

## Training Sessions

Training Session components 1: Warm-up at beginning of all water sessions				
Type of activity	Activities	Index	Time	Benefits
On-land warm-up	Go for a 5-minute jog	W1	5 mins	Raise body-temperature
On-the-Water Warm-up	Paddle around at 1/2 pressure, building to 3/4 pressure, using the full range of strokes, and including 4/5 short flat-out sprints – 5/6 strokes each	W2	5 mins	Raise body-temperature Neural activation
Dynamic Stretching	Back to 1/2 pressure, using again the full range of strokes while paddling around, but exaggerating the range of all strokes; also cross-bow work	W3	2 mins	Loosen up muscles within normal paddling range
Inner Circles	4 x 5 circles, paddling on inside of turn only – no crossbows – <b>no pause between strokes</b> - building speed & tightening circle simultaneously (2 each side)	W4	10 mins	Technique Smoothness Core activation
Speed-Work	Gradual build from paddling at 1/2 pressure to 10-stroke sprint followed by gradual step-down to light paddle for 30 secs, repeated 5 times	W5	3 mins	Neural activation Accustoming sub-conscious to the feel of flat-out boat-speed Mental practice: keeping spectator focus on speed

## Training Sessions

Training Session Components 2: Race runs in various forms				
Type of activity	Activities	Index	Time	Benefits
Half Runs (Race practice)	Max speed down a 50-60 sec section of an actual course: 4 runs, 30 mins between runs	RP2	4 mins [100 mins]	Overspeed gate training Race Practice/Simulation
Progressive Halves	Max speed down the first half of a course – 10 mins active rest – max speed down second half – 15 min walkback – repeat course in halves – then 1 full run at max speed down whole course	RP3	6 mins [60 mins]	Sub-conscious programming (Minimises get-off time in cold weather) <b>If timed, and each half started/finished thru' same gate, can be used to get full race pace up to half-race pace (mentally)</b>
Progressive Thirds	Max speed down first third of a course – 5 mins active rest – max speed down second third – 5 mins active rest – max speed down third section – 15 min walkback – repeat course in thirds – then 1 full run at max speed down whole course	RP4	6 mins [60 mins]	Sub-conscious programming <b>If timed, and each third started/finished thru' same gate, can be used to get full race pace up to third-race pace (mentally)</b>
Progressive Quarters	Max speed down 1 <sup>st</sup> quarter of a course – 3 mins passive/active rest – 2 <sup>nd</sup> quarter – etc – complete three courses like that, with 15 min walkback in between	RP5	6 mins [60 mins]	Sub-conscious programming Neural activation ATP-CP fitness
Progressive Fifths	Max speed down 1 <sup>st</sup> fifth of a course – 2 mins passive/active rest – 2 <sup>nd</sup> fifth – etc – complete three courses like that, with 15 min walkbacks in between	RP6	6 mins [60 mins]	Sub-conscious programming Neural activation ATP-CP fitness
Start-line simulation	5 x 1 <sup>st</sup> 20-25 secs of course flat out, 5 min walk-back or paddle-back. After 1 <sup>st</sup> run, W 3,5 & mental prep before each run	RP7	2 mins [40 mins]	Sub-conscious programming Neural activation ATP-CP fitness <b>Race-day practice</b>
Max speed session: drops	5 x 20 secs flat out & through next 3/4 gates at each major drop up to 3; 3-5 mins walk-back (or active recovery between drops)	RP8	5 mins [up to 80 mins]	Sub-conscious programming Neural activation ATP=CP fitness
Max speed session: wave trains	As for RP 8, but on sections between drops, especially wave-trains from upstreams	RP9	5 mins	Sub-conscious programming Neural programming ATP-CP fitness

## Training Sessions

Training Session components 3				
Type of activity	Activities	Index	Time	Benefits
White-water play	Surfing etc on the roughest water available, minimising rest between manoeuvres	Tech1	10 mins [20 mins]	Skill/Technique Acquisition Neural Activation ATP/CP fitness
Pirouettes 1	6 x sprint into eddy across eddy-line – radical pivot upstream – sprint out – 2 mins rest (no gate)(3 each side)	Tech2	1 min [10 mins]	Boat/edge control Upstream technique Sub-conscious programming
Pirouettes 2	6 x sprint into eddy across eddy-line – radical pivot downstream – sprint out – 2 mins rest (no gate)(3 each side)	Tech 3	1 min [10 mins]	Boat/edge control Downstream-in-eddy technique Sub-conscious programming
Rough-water sprint	6 x 20-30 sec flat-out sprints down roughest water available, ending through an upstream (finished out at max speed). Carry-back c. 4-5 mins	Tech4	3 mins [30 mins]	Skill/Technique Acquisition Neural Activation
Broken paddles	6x 20-30 sec course of upstreams on alternate sides, paddling with upstream paddle only (no cross-bows). 2 mins rest.	Tech 5	3 mins [15 mins]	Boat control Edging Acceleration out of & into eddies
30/110	As progressive quarters above, but 1 <sup>st</sup> 2 times down never more than 30% of max. weight on paddle-blade. 3 <sup>rd</sup> time down, 110% of max. weight on paddle for every stroke where humanly possible	Tech 6	8 mins [60 mins]	30%: Gaining feel of water/course/places on course Becoming more subtle 110%: can I do it at that power? How fast is too fast? Both: neural activation
Acceleration Power	2 sets of 5 x 5 secs max power acceleration, <b>starting with boat moving firmly backwards</b> , 1 min rest (4 mins between sets)	Str 1	1 min [15 mins]	Improves strength & max explosive power Neuromuscular training <b>Do from stationary</b>
Spins	2 x 4 x tail-spin 720 degree: max speed – reverse sweep – explosive sliced bow draws to keep tail down 2 min rest (2 each side)(5 mins rest between sets)	Str 3	2 mins [20 mins]	Strength endurance Speed-specific strength
Impossible moves shorts	5 15-30 sec courses ‘beyond the realms of possibility’. Do each 5x, 2 mins rest after each, absolute max speed	Str4	10 mins [60 mins]	Strength Boat-control Neural activation Sub-conscious programming

## Training Sessions

Training Session components 4				
Type of activity	Activities	Index	Time	Benefits
High-Speed gates	Short, difficult sequences of gates (15-20 secs) performed flat-out x 5 (last one with eyes shut), 2-3 mins rest between runs, 5 mins between sets. 3 sets.	Smax1	3 mins [45 mins]	Subconscious programming Skill/Technique acquisition (gates) Neural activation Acceleration technique ATP/CP fitness
High-Speed staggers	5 x 20 sec easy staggers performed flat-out, 2-3 mins between each run (or walk-back)	Smax2	2 mins [15 mins]	Skill/Technique Acquisition Neural Activation ATP/CP fitness
Aggressive Thirds 1	1 <sup>st</sup> run: in thirds; 2/3 easy downstreams only; 110% every stroke; aim to be shattered by end of each piece. 3mins active rest between pieces; 15 min walkback 2 <sup>nd</sup> run: as first, but 1 upstream in each piece, taken at max speed 3 <sup>rd</sup> Run: as 2 <sup>nd</sup> run, but 2 upstreams in each piece	Smax 3	6 mins [60 mins]	Power endurance Speed endurance Improves paddling efficiency at full speed Promotes relaxation at full speed Skill: helps to identify whether slowing down at particular gates really necessary
Aggressive Thirds 2	1 <sup>st</sup> run: in thirds; 1 upstream & 2/3 easy downstreams only; 110% every stroke; aim to be shattered by end of each piece. 3mins active rest between pieces; 15 min walkback 2 <sup>nd</sup> run: as first run, but 2 upstreams in each piece, taken at max speed 3 <sup>rd</sup> Run: as 2 <sup>nd</sup> run, but 3 upstreams in each piece	Smax 4	6 mins [60 mins]	Power endurance Getting accustomed to pain round gates Improves paddling efficiency at full speed Promotes relaxation at full speed Skill: helps to identify whether slowing down at particular gates really necessary
Aggressive Quarters 1	As Aggressive Thirds 1, but course done in quarters	Smax 5	6 mins [80 mins]	As Aggressive Thirds 1
Aggressive Quarters 2	As Aggressive Thirds 2, but course done in quarters	Smax 6	6 mins [80 mins]	As Aggressive Thirds 2
Tremblay Starts	2 or 3 sets of 8 7-sec starts from stationary. 53 secs active rest between starts. 5 mins rest between sets	Smax 7	3 mins [35 mins]	Starting Power Paddling technique to get full weight on blade

## Training Sessions

Training Session components 5				
Type of activity	Activities	Index	Time	Benefits
Kiprotich 1	As many repetitions as possible flat out, 20 secs flat out (flat water), 10 secs gentle paddle recovery. 10 mins passive/active recovery afterwards	SE1	3 mins [15 mins]	Speed endurance Improves paddling efficiency at full speed Promotes relaxation at full speed
The Lactate Doser	5/6 x 120 secs at max race speed followed by 4/5 mins of gentle paddling (continuous). 10 mins passive/active recovery	LT1	12 mins [50 mins]	Optimises speed at lactate threshold Upgrades neuromuscular efficiency at race pace Encourages mental toughness Heightens vVO2max
The Full Run Super Set	5/7 x 30 secs flat out, 60 secs close to race pace, 3 mins gentle paddle recovery (continuous). 10 mins passive/active recovery after set.	LT2	9 mins [45 mins]	Improves lactate threshold
Greyhounds	12 x 10 sec sprint from standing start, 3 secs deceleration, 5 secs passive rest/refocus. 10 mins gentle paddle recovery	LT4	2 mins [20 mins]	Increases power Raises lactate threshold Improves paddling economy
Shipley 1	2 sets of 8 x 45 sec max.speed course (easy gates), 135 secs paddle-back/active recovery. 10 mins recovery between sets	LE1	12 mins [60 mins]	Increases Lactic Endurance Improves paddling economy at max speed
Billat 1	As many intervals as possible of 30 secs flat out, 30 secs light paddle recovery, continuous	VO1	4-6 mins [8-12 mins]	Peak lactate tolerance Increases VO2max Improves vVO2max

## Training Sessions

Training Session Components which I no longer use - but you can if you wish				
Type of activity	Activities	Index	Time	Theoretical Benefits - <b>and reasons I no longer use them</b>
Full Runs (fitness)	Max speed runs down an open course: 4 runs, 10 min walkback between runs	RF1	8 mins [40 mins]	Not recommended <b>I have never recommended this</b>
Half Runs (fitness)	Max speed down a 50-60 sec section of an open course: 6 runs, 5 min walkback between runs 1 & 2, increasing by 1 min each time	RF2	6 mins [45 mins]	Not recommended for this purpose <b>I have never recommended this</b>
Full Run (Race practice)	Max speed run down an actual course, as in a race: 3 runs, 40 mins between runs	RP1	6 mins [90 mins]	None, he joked Race Practice/Simulation <b>I have never recommended this</b>
Kiprotich 2	2 sets (10 mins rest between) of 4 x 120 secs @ 10% below race speed, 30 secs flat out, 2 mins active rest	SE2	20 mins [45 mins]	Speed endurance: prevents 'fade' <b>10% below race pace will tend to reduce expectation</b>
Berger Loops	45-sec loop course (gates; rough water). 2 sets of 4x with 40 sec rests; 3x with 30 sec rests; 2x with 20 sec rests (all flat-out). 5 mins rest between sets	LT5	12 mins [30 mins]	Increases power Raises lactate threshold Subconscious programming <b>Rough water makes intensity hard to control/measure</b>
The Oxygen Special	3 or 4 x 4 mins @ c.10% below race speed, 4 min gentle paddle recovery (continuous) 10 mins gentle paddle recovery to finish	LT3	16 mins [30 mins]	Upgrades speed endurance Increases VO2max Improves lactate threshold <b>10% below max too difficult to calculate and maintain</b>
Shadow Loops	2 sets of 8 x 45 sec max.speed) on flat water, 135 secs at medium pace (HR 155-170). 10 mins recovery between sets	LE2	12 mins [60 mins]	Increases Lactic Endurance Improves paddling economy at max speed <b>45 secs at full speed insufficiently sport-specific</b>
Pyramid Loops	45 secs loop course. Max. speed runs of 1 loop, 2 loops, 4,2,1,2,4,2,1 loops. 1:1 work:passive rest ratio (on time: ideal to do with a partner)	LE3	15 mins [30 mins]	Increases Lactic Endurance Improves paddling economy at max speed <b>45 secs far too long to get the desired effect</b>
Stroke Power	2 sets of 5 x 5 stroke max power acceleration from rest, 20 strokes (LRLR) at max power letting boat glide 2/3 secs in between, 5 stroke max power acceleration, 2	Str 2	4 mins [25 mins]	Improves strength & max explosive power Neuromuscular training to use that power every stroke

**Training Sessions**

	mins rest (5 mins rest between sets)			<b>Eliminates Stretch-shortening cycle</b>
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