

*USRPTIA Webinar #2*  
**USRPT ORGANIZATION FOR  
TRAINING GROUPS**

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<http://coachsci.sdsu.edu/swim/bullets/47GUIDE.pdf>

**Sports  
Science  
Associates**

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## **STEP 2: DEVELOP A GENERAL OUTLINE OF THE PRACTICE**

- USRPT is designed to make as many training experiences as possible similar to competitive experiences.
- That should be the underlying philosophy of swimming coaching. Anything less seems to be a waste of time.
- Consequently, a great many traditional activities will need to be discarded.
- The basic question for any practice experience is: What is the ratio of relevant to irrelevant training items in any practice?

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## **BASIC USRPT STRUCTURE**

**TWO-HOUR PRACTICE SESSION**  
-15 minutes deck warm-up  
5 minutes pool warm-up/organization  
20 minutes USRPT set #1  
5 minutes recovery  
25 minutes skill/technique instruction  
20 minutes USRPT set #2  
5 minutes recovery  
20 minutes USRPT set #3

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## **DECIDE PRACTICE CONTENT**

- One stimulus per event.
- Same stroke and event all lanes.
- Different strokes and events across lanes.
- Same stroke and different events.
- Specific skill practices (e.g., dives, turns, finishes).
- Experimental/introductory skill practices.

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### STEP 3: FORM LIKE-GROUPS OF SWIMMERS IN EVERY LANE FOR ALL SETS

- A challenging task.
- Within a lane, swimmers should all complete a repetition without interfering with another swimmer.
- Provide as much clear water as possible (50s usually require one pass).

### Example: 400 SCm

- Lane 1: 4:50.0 to 5:10.0 as best times.
- Lane 2: 4:40.0 to 4:49.9 as best times.
- Lane 3: 4:15.0 to 4:25.0 as best times.
- Lane 4: 4:00.0 to 4:10.0 as best times.
- Lane 5: 3:46+ to 3:58.0 as best times.
- Lane 6: Active recovery.

### STEP 4: DETERMINE THE TECHNIQUE AND/OR MENTAL SKILLS FACTORS TO BE FOCUSED ON IN EACH SET

Technique or Psychology Item	Event and stroke to be Swum	Repetition Distance	Total Interval Time (work + rest)	Maximum Number of Repetitions
Explosive initiation of every stroke	200 BK	50	Time plus 20+ seconds	30 or 3 failures

#### TECHNIQUE MICROCYCLE 6

##### TEACHING POINTS FOR INITIAL ACTIONS IN ALL STROKES

<b>INITIAL ACTIONS IN CRAWL STROKE</b> <ul style="list-style-type: none"> <li>• Reach fully forward over the water; enter fingers first on a flat hand.</li> <li>• The shoulder should be fully extended forward.</li> <li>• The shoulder and upper arm should remain extended while the body rotates to lower the shoulder.</li> <li>• The upper arm should medially rotate while the elbow flexes to position the forearm/hand vertically.</li> <li>• Abduction of the upper arm commences as part of a continuous accelerated movement.</li> </ul>	<b>INITIAL ACTIONS IN BACKSTROKE</b> <ul style="list-style-type: none"> <li>• Reach fully forward over the water; enter with the back of the hand.</li> <li>• The shoulder should be fully extended forward.</li> <li>• The shoulder and upper arm should remain extended while the body rolls to lower the shoulder.</li> <li>• The upper arm should medially rotate while the elbow flexes to position the forearm/hand vertically.</li> <li>• Abduction of the upper arm commences as part of a continuous accelerated movement.</li> </ul>
<b>INITIAL ACTIONS IN BREASTSTROKE</b> <ul style="list-style-type: none"> <li>• Open the arms to a position where they are comfortable to perform the stroke-initiation movements.</li> <li>• As quickly as possible, flex the wrists slightly, medially rotate the upper arms, and flex the elbows.</li> <li>• Orient the forearms/hands to being as vertical as possible recognizing the need to retain some angle to produce a vertical force component to assist in breathing.</li> <li>• Seamlessly transition into the acceleration that marks the power-phase.</li> </ul>	<b>INITIAL ACTIONS IN BUTTERFLY STROKE</b> <ul style="list-style-type: none"> <li>• Enter the arms in a position where it is comfortable to perform the stroke-initiation movements.</li> <li>• As quickly as possible, flex the wrists slightly, medially rotate the upper arms, and flex the elbows.</li> <li>• Orient force production directly backward despite the elbows widening.</li> <li>• Seamlessly transition into the acceleration that marks the power-phase.</li> <li>• In non-breathing strokes, do not lift the head and/or shoulders.</li> </ul>

## THE DIFFICULTY OF EVEN TOTAL INTERVAL TIMES

### Plus Intervals

- $32.0 + 20 = 52.0$        $32.0 + 23 = 55.0$
- $13.0 + 15 = 28.0$        $13.0 + 17 = 30.0$

### Minus Intervals

- $32.0 + 20 = 52.0$        $32.0 + 18 = 50$
- $13.0 + 15 = 28.0$        $13.0 + 12 = 25$

[See paper]

## STEP 5: DETERMINE THE STROKE(S) TO BE SWUM IN ALL SETS

- **USRPT is an opportunity to accommodate specialists very well.**
- **Mix in skills if swimmers appear tired (low number of successful swims).**
- **Accommodate IM training.**
- **IM training requires surface swimming and transition skills.**

## 200 IM

- **Surface swimming as 100 y/m 25 SCy/m sets.**
- **Occasionally race events that are IM strokes to gauge progress.**
- **Improvement in several strokes indicates an improvement in 200 IM should occur.**
- **Transition sets – not true USRPT structure.**
- **Fast turns 10 x 50 200 IM BF-BK.**
- **Fast turns 10 x 50 200 IM BK-BR.**
- **Fast turns 10 x 50 200 IM BR-FR.**

## 400 IM (Similar structure to 200 IM)

- **Surface swimming as 200 y/m 25 SCy/m sets.**
- **Occasionally race events that are IM strokes to gauge progress.**
- **Improvement in several strokes indicates an improvement in 400 IM should occur.**
- **Transition sets – not true USRPT structure.**
- **Fast turns 10 x 50 400 IM BF-BK.**
- **Fast turns 10 x 50 400 IM BK-BR.**
- **Fast turns 10 x 50 400 IM BR-FR.**

### STEP 6: DETERMINE THE REPETITION DISTANCES FOR THE SETS

Repetition Distance	RACE DISTANCE (y/m)					
	50	100	200	400	800	1500
12.5	X (rarely)	-	-	-	-	-
25	X	X	X	X (rarely)	X (rarely)	-
50	-	X (rarely)	X	X	X	X (rarely)
75	-	-	X (rarely)	X	X	X
100	-	-	-	-	-	X

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### STEP 7: MAXIMUM NUMBER OF REPETITIONS FOR EACH SET [not particularly important]

Repetition Distance	RACE DISTANCE (y/m)					
	50	100	200	400	800	1500
12.5	4 x 6 rarely	-	-	-	-	-
25	Until fatigue	30	40	40	50	-
50	-	20	30	30	40	50
75	-	-	20	24	30	30-35
100	-	-	-	-	-	25-30

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### STEP 8: DETERMINE THE TOTAL INTERVAL TIMES FOR EACH LANE IN EACH SET

- 12.5 and 25 y/m rest ~15.0 seconds.
- 50, 75, 100 y/m rest ~ 20 seconds.
- 15.0 or 20 plus seconds round up.
- 15.0 or 20 minus seconds round down.
  
- Adaptations for 10 years and under.
- Initially, fast and fastest.
- Gradually introduce times when can do the calculations.

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### STEP 9: ADJUSTMENTS FOR GROUP SIZES AND POOL LENGTHS

#### 25 y/m POOLS

- For 25- and 75-repeats rest for two repetitions.
- For 50s and 100s miss one repetition.

#### 50 m POOLS

- 25s and 75s not possible as USRPT.
- For 50s miss two repetitions.
- Integrate distances and skills to avoid slowing-down.

LONG COURSE TRAINING IS HARDER THAN SHORT-COURSE TRAINING. MUST BE DONE (ONCE PER WEEK) AND MOSTLY OVER 50 m REPETITIONS.

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## GROUP SIZES

- Most difficult feature: The larger the lane group, the worse is the training situation.
- Fitting 6-8 in a lane is irrelevant for race-situation/conditions training.
- In USRPT for ~15 seconds rest, four swimmers per lane.
- For ~20 seconds rest, five swimmers per lane.
- Both maximum USRPT group sizes usually result in one or two passes.

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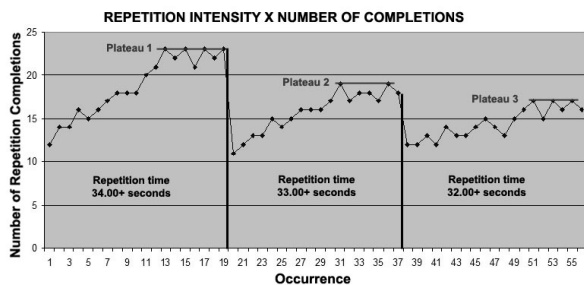
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## STEP 10: INCREMENTALLY ADJUST PERFORMANCE CRITERIA IN A SET TO STIMULATE IMPROVEMENT

- When maximum number of repetitions reached.
- When no further improvement in repetitions-to-failure occurs.
- Volume (total number of USRPT strokes) has to be observed.
- 3-5 times race-distance plus five adaptation repetitions.

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## CLOSURE

- The quality of swimming in a set is consistent rather than variable.
- Improvement can be judged from one practice to the next, therefore sets are repeated as “tests”.
- Swimmers are pushed maximally to perform at race-pace quality. Training is relevant.
- Practice conduct is a swimmer's responsibility, the same as expected in a competition.
- The coach becomes primarily a “teacher of technique”.

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**USRPT IS  
PRECISION TRAINING**

