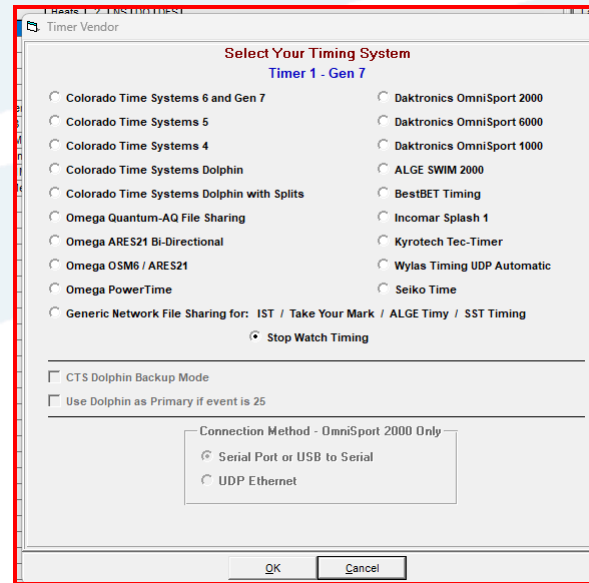
Confirm the timing system to be used

- Confirm whether the host will supply the trained operator or if one must be recruited
- Confirm what equipment is needed and who will supply it.

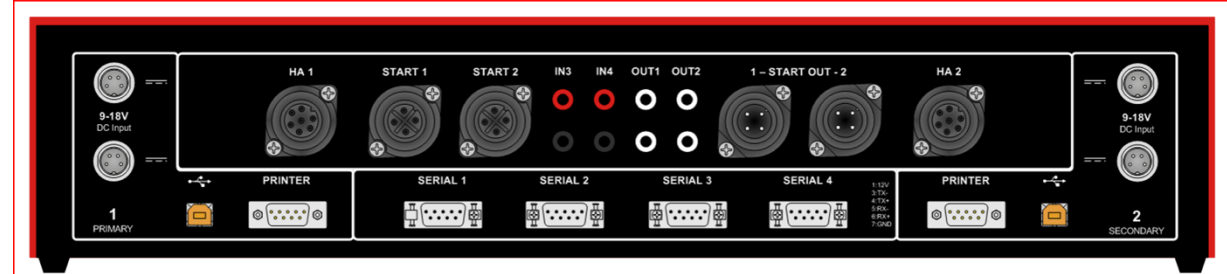
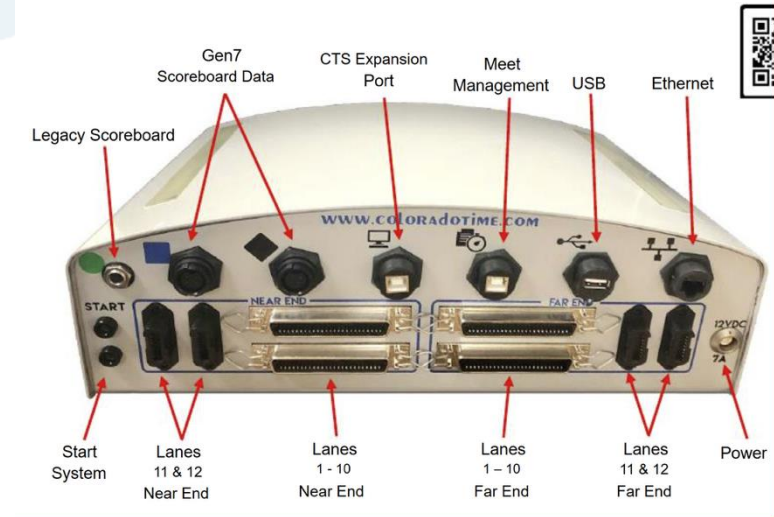


Day of the Meet

- Arrive early and make sure all equipment is set up properly
- Connect all cables from computer to timing system
 - ***If using CTS System 7, this must be done before turning on the timing console***
- Confer with the Meet Referee and Timing system operator for proper set up of start system to the timing system
- Have required forms available (split requests, etc.)
- Answer questions regarding entries as they come up



Connections



RELAY2026
EVENT DEVELOPMENT
— DENVER —

Running the Meet

- Pull in times from the timing system using Get Times button or the Race #
- Verify times and correct any discrepancies
- Enter DQ codes to facilitate answering questions on results
- Print results and awards

Check for Records and print the required applications and obtain the Meet Referee's signature

After the meet send back up of the database to your LMSC Top Ten Recorder with all the other required documents

Run the Meet - CVM 10th Matt Biondi Meet

Events Athletes Relays Seeding Web Swim-Off Re-Score Combine Reports Labels Preferences Interfaces OW Module Meet Mobile Help

Enter Results by Lane (Ctrl-E)

Meet Mobile Disabled HY-TEK's MEET MANAGER Licensed to: Conejo Simi Aquatics Updated: 8/16/2025 3:27:59 PM

Display Subtracted Splits

EVENT LIST - All Events - Yards - (Session not selected)										Cumulative Splits									
Evt #	Rnd	Status	Event Name	Heats	?	NS	DQ	DFS		Lane	50								
1	F	Scored	Mixed 50 Yard Butterfly	20	-	17	-	-		1	1:07.91								
2	F	Scored	Mixed 50 Yard Backstroke	20	-	19	2	-		2	NS								
3	F	Done	Mixed 50 Yard Breaststroke	19	-	16	4	-		3	59.11								
4	F	Scored	Mixed 50 Yard Freestyle	22	-	18	-	-		4	NS								
5	F	Scored	Mixed 100 Yard IM	19	-	17	13	-		5	57.88								
6	F	Scored	Men 400 Yard Freestyle Relay 7 Women/8 Men	1	-	-	1	-		6	58.08								
7	F	Scored	Women 400 Yard Freestyle Relay 7 Women/8 Men	1	-	-	-	-		7	58.25								
8	F	Scored	Mixed 400 Yard Freestyle Relay 7 Women/8 Men	1	-	-	-	-		8									
9	F	Scored	Men 200 Yard Medley Relay 10 Women/11 Men	1	-	-	1	-											
10	F	Scored	Women 200 Yard Medley Relay 10 Women/11 Men	1	-	-	1	-											
11	F	Scored	Mixed 200 Yard Medley Relay 10 Women/11 Men	1	-	-	1	-											
101	F	Done	Mixed 50 Yard Backstroke SPLIT	1	-	-	-	-											
103	F	Done	Mixed 100 Yard Freestyle SPLIT	1	-	-	-	-											

Records <Ctrl-Y> Replace Records with Team Scores>			
Record	Time	Date	Record Holder
MEE2	25.85	3/16/2025	18-24W Dana Chetostareva
NATL	24.51	4/28/2023	18-24W CAROLINE GHELICH
MEE2	27.79	3/23/2014	25-29W Jillian T Friend
NATL	24.19	4/28/2017	25-29W DANIELLE HERRMANN
MEE2	30.59	3/17/2024	30-34W Paula Vega
NATL	24.18	4/15/2000	30-34W ANGEL MARTINO
MEE2	28.58	3/16/2025	35-39W Lauren Frenndreis
NATL	25.04	4/28/2017	35-39W NORIKO INADA
MEE2	28.30	3/16/2025	40-44W Elizabeth Vucinich
NATL	25.14	5/10/2009	40-44W S VON DER LIPPE
MEE2	29.44	3/17/2024	45-49W Jennifer Finotti-Sheppard
NATL	25.49	4/21/2023	45-49W J BROOKS CROZIER
MEE2	29.90	3/23/2014	50-54W Lisa L Schoennema
NATL	25.70	4/28/2023	50-54W LIVINGSTONTHOMPS
MEE2	34.52	3/16/2025	55-59W Beata Konopla
NATL	27.04	10/30/2016	55-59W LESLIE LIVINGSTON
MEE2	30.46	3/17/2024	60-64W Becky Cleavenger
NATL	27.93	5/13/2018	60-64W TRACI GRANGER
MEE2	31.89	3/17/2024	65-69W Veronica Hibben
NATL	28.79	4/28/2023	65-69W TRACI GRANGER

Session : F7 SCR Sheet : F9 Adjust : F8 Restore Pads : Ctrl-P JD : Ctrl-J Race # : F2 List : Ctrl-L Re-Rank Prev Event : Ctrl-F4

Refresh : Ctrl-D Rel Names : Ctrl-R Awards : Ctrl-A Calc : Ctrl-K Unseeded : Ctrl-U Get Times : F3 Score : Ctrl-S Re-Score Next Event : Ctrl-F5

Heat 1 of 20 == Finals == Event 1 Mixed 50 Yard Butterfly

Lane	Comp#	Athlete Name	Age	Club	Seed Time	React	Finals Time	DQ	Exh	DQcode	Backup 1	Backup 2	Backup 3	HPL	PL	Pts	AdjStat
1	64	Smith, Diane	W79	Conejo Valley Masters-33	1:30.00		1:07.91				1:07.92	1:07.85		5	1		
2	133	Ben-Aderet, Shantal	W35	Santa Maria Swim Club-33	1:10.00		NS										
3	118	Markfield, Julie	W65	Rose Bowl Masters-33	1:00.59		59.11				59.20	59.03		4	6	A	
4	61	Shane, Paul	M78	Conejo Valley Masters-33	1:00.00		NS										
5	83	Parnes, Bart	M68	Long Beach Grunions-33	1:00.00		57.88				58.08	57.99		1	13		
6	127	Gast, Monte	M77	San Diego Swim Masters-44	1:01.69		58.08				57.77	57.88		2	2		
7	85	Smith, Stan	M77	Long Beach Grunions-33	1:10.00		58.25				58.28	58.41		3	3		
8																	



RELAY2026
EVENT DEVELOPMENT
DENVER

Participation Sticker Sheets...



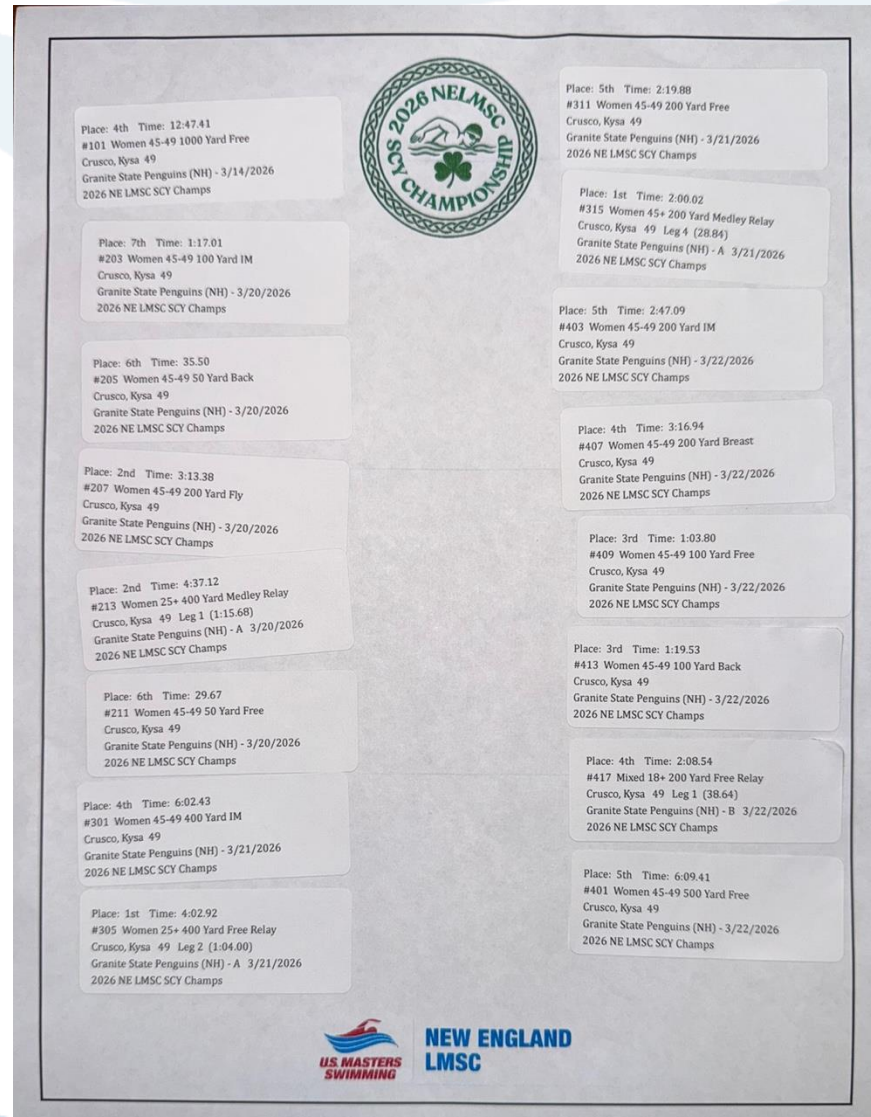
Sticker sheets are a long tradition at USMS meets

Recent photo courtesy of Arthur Ovalle (NEM/GBP-NE) (age 93)



RELAY2026
EVENT DEVELOPMENT
— DENVER —

Participation Sticker Sheets...



- Like many meets, we have award stickers to put on your medal, or onto a physical sticker sheet.
- Pages of stickers for every event to dig through.
- Someone took my sticker!
- Paper sticker sheets on a pool deck
→ Wet paper sticker sheets on a pool deck.

→ *Could we make this easier for athletes?*

Participation Sticker Sheets... Online!



Place: 5th Time: 13:26.64
#101 Women 45-49 1000 Yard Free
Ansell, Christina 47
Worcester Area Masters - 3/14/2026
2026 NE LMSC SCY Champs

Place: 5th Time: 35.11
#205 Women 45-49 50 Yard Back
Ansell, Christina 47
Worcester Area Masters - 3/20/2026
2026 NE LMSC SCY Champs

Place: 5th Time: 29.01
#211 Women 45-49 50 Yard Free
Ansell, Christina 47
Worcester Area Masters - 3/20/2026
2026 NE LMSC SCY Champs

Place: 3rd Time: 5:54.13
#301 Women 45-49 400 Yard IM
Ansell, Christina 47
Worcester Area Masters - 3/21/2026
2026 NE LMSC SCY Champs

Place: 3rd Time: 4:13.08
#307 Mixed 35+ 400 Yard Free Relay
Ansell, Christina 47
Worcester Area Masters - B 3/21/2026
2026 NE LMSC SCY Champs

Place: 4th Time: 1:18.73
#313 Women 45-49 100 Yard Fly
Ansell, Christina 47
Worcester Area Masters - 3/21/2026
2026 NE LMSC SCY Champs

Place: 4th Time: 2:45.43
#403 Women 45-49 200 Yard IM
Ansell, Christina 47
Worcester Area Masters - 3/22/2026
2026 NE LMSC SCY Champs

Place: 6th Time: 1:14.91
#203 Women 45-49 100 Yard IM
Ansell, Christina 47
Worcester Area Masters - 3/20/2026
2026 NE LMSC SCY Champs

Place: 1st Time: 3:04.30
#207 Women 45-49 200 Yard Fly
Ansell, Christina 47
Worcester Area Masters - 3/20/2026
2026 NE LMSC SCY Champs

Place: 3rd Time: 5:15.90
#213 Women 25+ 400 Yard Medley Relay
Ansell, Christina 47
Worcester Area Masters - A 3/20/2026
2026 NE LMSC SCY Champs

Place: 3rd Time: 2:45.52
#303 Women 45-49 200 Yard Breast
Ansell, Christina 47
Worcester Area Masters - 3/21/2026
2026 NE LMSC SCY Champs

Place: 4th Time: 40.40
#309 Women 45-49 50 Yard Breast
Ansell, Christina 47
Worcester Area Masters - 3/21/2026
2026 NE LMSC SCY Champs

Place: 4th Time: 2:07.30
#317 Mixed 25+ 200 Yard Medley Relay
Ansell, Christina 47
Worcester Area Masters - A 3/21/2026
2026 NE LMSC SCY Champs

Place: 5th Time: 1:04.38
#409 Women 45-49 100 Yard Free
Ansell, Christina 47
Worcester Area Masters - 3/22/2026
2026 NE LMSC SCY Champs



NEW ENGLAND
LMSC

- After the meet, we post a PDF with 'virtual' sticker sheets for every athlete.
- Print just your own page at home (or at work...)
- No more wet sticker sheets.
- No more missing stickers.

Tech stack: Meet Manager, Excel, Crystal Reports



2026 NE LMSC SCY Champs
Participation Sticker Sheets



RELAY2026
EVENT DEVELOPMENT
— DENVER —

Bonus: Relay names on the scoreboard

*Before race start
All swimmer names*

Real scoreboard photos
Simulated race data

HARVARD

400 Freestyle Relay

Ivy Meet Record: 3:14.48 Harvard (Pasadyn, Quist, Shelton, Dahlke) 2020
 Pool Record: 3:18.25 Princeton (McIlmail, Larson, McDonald, Veith) 2015
 NCAA A Standard: 3:14.50
 NCAA B Standard: 3:16.35

Ivy 

2020 Men's Swimming & Diving Championships

EVENT: 21 HEAT: 1 LENGTHS:

0.00

1	Lee/Cunanan/Kamps/McCrary	PENN	
2	Walther/Khosla/Leibson/Cox	PRIN	
3	Reihman/Rawls/Holmquist/Bathory	HARV	
4	Page/Marcoux/Lee/Gaissert	YALE	
5	Cline/Lincoln/Sung/Smilenov	BROW	
6	Liu/Liu/Kistorp/Gwo	COL	
7	daCosta/Mahoney/Lake/Curtis	CORN	
8	Hall/Park/Moll/LaMastra	DART	

TEAM
SCORES

1 HARV  547.5
 2 PRIN  409.0

3 YALE  397.0
 4 PENN  381.0

5 COL  265.5
 6 BROW  254.0

7 DART  223.0
 8 CORN  191.0

3:37 PM

Tech Stack: Meet Manager Pro, OmniSport 2000 (ethernet), python, Daktronics RTD protocol familiarity, Daktronics Show Control



RELAY2026
EVENT DEVELOPMENT
— DENVER —

Bonus: Relay names on the scoreboard

50 yards elapsed
1st swimmer

HARVARD												
400 Freestyle Relay												
Ivy Meet Record: 3:14.48 Harvard (Pasadyn, Quist, Shelton, Dahlke) 2020												
Pool Record: 3:18.25 Princeton (McIlmail, Larson, McDonald, Veith) 2015												
NCAA A Standard: 3:14.50												
NCAA B Standard: 3:16.35												
EVENT: 21 HEAT: 1 LENGTHS: 2												
39.7												
1	Lee, Sean	PENN										
2	Walther, Max	PRIN										
3	Reihman, Mahlon	HARV										
4	Page, Joseph	YALE										
5	Cline, Cody	BROW										
6	Liu, Nianguo	COL										
7	daCosta, Paige	CORN										
8	Hall, John	DART										
TEAM SCORES												
1 HARV		547.5	3 YALE		397.0	5 COL		265.5	7 DART		223.0	3:38 PM
2 PRIN		409.0	4 PENN		381.0	6 BROW		254.0	8 CORN		191.0	

Tech Stack: Meet Manager Pro, OmniSport 2000 (ethernet), python,
Daktronics RTD protocol familiarity, Daktronics Show Control



RELAY2026
EVENT DEVELOPMENT
— DENVER —

Bonus: Relay names on the scoreboard

*Race complete
Not reset
4th swimmer*

HARVARD									
400 Freestyle Relay									
Ivy Meet Record:		3:14.48		Harvard (Pasadyn, Quist, Shelton, Dahlke) 2020					
Pool Record:		3:18.25		Princeton (McIlmail, Larson, McDonald, Veith) 2015					
NCAA A Standard:		3:14.50							
NCAA B Standard:		3:16.35							
EVENT: 21		HEAT: 1		LENGTHS: 16		3:53.0			
1	2	McCrary, Mark		PENN		28.88	3:37.84		
2	1	Cox, Derek		PRIN		25.22	3:36.13		
3	4	Bathory, Levente		HARV		28.09	3:39.65		
4	3	Gaissert, Henry		YALE		25.07	3:38.88		
5	6	Smilenov, Alex		BROW		27.84	3:42.32		
6	5	Gwo, Albert		COL		26.11	3:41.31		
7	8	Curtis, Dylan		CORN		28.58	3:44.76		
8	7	LaMastra, Connor		DART		26.79	3:43.77		
TEAM SCORES		1 HARV 	547.5	3 YALE 	397.0	5 COL 	265.5	7 DART 	223.0
		2 PRIN 	409.0	4 PENN 	381.0	6 BROW 	254.0	8 CORN 	191.0
									3:41 PM

Tech Stack: Meet Manager Pro, OmniSport 2000 (ethernet), python,
Daktronics RTD protocol familiarity, Daktronics Show Control



RELAY2026
EVENT DEVELOPMENT
— DENVER —

Bonus: Relay names on the scoreboard

*Race complete
Timer reset
All swimmer names*

HARVARD									
400 Freestyle Relay									
Ivy Meet Record:		3:14.48 Harvard (Pasadyn, Quist, Shelton, Dahlke) 2020							
Pool Record:		3:18.25 Princeton (McIlmail, Larson, McDonald, Veith) 2015							
NCAA A Standard:		3:14.50							
NCAA B Standard:		3:16.35							
EVENT: 21		HEAT: 1		LENGTHS: 16		0.00			
1	2	Lee/Cunanan/Kamps/McCrary			PENN		28.88	3:37.84	
2	1	Walther/Khosla/Leibson/Cox			PRIN		25.22	3:36.13	
3	4	Reihman/Rawls/Holmquist/Bathory			HARV		28.09	3:39.65	
4	3	Page/Marcoux/Lee/Gaissert			YALE		25.07	3:38.88	
5	6	Cline/Lincoln/Sung/Smilenov			BROW		27.84	3:42.32	
6	5	Liu/Liu/Kistorp/Gwo			COL		26.11	3:41.31	
7	8	daCosta/Mahoney/Lake/Curtis			CORN		28.58	3:44.76	
8	7	Hall/Park/Moll/LaMastra			DART		26.79	3:43.77	
TEAM SCORES		1 HARV  547.5	3 YALE  397.0	5 COL  265.5	7 DART  223.0	3:41 PM			
		2 PRIN  409.0	4 PENN  381.0	6 BROW  254.0	8 CORN  191.0				

Tech Stack: Meet Manager Pro, OmniSport 2000 (ethernet), python, Daktronics RTD protocol familiarity, Daktronics Show Control



RELAY2026
EVENT DEVELOPMENT
— DENVER —

Real-World Scenarios

How Club Assistant and SwimPhone make things go right and the benefits to the Swimmers

- Example scenario: Hytek Operator Unavailable
 - Club Assistant and SwimPhone...
 - Generate psych sheets
 - Produce estimated timeline
 - Publish to free website
 - Facilitate emailing to swimmers on the roster

Thursday, August 6, 2026 - Session 2 - Thursday

Warm-ups start at 6:00 AM

Meet Session starts at 7:30 AM

Meet Session is estimated to end at 4:15 PM



#	Sex	Event		Entries	Psych Sheets	Heats	Heat Sheets	Results	Estimated Timeline
3	Women	200 M	Breast	110	Psych	14	Heats	Results	07:30 AM
4	Men	200 M	Breast	124	Psych	15	Heats	Results	08:37 AM
5	Women	100 M	Back	126	Psych	17	Heats	Results	09:37 AM
6	Men	100 M	Back	140	Psych	19	Heats	Results	10:26 AM
7	Women	100 M	Fly	94	Psych	13	Heats	Results	11:18 AM
8	Men	100 M	Fly	176	Psych	24	Heats	Results	11:52 AM
9	Women	400 M	Free	127	Psych	15	Heats	Results	12:42 PM
10	Men	400 M	Free	141	Psych	16	Heats	Results	02:29 PM
			Total	1,038		133			04:15 PM



RELAY2026
EVENT DEVELOPMENT
— DENVER —

Real-World Scenarios

How Club Assistant and SwimPhone make things go right and the benefits to the Swimmers

- Benefits of these pre-meet administrative tasks
 - Meet director stops panicking
 - Swimmers are informed
 - NO app to download – SwimPhone is a free website
 - NO PDF to download – SwimPhone is a dynamic resource
 - Searchable rosters, psych sheets, timeline
 - Display first batches of data, ready for the HyTek operator's next updates

2025 Shark Tank SCM Meet

Psych Sheet

Event 4: Mixed 400 M IM

21 Swimmers

[Psych Sheet by Age Group](#) [Psych Sheet by Seed Time](#)

Search:

Rank	Club	Swimmer	Age Group	Seed Time	HT/LN	PI
1	NCMS	Dellanoce, Michael	40-44	4:44.00	3/4	
2	TMC	Bezugliy, Alexander	40-44	4:49.49	3/5	
3	SPM	Chambers, Cameron	35-39	4:55.50	3/3	
4	TTC	Olabarriaga, Marcello	55-59	5:30.00	3/6	
5	LMSC	Kroupa, Andy	55-59	5:33.31	3/2	
6	SHARK	Najjar, Ellie	60-64	5:45.00	3/7	



RELAY2026
EVENT DEVELOPMENT
— DENVER —

Real World Scenarios

How to benefit the swimmer

Problem: Pool Measurements

Solution

- Use a laser!
- LMSC Chair/Sanctions/TTR should assume responsibilities for measuring and/or training event hosts on how to measure.
- Measure bulkheads every time just to be safe (post 2026 R5)
- For Multi-day meet, can any sessions count?
- APOLOGIZE!



RELAY2026
EVENT DEVELOPMENT
— DENVER —

Real World Scenarios

How to benefit the swimmer

Problem: postponement or truncated session due to [issue] a prior day.

Solution

- Communicate as best as you can.
- Outline swimmer expectations
- Use all tools available to you
 - Positive Check-in for **everything**
 - 2-a-lane for distance events
 - Dive-over starts
 - Combine genders if not already combined
 - Initial distance (split) request for 50s/100s



RELAY2026
EVENT DEVELOPMENT
— DENVER —

Be prepared: What could go wrong?

- Examine every technical component on the pool deck. What would you do if any of these things failed in the middle of the meet?
- The scoreboard.
- The PA system (or the one microphone attached to the PA system).
- The single Hy-Tek laptop (do you have a backup laptop?)
- The single timing console that we have at the facility.
- The single starting system that we have at the facility.
 - The single starting microphone for the starting system.
- The in-deck timing system wiring (do you have a deck harness, etc.?)
- The single printer for the Hy-Tek system. (Extra toner/ink?)
- The single serial cable that connects Hy-Tek to the timing console.
- The single network switch connecting your Hy-Tek Pro laptops.





Wrap Up / Q&A

Don't be afraid to ask. If you're thinking it, someone else is too!

Panelist Bio: Karin Wegner

Karin Wegner lives in sunny Las Vegas with her husband, three teenage children, and two cats. Las Vegas is the easternmost part of the Southern Pacific LMSC; Karin has served SPMS in many capacities since moving west from New Jersey in 2008, such as SPMS delegate, member, and meet director. Karin has worked with Club Assistant and SwimPhone as a USMS swim meet registration expert, club management specialist, and website support rep since 2008. She was previously a career swim coach in New Jersey, coaching Masters and age group swimmers at Rutgers University and the West Essex YMCA. Karin is a founding member of Team Redbird and a dedicated meet director for the Fabulous Las Vegas Masters Meet every January.



Karin@ClubAssistant.com



RELAY2026
EVENT DEVELOPMENT
— DENVER —

Panelist Bio: Rick Osterberg

Rick has been running swim meets since the late 1980's. He enjoys tinkering with swimming technology to improve the in-venue and online user experience. He built the first live online scoreboard in 1997, the first live webcam "stream" in 1998, the first instant cell phone results in 2003 (four years before the iPhone existed), the first real-time online GPS tracking of an open water race in 2003, and online entries for USMS meets in 2007. He's run college dual meets and championship meets, USA Swimming meets, Sectional Championships, and LMSC Championships at Harvard's Blodgett Pool since 1995. He's been involved with LMSC and LSC boards for 25+ years. He enjoys training but not racing. When not at the pool, he is the Chief Information Officer at an engineering college in the Boston area.



rickosterberg@gmail.com



RELAY2026
EVENT DEVELOPMENT
— DENVER —

Panelist Bio: Alina de Armas

Alina is with Southern Pacific Masters and lives in Simi Valley, CA. She has worked as an Administrative Referee for 30+ years in USMS, USA, College and High School meets. She has served as the Administrative Referee for USMS National Championships 12 times. She is the SPMS Officials Chair and serves on the SPMS Meet Operations Committee and the USMS Officials Committee.

Alina@dearmas.co



RELAY2026
EVENT DEVELOPMENT
— DENVER —

Panelist Bio: Jeff Strahota

Jeff has been involved in Masters since 1998 – before he was allowed to be a member! Since then, he's served in various positions on his club, LMSC board, USMS Committees, and USMS Board; and is presently a member of the CCS Advisory Board. Understanding the value of competition, Jeff continues to participate in, officiate for, host, and travel to USMS events, both pool and open water.

jeff.strahota@gmail.com



RELAY2026
EVENT DEVELOPMENT
— DENVER —

Resources

Pool Measurement Appendix Slides

- <https://www.usms.org/volunteer-central/guide-to-local-operations/event-management/top-10-and-records-and-tabulation/pool-length-form-and-measurement-procedures>



Using Steel Tape?

- Make sure your steel tape is long enough for your pools (need 165' for LCM).
- Thread through hollow pool noodles, pull buoys, or other similar methods to keep tape level with top of water level across the pool.



USE A LASER!

- These are readily available, quickly shipped, and not pricey!
- Small space in your meet bag/box.
- No pull buoys or people in the water needed to hold up tape.
- Many are accurate well past the 165(ish) feet you need for LCM, and will measure from the bottom OR top of the device.



Laser Measure,RockSeed Digital Laser Distance Meter with 2 Bubble Levels,Portable M/in/Ft Unit Switching Backlit LCD and Measuri...

4.4 ★★★★★ (22.2K)

3K+ bought in past month

\$29⁹⁹



Laser Measure, 229ft Laser Measuring Tool with Angle Sensor | 2mm Accuracy, Distance/Area/Volume/Pythagorea...

4.5 ★★★★★ (7.6K)

2K+ bought in past month

\$27⁵⁴ Typical: \$28.99



RELAY2026
EVENT DEVELOPMENT
— DENVER —

Bulkheads w/ Gaps/Voids

- Especially with water-level (or no) touchpads, measuring these pools is very tricky!
- Trying to hit the thin solid strip at the top of the bulkhead with a laser is nearly impossible, even for a 25y/25M pool.
- Place the laser on, and aim for, the longer/wider space between lanes.
- Some pools have a built a custom target to aim for with other tricky walls (ie: deck-level overflow).



Easy to Measure Walls

- Full wall (aka Fina wall) pads make it really easy to measure with a laser. The pads make a huge target!
- If only 1 wall has this pad, measure from the OTHER wall, especially if that other wall has a gap/space right at water level.
 - (In other words, you do NOT have to measure from the start end).



Follow the Measurement Directions

- Page 2 of the Pool Measurement form gives you all the specific measurements you need. Make sure YOU read this and know which numbers you need to hit.
- Remember, your pool needs to be AT LEAST 25 yards, 25 meters, or 50 meters long. There is NO negative tolerance.
- Bulkheads can shift with repeated force against them (starts/turns) and by lane-rope tightening.

Minimum Measurement lengths:

- Measurements (certifying or confirming) may be conducted with or without touchpads in place.
- If touchpads are NOT in place, the measurement must be taken in the center of the lane at water level. If a protrusion exists where the touchpad would be placed, the protrusion must be used as a measuring point.
- If touchpads are in place, measure from the face of the touchpad in the center of the lane at water level to the other end of the course.
- The minimum measured course length during competition shall be as follows:
 - SCY – 25 yards, 75.00 ft, or 75 ft 0 in or 75' 0"
 - SCM – 25 meters, 82.02 ft, or 82 ft 0.25 in or 82 ft 1/4 in or 82' ¼"
 - LCM – 50 meters, 164.04 ft, or 164 ft 0.5 in or 164 ft 1/2 in or 164' ½"
- Courses measured with no touchpads in place AND will have one touchpad in place for competition must be at least the following measured lengths:
 - SCY: 25.01 yards, 75.03 ft, or 75 ft 3/8 in or 75' 3/8"
 - SCM: 25.01 meters, 82.05 ft, or 82 ft 0.6 in or 82 ft 5/8 in or 82' 5/8"
 - LCM: 50.01 meters, 164.08 ft, or 164 ft 1 in or 164' 1"
- Courses measured with no touchpads in place AND will have two touchpads in place during competition must be at least the following measured lengths:
 - SCY: 25.02 yards, 75.06 ft, or 75 ft ¾ in or 75' ¾"
 - SCM: 25.02 meters, 82.10 ft, or 82 ft 1.2 in or 82 ft 1 1/8 in or 82' 1 1/8"
 - LCM: 50.02 meters, 164.11 ft, or 164 ft 1.3 in or 164 ft 1 3/8 in or 164' 1 3/8"

<https://www.usms.org/volunteer-central/guide-to-local-operations/event-management/top-10-and-records-and-tabulation/pool-length-form-and-measurement-procedures>



RELAY2026
EVENT DEVELOPMENT
— DENVER —

Pool Measurement – Best Practices

- Use a laser.
- Chair/Top Ten/Sanctions should be the local SMEs on pool measurement.
- Train all event directors on how to do the measurement.
- Consider having the LMSC be responsible for conducting this, especially if you have less mobile meet directors. Similarly, consider purchasing a laser for the LMSC for use at any facility who may not have one.
- (2027) If you are running a bulkhead course, measure even when you don't think you might need to.





Thank You!

**Slides, Resource Links, and Panelist Bios
will be posted on the USMS website**